Table of Contents

Institutional Review Board for the Protection of Human Subjects (IRB)
Policies and Procedures

Institutional Review Board (IRB) Policies and Procedures
Table of Revisions

Revision Date	Brief Description	Location	Author	Approval
06/12/2024	IRB member meeting duties and attendance requirements	Pages 16-17	N. Lewis	Administrative change
06/12/2024	Wording change from “checklist” to “determination form”	Page 60	N. Lewis	Administrative change
6/12/2024	Clarify CITI training confirmation responsible party(s)	Pages 14, 16, 62, 128	N. Lewis	Administrative change
6/12/2024	Addition of Table of Revisions to Policy	Page 4	N. Lewis	Administrative change
6/25/2024	Addition of Table of Contents	Pages 1-3	M. Lukovich	Administrative change
07/01/2024	Replacement of HSRRC acronym to IRB	throughout	N. Lewis	Administrative change

Binghamton University
Institutional Review Board (IRB) Policies and Procedures

MISSION STATEMENT

Binghamton University, the State University of New York, investigators and their research staff, the IRB, and IRB office staff, share a collaborative responsibility and commitment to maintaining the highest ethical standards in all research endeavors. The University strives to protect the rights and welfare of human subjects who choose to participate in biomedical or social and behavioral scientific research, and has an organized and systematic program in place for doing so.

Binghamton University has established the Institutional Review Board (IRB), responsible for the review of research involving human subjects, under the terms and conditions set forth by the Office of Human Research Protections (OHRP) of the Federal Government Department of Health and Human Service (HHS) and the Food and Drug Administration (FDA).

OHRP provides the following definitions for Human Subjects Research:

- *Research* - is a systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge.
- *Human subject* - is a living individual about whom an investigator (whether professional or student) conducting research obtains (1) information or biospecimens through intervention or interaction with the individual, and uses, studies, or analyzes the information or biospecimens; or (2) uses, studies, analyzes, or generates identifiable private information or identifiable biospecimens.

All students, faculty and staff must comply with OHRP regulations, as well as state and local laws, and University policies. Failure to comply with the required rules and regulations can result in the loss of funding for human subjects research for the entire institution.

All human subjects research conducted by Binghamton University students, faculty and staff must be reviewed and approved by the IRB prior to the commencement of human subjects research if the University is considered "engaged" in the research as defined by HHS. A comprehensive list of criteria and scenarios in which an institution is considered "engaged" can be found here.

Human subjects research protections are constantly evolving and, as such, the Binghamton University research community will be notified of any regulatory or procedural changes via the IRB listserv, Dateline, and the Division of Research website. This will ensure that Binghamton University human subjects researchers stay up-to-date on the most recent regulatory and procedural standards.

I. HUMAN SUBJECTS RESEARCH OVERSIGHT

Binghamton University's IRB is guided by ethical principles, federal, state, and local laws pertaining to all research involving humans as subjects. These guiding ethical principles have been set forth by the Nuremburg Code of 1947, the Declaration of Helsinki of 1964, and the Belmont Report - Ethical Principles and Guidelines for the Protection of Human Subjects of

Research of 1979.

The federal regulations applicable to human subjects research include:

- The OHRP under HHS Code of Federal Regulations (CFR) Title 45 CFR. 46 ("the common rule")
- Food and Drug Administration (FDA) Title 21 CFR 50 and 56
    - Investigational New Drug Applications – IND 312
    - Radioactive Diagnostic Drugs 361
    - Investigational Device Exemptions - IDE 812
- Department of Education 34 CFR Part 97, 98 99, 350 and 356
- Department of Defense (DOD) and Department of Navy (DON) Title 32 CFR219
    - Protection of Human Subject and Adherence to Ethical Standards in DOD-supported research - DOD 3216.02
    - Limitation on Use of Humans as Experimental Subjects - Title 10 USC980
    - Research Integrity and Misconduct - DOD 3210.7
    - Use of Investigational New Drugs in Force Health Protection - DOD 6200-2

Binghamton University has secured from the OHRP a **Federal Wide Assurance (FWA00000174)**. The FWA is an assurance of compliance with the federal regulations for the protection of human subjects in research. The FWA defines the responsibilities of the University, the IRB administrative office and staff, and research investigators to protect human research subjects.

The University will comply with all applicable state laws regarding human subjects research. If research takes place outside the state of New York, the IRB will consult with legal counsel, as appropriate, to gain interpretation and guidance. In situations where there are conflicts between federal and state, or other applicable laws, legal counsel will be consulted to advise on the appropriate resolution of the conflicts.

II. PURPOSE OF THE IRB

The primary responsibility for protecting the rights and welfare of human subjects rests with each individual who initiates, directs, or engages in research. It is the responsibility of the Binghamton University IRB to ensure that the rights and welfare of the human research subjects recruited to participate in research activities conducted under University auspices are protected.

III. AUTHORITY OF THE IRB

A. Types of Studies That Must be Reviewed

All research studies involving human subjects conducted by University faculty, staff, and students in connection with their institutional responsibilities, or done under the sponsorship or auspices of the institution, must be reviewed and approved by the IRB prior to commencement of the research.

The IRB has independent jurisdiction and oversight responsibilities over human subjects research in which the University is engaged. This includes:

1. Funded and non-funded research.
2. Research involving subjects from outside the University.
3. Research involving vulnerable populations (Binghamton University requires additional protections outlined in the federal regulations).

B. Authority to Disapprove, Modify, or Approve Studies

Given the authority that IRB's have under HHS regulations, when conducting an initial or continuing review of a research study, or a review of proposed changes to a previously approved research study, the IRB can take any of the following actions:

1. Approve the research study or proposed changes as submitted without any conditions;
2. Approve the research study or proposed changes as submitted with conditions (revised full board studies may be reviewed by the IRB Chair or committee member(s) designated by the IRB Chair if approved for expedited review procedures moving forward);
3. Require modifications to secure approval;
4. Defer or table the research study or proposed changes for further review at a future date after the required modifications are submitted by the investigator; or
5. Disapprove the research study or proposed changes.

In cases where a study is disapproved or modifications are requested, the IRB will provide its rationale for the action taken. The investigator may request an appearance before the Committee to present arguments for reversal of the decision or propose a change in the protocol based on the advice and counsel of the Committee.

By regulation, action on protocols that require full IRB review may be taken only at convened meetings at which a majority of the members of the IRB are present, including at least one member whose primary concerns are in nonscientific areas. In order for the research to be approved, it must receive the approval of a majority of those members present. Investigators with research under full board review are invited to a convened meeting to provide justification or clarification for the proposed research endeavors.

No official within Binghamton University may approve a protocol or human subjects research activity that has not been approved by the IRB.

C. Authority to Oversee Ongoing Conduct of a Study

The IRB may require progress reports or a summary of findings from the investigator at any time. Additionally, the IRB may determine that there is a need for the committee to oversee the conduct of a study. The IRB has the authority to observe, monitor, or request that an audit be performed on approved research to ensure that proper scientific, ethical, and regulatory requirements are being followed.

Monitoring of ongoing research studies for compliance may include a review and assessment of areas such as, but not limited to the following:

- Consent processes.
- Current enrollment and verification of informed consent.
- Participant payment.
- Privacy and confidentiality issues.
- Recruitment procedures;
- Reports of adverse events.
- Research team composition and training processes.
- Screening procedures.
- Storage of study documents and data.
- Study procedures.
- Publications from the study data.

D. Authority to Suspend or Terminate Approval of a Study

The IRB has the authority to determine if a research project should be suspended or terminated for cause. If appropriate, the action will be reported to appropriate institutional officials, the head of any supporting federal department or agency (if applicable), the OHRP under HHS, and the corporate study sponsor (if applicable). If the project that is suspended or terminated involves a drug, device, or biologic regulated by the FDA, the FDA shall also be notified of the suspension/termination.

In coordination with the Office of Sponsored Programs and the Assistant Vice President for Research Compliance/IO, the IRB Associate Director reviews any applicable contract language to confirm any obligations by a sponsor monitoring body that the organization be promptly notified of any information discovered by the sponsor's on-site study monitors that could affect the safety of subjects, affect the willingness of subjects to continue participation, influence the conduct of the study, or alter the IRB's approval to continue the study, when appropriate/applicable.

E. Conduct of Human Subjects Research Without IRB Approval

The purpose of this policy and process is to address noncompliance in obtaining prior approval to conduct human subjects research. The IRB must review all projects that meet the definition of research and that involve human subjects prior to any data collection to determine the appropriate level of review and, as appropriate, approve them. There are three major types of IRB review: exempt, expedited, and full. This policy applies to all three review categories.

Federal regulations require that research on human subjects include a prior review and approval by an IRB. Noncompliance in obtaining approval prior to research commencement may result in:

- Withholding research funding.
- Unacceptance of publications including dissertation and thesis.
- Suspension and/or termination of research.
- A research misconduct inquiry and investigation.

Binghamton University complies with all applicable human subjects research regulations. The institutional IRB is responsible for:

- Investigating allegations of noncompliance in obtaining prior approval to conduct human subjects research.
- Reporting any findings of serious and/or continuing noncompliance to the Assistant Vice President of Research Compliance who serves as the Institutional Official (IO) in such matters.

The IRB Associate Director and/or the IRB Chair are the individuals to receive reports of instances of noncompliance. Such reports of noncompliance may be made by Principal Investigators (PI's) or study team members, faculty, staff, subjects in the research, students, and anonymous persons.

The IRB Associate Director and the IRB Chair will review the incidence of noncompliance to determine the legitimacy and/or seriousness of the allegation. The PI will be notified of the allegation.

Upon confirmation of noncompliance in obtaining prior approval to conduct human subjects

research, the PI will be required to suspend the research immediately if the research is active. The PI will be notified that data collected prior to IRB approval shall not to be used for publication or presentation purposes. If the PI wishes to continue the research, a protocol is to be submitted within fourteen (14) calendar days to the IRB. The standard IRB process of review and approval will then be conducted.

A written report of the research that was conducted prior to IRB review and approval is to be submitted by the PI to the IRB Associate Director and the IRB Chair within seven (7) calendar days of official notice of noncompliance. This report is to be submitted regardless of the intention to continue the research with the necessary approvals. The report detailing the research conducted prior to IRB review should include a description of the procedures; the number of subjects enrolled and a description of the subject pool; all documents used for recruitment, consent, and in conducting the research (i.e. survey, questionnaires, tests); and any findings (if completed).

The Assistant Vice President for Research Compliance, who serves as the Institutional Official/Research Integrity Officer (IO/RIO) is to be notified immediately upon failure by the PI to:

- Immediately suspend the research;
- Submit a protocol to the IRB within (14) calendar days for continuance (when applicable); or
- Submit the written report to the IRB Associate Director and the IRB Chair within (7) calendar days.

The IO will notify the PI of any failure of adherence, which may result in the initiation of a Research Misconduct Inquiry as per the Binghamton University Policy on Responsible Conduct of Research.

The IRB Associate Director and the IRB Chair are to review the written report submitted by the PI within seven (7) calendar days of receipt. If the report identifies actions that may have adversely affected the subjects; or of noncompliance that was done willfully, knowingly, or intentionally; the IO is to be notified immediately upon that determination. The IO will contact the PI to discuss the findings which may result in the initiation of a Research Misconduct Inquiry as per the Binghamton University Policy on Responsible Conduct of Research.

Research Misconduct is defined as fabrication, falsification, or plagiarism or other practices in the conduct of research, scholarly, or creative activity that seriously deviate from those that are commonly accepted within the academic community for proposing, performing, or reviewing research, or in reporting research results. Not adhering to federal regulations which require that research on human subjects receive a review and approval by an IRB prior to commencement constitutes a serious deviation.

If the PI is a student, the Dean of Students will be notified by the IO of noncompliance. The IO will provide the Dean of Students any and all supporting documentation. The Dean of Students will then determine the appropriate course of action for addressing the noncompliance.

IV. IRB ORGANIZATIONAL STRUCTURE

A. IRB Office Staff

For matters relating to the execution of their duties and responsibilities, the IRB office staff report directly to the Assistant Vice President for Research Compliance. The IRB office staff is comprised of the IRB Associate Director (who is a voting member of the IRB) and the IRB Coordinator.

The following information is reported by the IRB office staff to the Assistant Vice President for Research Compliance, who in turn communicates directly with the OHRP:

- Changes in IRB membership.
- Serious or continuing noncompliance with federal regulations.
- Any unanticipated problems involving risks to subjects or others.
- Reports of serious or continuing noncompliance, and unanticipated problems involving risks to subjects or others.
- Any suspension or termination of IRB approval for a project.

Notification of the suspension or termination of research by the IRB is also made to:

- The IRB as an information item in the agenda in the next scheduled meeting.
- Other federal agencies when the research is overseen by those agencies, and they require reporting separate from that to the OHRP (within 14 business days of suspension or termination of research protocol).
- The Food and Drug Administration (FDA), when the research is FDA regulated (within14 days of suspension or termination of research protocol).

All reports include information and documentation from the convened IRB and any documentation reviewed by the IRB Chair and the IRB office staff during the initial investigation including all correspondence from the PI and any other individuals involved in the review and investigation process. A report is drafted by the IRB Chair and the IRB office staff, which is then forwarded to the IO for finalization and approval.

B. Campus Research Compliance Committees

If needed, the IRB works in collaboration with other committees and with the campus community as a whole to ensure the appropriate protections for human subjects are in place. Below is a list of other offices and committees that the IRB may collaborate with when reviewing a research proposal. When research involved processes that fall under the purview of these committees, the IRB requires that protocol be reviewed and approved by the appropriate committee. Letters of review and approval must be received and reviewed by the IRB prior to final research approval and the commencement of study procedures.

Institutional Biosafety Committee

The National Institutes of Health (NIH) requires that universities maintain the highest level of scientific integrity and community safety in the review of research involving genetic engineering, the splicing together of DNA from different organisms, and the use of certain biologicals and hazardous materials. Strict rules have been established regarding types of experimentation allowable and under what circumstances different classes of experiments can be conducted. The Institutional Biosafety Committee reviews all such research.

Radiation Safety Committee

The use of radioactive materials on campus is governed by the New York State Department of Health. The Radiation Safety Committee advises members of the University in matters involving radiological procedures and safety; establishing procedures pertaining to the ordering, receipt, use and disposal of radioactive materials; and advises researchers on specific problems related

to the use of radioactive materials in research and instruction.

Institutional Animal Care and Use Committee (IACUC)
The IACUC is responsible for oversight of animal care, supporting the animal-related needs of University researchers, and ensuring compliance with all standards mandated by federal and state laws, University policies, and accrediting bodies.

Stem Cell Research Oversight Committee
Prior to commencing research using human embryonic stem cells/cell lines or other pluripotent stem cells/cell lines regardless of source (not limited to embryos, adult tissues, amniotic fluid or fetal tissue), Binghamton University investigators must have their research protocol approved by the campus Stem Cell Research Oversight Committee. Only NIH-Approved human embryonic stem cell/lines listed on the NIH Human Pluripotent Stem Cell Registry may be used at Binghamton University

Institutional Conflict of Interest Committee (ICIC)
Binghamton University follows written policies and procedures for identifying, managing, and minimizing or eliminating financial conflicts of interest of the University and individuals that could influence the conduct of research. Any Investigator who has disclosed significant financial interests that may influence proposed human subjects research, or may be perceived to influence it, will be subject to review by the ICIC to establish a Conflict of Interest Management Plan.

C. Cooperative, Collaborative, and Multi-Site Research
Cooperative, collaborative, and multi-site research is research conducted in conjunction with an institution not affiliated with Binghamton University. When Binghamton University researchers plan to conduct cooperative, collaborative, or multi-site research, determining which IRB should complete the review process will depend on a variety of factors including, but not limited to: funding requirements, the extent of IRB oversight required relative to the participant risks; the nature of the research to be conducted by each institution; and which other institutional IRBs are involved.

- *Cooperative Research* - Occurs when University faculty, staff, or students obtain access to human subjects through one or more cooperating institutions, or when PIs from cooperating institutions obtain access to human subjects at Binghamton University.
- *Collaborative Research* - Occurs when non-Binghamton investigators come to Binghamton to work on a Binghamton study (i.e. help with consenting subjects, assisting with administering study interventions), or conduct some aspect of the research elsewhere (i.e. accessing subjects' identifiable information).
- *Multi-Site Research* - Occurs when Binghamton University is serving as one of several participating sites running a full protocol (each institution enrolling subjects and carrying out the protocol at its own site).

The Revised Common Rule
The Revised Common Rule requires single IRB (sIRB) review for cooperative research involving multiple institutions that are considered engaged by the federal regulations. This requirement became effective January 20, 2020.

- *Institutional Engagement* - The Office for Human Research Protections (OHRP) considers an institution "engaged" in non-exempt human subjects research when its employees or agents, for the purposes of a research project, obtain:
    - Data about the subjects of the research through intervention or interaction with them;
    - Identifiable private information about the subjects of the research; or
    - The informed consent of human subjects.

NIH Policy

Effective January 25, 2018, the NIH required use of a single IRB for the review of NIH-funded multi-site studies where each site will conduct the same protocol involving non-exempt human subjects research, whether supported through grants, cooperative agreements, contracts, or the NIH Intramural Research Program. This policy applies to domestic sites only. Foreign sites participating in NIH-funded, multi-site studies are not expected to follow this policy.

Binghamton University does not share oversight of research. A single IRB of record will be designated for all exempt, expedited, and full-board reviewed studies based on the nature of the research being conducted and in line with federal regulations. IAA's will be put in place for all non-exempt research.

In the event an exception must be made for shared oversight, a written agreement will be executed to delineate the responsibilities of each institution.

Institutional Authorization Agreement (for non-exempt research)

When multiple institutions are engaged in a research study involving human participants, an Institutional Authorization Agreement (IAA) permits one institution's IRB to cede review (the "Relying IRB") to another institution's IRB (the "IRB of Record"). In doing so, only one IRB reviews and approves the human subject research activities for all institutions; avoiding duplicative review and regulatory oversight. Depending on the Binghamton University investigator(s) role in the research and target subject sample, Binghamton University's IRB can review the research as the IRB of Record and sign an IAA for the other institution(s) to rely on this review. Alternatively, Binghamton University's IRB can rely on an external IRB for review of the proposed research. *Note: If the human subjects research is deemed Exempt, either institution may agree to an external review or serve as the reviewing institution, subject to a signed IAA, as requested by either party.*

Institutions may use different descriptive terms for an IAA including: reliance agreement, cooperative agreement, or memorandum of understanding (MOU). MOUs are generally entered into when addressing issues pertaining to coverage of an entire research program, whereas reliance agreements are more common and generally used to cover a single study protocol.

The written IAA defines the responsibilities of the relying institution and the reviewing IRB. This includes, but is not limited to:

- Determining whether the relying institution applies its FWA to some or all research and ensuring that the IRB review is consistent with requirement of the relying institutions FWA.
- Determining which organization is responsible for obtaining any additional approvals from HHS when the research involves subjects covered under Subpart B, C, D of 45 CFR 46.

- Determining which organization is responsible for reporting serious or continuing non- compliance; unanticipated problems involving risks to participants or others; and suspension or terminations of IRB approval.
- Determining if an organization may have an organizational conflict of interest related to the research and the management, therein.
- Ensuring continuance of oversight until study closure by an institution should the IAA be terminated, or a mutually agreed upon transfer of the research protocol.

At Binghamton University the IRB Associate Director and the IRB Coordinator are responsible for coordinating IAA related materials with study PIs and external institutions. The Assistant Vice President for Research Compliance, who is also the Institutional Official, is the individual designated to sign IAA's on behalf of Binghamton University.

NIH awardees are responsible for ensuring that authorization agreements are in place and that copies of authorization agreements and other necessary documentation are maintained in order to document compliance with the NIH single IRB policy. As appropriate, awardees are responsible for ensuring that a mechanism for communication between the single IRB of record and participating sites is established. In instances where the Binghamton University Research Foundation is the awardee, the process for ensuring authorization agreements are in place and that documentation is maintained is as outlined below. The awardee institution is also responsible for meeting additional certification requirements such as Certificates of Confidentiality or the NIH Genomic Data Sharing Policy.

Exceptions to the NIH single IRB policy will be made where review by the proposed single IRB would be prohibited by a federal, tribal, or state law, regulation, or policy. Requests for exceptions that are not based on a legal, regulatory, or policy requirement will be considered if there is a compelling justification for the exception. The NIH will be responsible for determining whether to grant an exception following an assessment of the need. Documentation of the NIH rationale for exceptions to the single IRB policy will be kept in an electronic file will all other study related materials.

If a non-Binghamton University site is engaged in the conduct of human subjects research, the PI should initially contact the Binghamton University IRB to discuss which institution is the best fit to serve as the single IRB of record and next steps in the IRB application process.

When Binghamton is to be the IRB of Record (external institution(s) cedes review)
Below are examples of situations in which Binghamton University would serve as the IRB of Record include:

- The lead investigator is a Binghamton University faculty/staff member, or student.
- The target subject sample is Binghamton University faculty, staff, or students.
- The majority of research activities take place at Binghamton University.

To propose that the Binghamton University IRB serve as the IRB of record for a cooperative, collaborative, or multi-site project, Binghamton PIs must do the following:

1. Confirm with the collaborators from the other participating institutions that their IRB(s) do not request to serve as the IRB of record. Some institutions will require an application be submitted for a determination.
2. Fill out the "Application for Binghamton University to Serve as the IRB of Record" and submit to hsrrc@binghamton.edu. The application includes asking questions necessary for a local context review (i.e. laws relevant to the study being reviewed by the IRB

when research is conducted in another state or country) and review of potential conflict of interests.

3. The Binghamton University IRB will work directly with the external IRB to execute the IAA and to develop a plan for addressing any local context concerns or conflicts of interests. A conflict of interest management plan will be obtained by any external institution(s) as appropriate and a copy forwarded to the Binghamton University IRB.
4. Once the Binghamton PI has been notified via email by the Binghamton IRB that the external institution will cede review and Binghamton will serve as the IRB of record, the PI should submit the study as usual in PACS.
    - When submitting the study in PACS PI's will need to list the external study team members and provide proof of CITI training. If a relying institution does not use the CITI platform, study team members will be required to register with and complete CITI training through Binghamton University. The registration process and training completion check will be facilitated by the IRB office. The CITI platform will be offered as a complimentary service.
    - The IRB PACS application or other study-related materials must contain a description of any laws relevant to the study being reviewed when research is conducted in another state or country. This may be provided in the "Application for Binghamton University to Serve as the IRB of Record", a memorandum of understanding, or a research site agreement.
    - When the researcher is the lead researcher of a multi-site study, applications in PACS must include information about the management of information that is relevant to the protection of participants such as:
        1. Unanticipated problems involving risks to participants or other.
        2. Interim results.
        3. Protocol modifications.

      The IRB evaluates whether the management of information that is relevant to the protection of participant's is adequate.
5. Once all documents are submitted to Binghamton's IRB, the IRB staff will coordinate with the outside institution(s) to facilitate any necessary IAAs. The Binghamton PI will be notified via email when a fully executed IAA is in place and a copy will be provided.

Once an IAA is in place, the Binghamton PI is responsible for notifying the external IRB of all study modifications, revisions, continuing reviews, adverse events, unanticipated problems, complaints, study closures and any other correspondence with the Binghamton University IRB in a timely manner and in agreement with the process set forth in the Binghamton University policies and procedures. In the event that a study is suspended or terminated, the Binghamton IRB will contact any external site IRBs and external PI(s) directly within 24 hours via email. Upon request from the relying IRB, the Binghamton IRB will make available relevant study records including, but not limited to meeting minutes, approved protocols, consent documents, and other records documenting the Binghamton IRB's determinations via email.

As appropriate throughout the lifespan of the research study, the Binghamton IRB will provide the relying IRB and approved study team members with any relevant updates to organizational policies via email.

The IRB Associate Director will be listed as the primary contact person at Binghamton on the Application for Binghamton University to Serve as the IRB of Record and contact information will be provided. Additionally, contact information for the Binghamton IRB is made widely available to external researchers on the approved protocol, informed consent, IRB website, and

other study related materials in order to facilitate research staff asking questions, expressing concerns, and conveying suggestions for improvement.

A copy of the IAA will be retained in an electronic archive of reliance documentation. Any additional documentation received by the external IRB throughout the lifespan of the project will be added to the electronic file as appropriate. All IRB primary project submission materials will be retained in PACS.

When Binghamton is to Cede IRB Review (act as the relying institution)

Binghamton University will cede IRB review only to IRB's that are accredited by a recognized accrediting organization or otherwise have a process in place for ensuring compliance with ethical principles, applicable laws and guidance.

- If the human subjects research is minimal risk, the Binghamton IRB staff member may agree to external review subject to a signed reliance agreement.
- If the human subjects research is greater than minimal risk and the reviewing IRB is accredited by AAHRPP or an equivalent body, the staff member may agree to external review subject to a signed reliance agreement.
- If the human subjects research is greater than minimal risk and the reviewing IRB is not accredited by AAHRPP or an equivalent body, the IRB Associate Director may agree to external review subject to a signed reliance agreement from the external IRB and existence of a process for ensuring ethical and compliant review.

Below are examples of situations in which Binghamton University would rely on an external IRB:

- The lead investigator is a non a Binghamton faculty/staff member, or student.
- The target subject sample is from another institution (i.e. patients of a hospital).
- Federal regulations, state laws, or local policies require use of a specific IRB.

To propose that the Binghamton University IRB cede review of a study protocol to an external collaborator's institution, the Binghamton PI must do the following:

1. Fill out the "Application for External Institution to Serve as IRB of Record" and submit to hsrrc@binghamton.edu. Include as an email attachment a protocol summary or the human subjects section of the grant application.
2. Only once institutional signoff has been provided by the Binghamton IRB may PI's submit the study to the external IRB for approval. Note that institutional signoff to submit may be in advance of an IAA being fully executed.
3. The Binghamton University IRB will provide the external IRB with any information necessary to conduct a local context review and review of potential conflict of interests. When appropriate, and as requested, a conflict of interest management plan will be provided to the external IRB. The local context and conflict of interest review must happen prior to any IAA being executed. In addition, the Binghamton IRB staff will confirm that:
    - The External IRB has a Federalwide Assurance of compliance;
    - That any local ancillary reviews have been completed; and
    - That the investigator and research team have completed appropriate human subject training.
4. Upon receipt of the necessary information outlined above, the Binghamton IRB will work directly with the external IRB to execute the IAA.
5. Once a reliance agreement has been fully executed the Binghamton investigator will be notified via email by the Binghamton IRB staff and a copy will be provided. *Note: study*

procedures may only commence once the agreement is fully executed AND the external IRB has approved the research.

6. Upon IRB approval, Binghamton University investigators are responsible for contacting the Binghamton IRB and providing a copy of the study approval letter, approved protocol and approved informed consent document from the reviewing IRB.

The Application for External Institutions to Serve as the IRB of Record will contain the name and contact information for the primary IRB contact at the external institution in the event research staff would like to obtain answers to questions, express concerns, or convey suggestions.

All study modifications, continuing reviews, adverse events, unanticipated problems, complaints, study closures, and any other correspondence between the approved study team members and the external reviewing IRB must be forwarded to the Binghamton University IRB in a timely manner.

A copy of the IAA will be retained 1) in an electronic archive of reliance documentation and 2) with the initial IRB project submission materials (i.e. IRB approval letter, approved protocol, and approved informed consent). Any additional documentation received by the Binghamton IRB throughout the lifespan of the project will be added to the electronic file as appropriate.

Addition of Research Sites to Previously Approved Binghamton Protocols

Researchers interested in adding additional research sites to a previously approved protocol should initially contact the Binghamton IRB to discuss the potential protocol change. If the Binghamton IRB is the current IRB of record for the existing study and the proposal is to add an external research site for what will become a multi-site or collaborative project, Binghamton PI's must do the following:

1. Confirm with the collaborators from the other participating institutions that their IRB(s) do not request to serve as the IRB of record. Some institutions will require an application be submitted for a determination to be made.
2. Fill out the "Application for Binghamton University to Serve as the IRB of Record" and submit to hsrrc@binghamton.edu.
3. The Binghamton University IRB will work directly with the external IRB to execute the IAA.
6. Once the Binghamton PI has been notified by the Binghamton IRB that the external institution will cede review and Binghamton will serve as the IRB of record, the PI should submit a study modification as usual in PACS.
    - When submitting the study in PACS, PI's will need to list any new external study team members and provide a completion certificate from CITI as proof of successful CITI training.
    - The IRB PACS modification must contain a description of any laws relevant to the study being reviewed when research is conducted in another state or country. This may be provided in the "Application for Binghamton University to Serve as the IRB of Record", a memorandum of understanding, or a research site agreement.

Letters of Agreement from Research Sites Not Considered "Engaged"

When a Binghamton PI intends to conduct research at a site external to the University (not owned or operated by the University), the PI is responsible for ensuring that the non-Binghamton University site is willing to engage in the collaboration. If a Binghamton PI is collaborating with an institution or organization that is NOT considered "engaged" in the

research as defined by the federal regulations, a letter of agreement (permission) from an individual who has the authority at the collaborating institution/organization to sign the document may be needed (e.g., if recruiting potential participants from an elementary school, a letter of agreement from the principal or superintendent will be required). The letter should specify the role of the institution/organization in the research activities. A template is provided on the IRB website.

If a Binghamton PI is collaborating with another institution that WILL BE considered "engaged" in the research as defined by the federal regulations, the PI should follow the regular application process for ceding IRB review or serving as the IRB of record noted above.

D. Regulatory Agencies

Binghamton University's IRB is required to communicate to federal, state, and local authorities all information that is outlined in the federal guidelines. The IRB also strives to maintain positive and productive relationships with regulatory agencies and local and state legislators.

Here is a list of additional laws, regulations, and guidelines concerning the conduct of research with human participants:

- The Federal Policy for the Protection of Human Subjects (the "Common Rule")
- U.S. Food and Drug Administration (FDA) CFR Title 21
- New York State's Article 24-A: Protection of Human Subjects
- HIPAA Privacy Act
- Family Educational Rights and Privacy Act (FERPA)
- New York Civil Rights Law Section 79-l: Confidentiality of records of genetic tests

Department of Defense (DoD) Sponsored Research

Research sponsored or funded by the U.S. Department of Defense (DoD) must be reviewed by the IRB under an additional set of regulations (32 CFR 219) that involve special protections for research participants, as well as additional review and reporting requirements for investigators and IRBs. Please reference Section XXI. Department of Defense Supported Research of the IRB policies and procedures document for additional information. Researchers must meet the additional DoD requirements prior to initiation of the research. The DoD follows the HHS and FDA regulations on human subjects research but also applies DoD Directive 3216.02, Protection of Human Subjects and Adherence to Ethical Standards in DOD-Conducted and Supported Research. Note that these additional regulations may add a significant amount of time to the review and approval process of research.

V. IRB MEMBERSHIP

A. Composition of the IRB

The structure and composition of the IRB must be appropriate to the amount and nature of the research that is reviewed by the IRB and in compliance with federal regulations. Every effort is made to have a membership that represents and understands the areas of specialty encompassing most of the research performed at Binghamton University.

The IRB members are selected based on relevant experience, expertise, and diversity (racial, cultural, gender, and professional) to insure respect for their advice and counsel specific to safeguarding the rights and welfare of human subjects. This includes having members experienced in working with vulnerable subjects, and the inclusion of both scientific and non-scientific members. Committee members possess the professional competence necessary to

ascertain the acceptability of proposals in terms of organizational commitments, regulations, applicable law, standards of professional conduct and practice, and community attitudes.\

Annually the Assistant Vice President for Research Compliance/Institutional Official will meet with the IRB Chair, Associate Vice President for Research/Operations Manager and the VPR to review all resources of the IRB confirming that adequacy is present to perform the critical function of the operation.

The IRB office staff will report changes in IRB membership to OHRP as required.

B. Member Selection and Appointment

The Assistant Vice President for Research Compliance in collaboration with the IRB Chair and office staff will identify those areas of research for which member expertise is required. Recommendations for appointment to the IRB are requested from individuals in the University and local community. The Assistant Vice President for Research Compliance appoints the IRB members.

Length of Term/Service

Members are appointed to one-year, renewable terms. Members may resign at any time by submitting a letter of resignation to the IRB Chair.

Duties

The IRB members are responsible for:

- Completing initial and ongoing educational requirements regarding the protection of human subjects.
- Identifying any personal conflicts of interest during protocol reviews and, if one exists, removing themselves from the discussion and voting except to provide information requested by the IRB.
- Reading all provided material and being informed and prepared for the committee meetings.
- Conducting reviews of full board and expedited protocols as requested.
- Being an active member of the IRB and attending the meetings, participating in the discussions, and casting a vote at convened meetings.

Attendance Requirements

The IRB members, upon accepting their appointment, are informed of the scheduled committee meetings on a semester-by-semester basis, and it is their responsibility to make every effort to attend each meeting.

Removal

The Assistant Vice President for Research Compliance may remove members from the IRB prior to the end of their appointment. The IRB member removal may occur in the event that the member does not fulfill assigned duties or responsibilities in reviewing protocols, or has displayed inappropriate behavior and has affected the conduct of IRB meetings. Members cannot be removed based on voting records, or in an attempt to alter the IRB membership to facilitate approval for protocols.

C. Alternate Members

The appointment and function of alternate IRB members is the same as that for primary IRB members, and the alternate's expertise and perspective are comparable to those of a primary

member. The role of the alternate member is to serve as a voting member of the IRB when a regular member is unavailable to attend a convened meeting. When an alternate member substitutes for a primary member, the alternate member will receive and review the same materials prior to the convened meeting that the primary member received or would have received. The alternate member will not be counted as a voting member unless the primary member is absent. The IRB meeting minutes will document when an alternate member replaces a primary member.

D. Consultants

At times, the IRB may not have the necessary expertise to judge the scientific soundness or cultural appropriateness of a research protocol, or to make a fair and accurate determination of the risk-benefit ratio. In these situations the IRB will invite an ad hoc consultant for assistance in reviewing the scientific merit or to perform an in-depth review of the study.

Consultants are required to sign written confidentiality statements. Those individuals who identify that they do have a conflict of interest pertaining to the research they are being asked to review can no longer serve as consultants for the specified research.

Consultants will provide their opinions of the research protocol under review to the IRB in layman terms. This may be accomplished through a written report that will be distributed to the IRB or by attending a meeting to provide in-person feedback. If consultants attend IRB meetings, they will not be involved in the discussion and decision making except to provide information requested by the IRB. The consultant must leave the meeting before final discussion and voting.

All consultant reports will be kept on file with the IRB office and the information provided to the IRB by the consultant will be reflected in the minutes of the meetings.

VI. MANAGEMENT OF THE IRB

A. IRB Leadership

IRB Chair/IRB Associate Director

The IRB Chair and the IRB Associate Director are directly responsible for mutually assuring that the IRB operates in full accordance with regulatory requirements and the highest ethical standards.

The IRB Chair works with the IRB Associate Director, the IRB Coordinator, committee members, institutional officials, and investigators to ensure that the rights and welfare of research subjects are adequately protected, and that the benefits of the research justify the risks to the research subject. The IRB Chair is appointed by the Assistant Vice President for Research Compliance and is appointed usually for a three-year term.

Responsibilities

The IRB Chair and the IRB Associate Director play leadership roles in establishing and implementing IRB policy. As the primary representative of IRB decisions, the IRB Chair has shared authority over all IRB policies and procedures in collaboration with the Assistant Vice President for Research Compliance, the IRB Associate Director, and the IRB Coordinator.

The Chair, in conjunction with the IRB Associate Director (who may at times serve as the Chair's

designee), are responsible for the following:

- Representing the IRB in discussions with other segments of the organization.
- Representing the organization in discussions with federal authorities.
- Reviewing all protocols presented to the full committee. Both the IRB Chair and the IRB Associate Director are expected to have read each full committee protocol and to communicate with other reviewers so that important IRB issues are identified or resolved before the full committee meeting.
- Directing the proceedings and discussion of the full committee meeting. This includes keeping the discussion focused on important IRB issues and seeing that the full committee meeting process is both efficient and effective.
- Voting at full committee meetings.
- Reviewing research that is under an expedited review process. At minimum, all expedited protocols are reviewed by the IRB Associate Director. This task may be shared with other committee members, as well.
- Having an in-depth understanding of the ethical issues, state laws, institutional policies, and federal research regulations that are applicable to studies that are reviewed by the IRB.
- Drafting letters from the IRB to researchers regarding IRB decisions.
- Reviewing and signing IRB response letters in a timely fashion.
- Representing the IRB in discussions with researchers who have made submissions to the IRB
- Investigating instances of non-compliance in collaboration with the Assistant Vice President for Research Compliance and developing a plan of action to address the non-compliance and oversee monitoring of any remedial action.
- Reviewing unanticipated problems, adverse event reports, and complaint forms pertaining to active studies and taking appropriate action regarding the revision or suspension of study protocols.
- Reporting as needed to the Assistant Vice President for Research Compliance.

The IRB Chair is not expected to be the only, or ultimate, authority on compliance issues. The IRB Associate Director, the IRB Coordinator, and other members of the organization take collective responsibility for compliance verification.

The Assistant Vice President for Research Compliance has the authority to remove the IRB Chair at any time, for cause, in consultation with the President and Vice President of Research.

B. IRB Member Training

Orientation

The IRB members are required to complete the IRB Members Basic Course through the

Collaborative Institutional Training Initiative (CITI Program). The training must be completed prior to the first convened meeting that the new appointee is scheduled to attend. Those members requiring continuing education will be notified by CITI as well as the IRB office staff. This continuing education must be completed by the expiration date of 4 years from the last certification date in order to maintain active status in the committee.

Liability Coverage for IRB Members

Section 17 of the NYS Public Officers Law provides that the NYS Attorney General will defend

employees should they become involved in litigation if such litigation pertains to an incident involving their duties as long as the employee(s) did not intentionally engage in wrong doing. This protection is also extended to SUNY Associates and volunteers expressly authorized to participate in a state-sponsored volunteer program. Evidence of this authorization includes a volunteer appointment record in accordance with campus procedures and an oath of office executed by the SUNY Associate or other volunteers.

C. IRB Administrative Office

The IRB office staff will provide the necessary support to facilitate the acceptance, review, approval, continuing approval, and modification of protocols submitted to the IRB. The IRB office staff will facilitate full board meetings, as well as maintain all records in accordance with University, state, and federal regulations. Full job descriptions and responsibilities of the IRB Associate Director and the IRB Coordinator will be made available upon request.

Office/Meeting Space

Administrative offices for the IRB are maintained in the University Innovative Technology Complex Biotechnology building with the necessary office equipment and supplies (ITC Biotechnology building rooms 2204, 2205, and 2207). Boardrooms within the ITC complex are reserved to hold full board meetings.

Personnel

The IRB office staff is adequate for conducting IRB business. Personnel hires are bound by the Research Foundation of the State University of New York (SUNY) and SUNY, which encompass all Affirmative Action and Equal Employment Opportunity Requirements. The recruitment and hiring process follow the policy and procedures of the Research Foundation of SUNY and SUNY.

IRB Education Program

All IRB office staff and committee members are required to fulfill human subjects research training through the Collaborative Institutional Training Initiative (CITI). The IRB office staff maintain records to ensure that committee members stay up-to-date on all ethical training.

All IRB office staff and members are provided additional opportunities for training through online and on-site seminars or workshops. Attendance at regional and national meetings (i.e. PRIM&R) is encouraged and supported by the Division of Research for IRB office staff. IRB office staff are highly encouraged to obtain Certified IRB Professional (CIP) certification as they become eligible. Continuing education materials are distributed prior to or at each IRB meeting. All new federal regulations, policies, procedural revisions, and other departmental news that require immediate notification of the University research community are accomplished through the IRB listserv and IRB website.

Legal Counsel

If needed, the IRB consults the Binghamton University Counsel for the interpretation and application of laws for any jurisdiction where human subjects research conducted by members of the Binghamton University community is occurring.

IRB Outreach

The IRB provides training, educational materials, and resources to investigators and research subjects online through the IRB website as well as through individual and group meetings, workshops, and class presentations. For investigators who have questions or concerns about their studies and research subjects who have questions, complaints, or concerns regarding

participation in human subjects research, the office contact information is made widely available through the IRB website and informed consent documents. If necessary, questions, comments, or concerns are documented and discussed during convened IRB meetings.

Evaluation of Educational and Outreach Efforts

At least annually the IRB staff will evaluate the status of educational and outreach efforts that are directed towards research-related issues of importance to all individuals who conduct, review, approve, oversee, support, or participate in research supported by Binghamton University. The IRB staff will document these efforts which may include, but not be limited to, one or more of the following:

- Meetings with investigators who conduct research on the Binghamton University campus and in the local community;
- Meetings with representatives of Binghamton University schools through which research participation is offered as a means to obtain credit towards degree- or coursework;
- Review of progress reports for grants that are related to community outreach activities;
- Analysis of IRB member and staff participation in research-related community events;
- Analysis of IRB member and staff attendance at educational programmingthroughout the year and whether opportunities were foregone due to lack of funding;
- Analysis of the nature and number of educational activities conducted or sponsored by the IRB members and staff;
- Review of and revision to consent templates to ensure that information is presented at the appropriate literacy level;
- Interaction with student representatives or organizations to discuss issues related to research participation; and
- Analysis of subject-related calls and/or subject complaints received by the IRB office staff (i.e. the nature and number of subject complaints to determine if proper action was taken or if improvements can still be made).

Results of evaluation efforts will be utilized to enhance educational and outreach efforts. This may be done through an increase in IRB member and staff efforts to interact with prospective subjects, revision to the IRB guidance related to recruitment and consent documents, updating of the “research participants” section of the IRB website, enhanced interaction with investigators or entities at Binghamton who regularly conduct or facilitate community participation in research, or other to-be-developed activities.

D. IRB Member and Staff Evaluations

The Assistant Vice President for Research Compliance will perform evaluations of the IRB operations, committee members, and IRB office staff periodically to ensure effective performance. As a part of annual evaluation of members, the IRB office staff provide the Assistant Vice President for Research Compliance with the training status of all IRB members. Evaluation of continuing education requirements is included as part of the evaluation of the performance of IRB members as well as the evaluation of the performance of IRB staff.

E. IRB Monitoring and Quality Improvement

The primary goals of the Binghamton University IRB Quality Improvement (QI) Program are to evaluate human research protections surrounding all University-supported research activities and, when necessary, make improvements to the education, training, and monitoring provided to all individuals who conduct, review, approve, oversee, support, or participate in human

subjects research activities. The intent of this evaluative program is to enhance the efficiency, effectiveness, and thoroughness of the entire IRB review process and to ensure compliance will regulations, guidance, institutional policies, and best practices for human research protections at the same time, a secondary goal is to maintain a customer-friendly compliance program that aids researchers in conducting ethically sound, timely, and innovative research.

QI activities are administered primarily under the direction of the Assistant Vice President for Research Compliance and the Associate Director of the IRB, with input from IRB members. The production of regular and ad hoc reports is a primary component of the QI program intended to assess the efficiency of the IRB and responsiveness to researcher requests. Reports to be prepared will be determined based on institutional and office needs, however the following standard reports are provided at monthly IRB meetings:

- Number of past 45-day exempt reviews including the breakdown by new reviews, study modifications, and study closures.
- Number of past 45-day expedited reviews including the breakdown by new reviews, continuing reviews, study modifications, and study closures.
- Past-month report of protocol violations/deviations.
- Past-month report of research misconduct cases.

Reports on the processing of pre-reviews of new protocols, IRB turnaround time and IRB processes are also generated on an annual basis and provided to the Assistant Vice President for Research Compliance.

In addition to producing regular reports, IRB staff conduct continuous quality improvement initiatives throughout the year intended to assess routine compliance functions. These include, but are not limited to:

- Surveying researchers periodically to determine levels of satisfaction and to identify areas in need of improvement.
- Reviewing IRB minutes to verify that meeting discussions addressed issues relating to the regulatory requirements for approval of research as well as that quorum was met and maintained.
- Reviewing complaints, adverse events, and unanticipated problem reports provided to the IRB and assessing both timeliness and thoroughness of the response.
- Conducting post-approval monitoring of research activities (see the post-approval monitoring section of the IRB policies and procedures).
- Verifying IRB FWA and IRB applications with HHS.

Recommendations made by researchers, participants, IRB members, IRB staff, and the Assistant Vice President for Research Compliance are forwarded to the IRB Associate Director and relevant individuals within the operation. Individually, or in consultation with the IRB membership, adjustments will then be made to IRB operations, training, education, etc.

F. IRB Resources

Annually the Assistant Vice President for Research Compliance/Institutional Official will meet with the IRB Chair, AVP for Research/Operations Manager and the VPR to review that overall resources of the IRB are adequate to perform the critical function of the operation.

VII. CONFLICT OF INTEREST POLICY

A. IRB Members and Consultants

No IRB members (regular or alternate) or consultants may participate in the review of any research project in which the member or consultant has a conflict of interest (COI), except to provide information requested by the IRB.

A "conflict of interest" shall be defined as any factor, event or interest, whether of a financial or non-financial nature that could reasonably influence, or be perceived to influence, the review of any research study. Financial interests include but are not limited to the following interests of the IRB member, spouses, dependent children, or partners: anything of monetary value, including although not limited to, salary or other payments for services (e.g. consulting fees or honoraria); equity interests (e.g. stocks, stock options, or other ownership interest); and intellectual property rights (e.g. patents, copyrights, and royalties from such rights).

Committee members and consultants may also find themselves in any of the following COI's when reviewing research:

- The member or consultant is involved in the design, conduct, and reporting of the research.
- An immediate family member of the member or consultant is involved in the design, conduct, and reporting of the research.
- Any other situation where an IRB member believes that another interest conflicts with his or her ability to deliberate objectively on a protocol.

IRB members are required to complete a Confidentiality Agreement and Conflict of Interest Disclosure annually and to disclose COI's as they may arise for each protocol they are asked to review. IRB consultants shall complete a Confidentiality Agreement and Conflict of Interest Disclosure for each protocol they are hired by the IRB to review. New interests that are acquired that may affect or have the potential to affect your obligations to review research protocols are to be disclosed within 30 days of when identified.

Designated Reviewers for Expedited Review

IRB members (including experienced staff members) who have been designated by the IRB Chair or IRB Associate Director as reviewers for initial or continuing review of research protocols, reports of noncompliance, protocol deviations, unanticipated problems, and modification requests that qualify for expedited review will self-identify any COI that they may have with the research or PI. In such cases, the review responsibility will be reassigned to another experienced IRB member.

Convened IRB Meeting

Binghamton University policy prohibits IRB members and consultants from participating in the final discussion of, or voting upon any research protocol for which they, their spouse, dependent children, or partner are involved in the design, conduct, or reporting of the research or hold a financial interest, meaning anything of monetary value, including although not limited to, salary or other payments for services (i.e. consulting fees or honoraria); equity interests (i.e. stocks, stock options, or other ownership interest); and intellectual property rights (i.e. patents, copyrights, and royalties from such rights).

Should an IRB member declare involvement in any way in a research protocol under review by the IRB, or state a COI with the research protocol the following is required:

- IRB member is excluded from discussion and voting at committee meetings except to provide information requested by the IRB concerning the research.

- IRB member leaves the meeting room during discussion and voting.
- IRB member is not counted towards quorum.
- IRB member with a conflict is documented in the minutes as being absent with an indication that a conflict of interest was the reason for the absence.

The IRB Chair and committee members are required to complete a Conflict of Interest Form annually. Additionally, the Conflict of Interest Form needs to be updated when a new conflict of interest is acquired that affects or has the potential to affect one's obligations to review research protocols.

B. Principal Investigators and Study Team Members

The HHS regulations 45 CFR part 46 use the term "investigator" to refer to an individual performing various tasks related to the conduct of human subjects research activities, such as obtaining informed consent from subjects, interacting with subjects, and communicating with the IRB. For the purposes of the HHS regulations, OHRP interprets an "investigator" to be any individual who is involved in conducting human subjects research studies. Such involvement would include:

- Obtaining information about living individuals by intervening or interacting with them for research purposes;
- Obtaining identifiable private information about living individuals for research purposes;
- Obtaining the voluntary consent of individuals to be subjects in research; and
- Studying, interpreting, or analyzing identifiable private information or data for research purposes.

Investigators can include physicians, scientists, nurses, administrative staff, teachers, and students, among others. Some research studies are conducted by more than one investigator, and usually one investigator is designated the "principal investigator" with overall responsibilities for the study. In every human subjects research study, investigators have certain responsibilities regarding the ethical treatment of human subjects. Investigators are also referred to as researchers throughout the policy and procedures document.

According to the University Investigator COI policy, if you are a PI or senior key personnel on a sponsored program or IRB protocol, and/or have a current COI on file, you must have a completed Investigator Disclosure Statement in PACS on file at the time of an application for funding or submitting a IRB protocol. Disclosed COIs that might affect the protection of subjects must have a management plan in place. Management plans may include: partial or complete divestment, limiting involvement of the conflicted individual, additional oversight, or disclosure. Disclosure alone cannot be used to manage conflicts of interests that might affect the protection of subjects.

The IRB will review the following questions included in the study protocol narrative and evaluate whether there is conflict of interest:

1. Does any investigator who is involved in the design, conduct, or reporting of the study, their spouse, or dependent children have a proprietary or financial interest related to the research? ("Financial interest" refers to any financial interest in the sponsor, product, or service being tested, or any financial interest in a competitor of the sponsor, product, or service being tested.)
2. Does any investigator who is involved in the design, conduct, or reporting of the study, their spouse, or dependent children have any ownership interest, stock options, or

other financial interest related to the research that:

a. Exceeds $5,000 when aggregated?
b. Is not publicly traded on stock exchange?
c. Involves arrangements in which the value of the ownership interests will be affected by the outcome of the research?
d. Exceeds 5% interest in any one single entity when aggregated for the spouse or dependent children?

3. Does any investigator who is involved in the design, conduct, or reporting of the study, their spouse, or dependent children have any compensation related to the research that:

a. Exceeds $5,000 in the past year, when aggregated?
b. Involves arrangements in which the amount of compensation will be affected by the outcome of the research?

If there is a definite or probable COI, the IO will review the documents and meet with the PI and investigator with a COI to educate and prepare a COI Management Plan for the research. The Management Plan will be signed by the IO and the PI or investigator with the conflict. In the event that the Management Plan is not adhered to as part of the approved protocol, the researcher will then be found noncompliant. The noncompliance will automatically be deemed "serious" and the IRB procedures for handling "Serious Non-Compliance" will be followed. All records related to disclosure and management of financial conflicts of interests and any other related correspondence and documents will be stored for a period of three years following completion of the approved research.

C. Institutional Conflict of Interests

University administrators are required to comply with the New York State Commission on Public Integrity disclosure policies that stipulate that they file at least annually a disclosure of all of their financial activities through JCOPE. Additionally, an "Institutional Conflict of Interest Financial Disclosure" is required of all Senior Officers of the University, annually, in order to be in compliance with the procedures of the Association for Accreditation of Human Research Protection Programs. The Institutional Conflict of Interest Financial Disclosure is facilitated by the Office of Research Compliance.

D. Undue Influence

Undue influence can be defined as "any pressure or influence which causes an individual to act in a manner that is favorable to an individual investigator or the institution over the welfare and safety of the research participants." Individual members of the IRB, whether employed by the institution or who are community members, as well as IRB office staff, have the right and obligation to report any undue pressure upon them during the initial and continuing review processes or when conducting or participating in other IRB related business. Reporting of undue influence is required to ensure the highest ethical standards of research conducted at Binghamton University.

Reports of Undue influence can be submitted to the following individuals:

- IRB Chair
- IRB Associate Director or IRB Coordinator
- Assistant Vice President for Research Compliance/Institutional Official(IO)
- Vice President for Research

Reporting Procedures:

The IO will receive all reports of undue influence. Upon review of the reports the IO will conduct an investigation or assign an investigation to an individual or a committee. In the event that the IO is involved in the report, the Vice President for Research will be informed and will decide on the investigative action.

Actions of Report Findings:
All undue influence investigations require that a report be formulated and provided to the complainant and to the IRB for a full committee review. The IRB may decide to vote and report the undue influence issue and correspondence to the OHRP if it is determined, during a convened meeting, that the undue represents an unanticipated problem involving risks to subjects or others, or it has not been resolved by the University.

VIII. FUNCTIONS OF THE IRB

A. Determining if IRB Review is Required
The IRB Associate Director and the IRB Coordinator will review each application submitted through the online portal, Pre-award and Compliance System (PACS), for compliance with federal and state regulations and institutional policies. The IRB Associate Director and IRB Coordinator will first determine whether or not the proposed activity constitutes research (for HHS supported studies) or a clinical investigation (for FDA regulated studies), and whether or not human subjects are involved.

"Human Subjects Research" means any activity that meets either the HHS (Office of Human Research Protections) or FDA definitions of "research" and involves "human subjects".

HHS Definition of Human Subjects Research (45 CFR 46)

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

For purposes of this part, the following activities are deemed not to be research:

1. Scholarly and journalistic activities (i.e. oral history, journalism, biography, literary criticism, legal research, and historical scholarship), including the collection and use of information, that focus directly on the specific individuals about whom the information is collected.
2. Public health surveillance activities, including the collection and testing of information or biospecimens, conducted, supported, requested, ordered, required, or authorized by a public health authority. Such activities are limited to those necessary to allow a public health authority to identify, monitor, assess, or investigate potential public health signals, onsets of disease outbreaks, or conditions of public health importance (including trends, signals, risk factors, patterns in diseases, or increases in injuries from using consumer products). Such activities include those associated with providing timely situational awareness and priority setting during the course of an event or crisis that threatens public health (including natural or man-made disasters).
3. Collection and analysis of information, biospecimens, or records by or for a criminal justice agency for activities authorized by law or court order solely for criminal justice or criminal investigative purposes.

4. Authorized operational activities (as determined by each agency) in support of intelligence, homeland security, defense, or other national security missions.

Human Subject: Means a living individual about whom an investigator (whether professional or student) conducting research:

- Obtains information or biospecimens through intervention or interaction with the individual, and uses, studies, or analyzes the information or biospecimens; or
- Obtains, uses, studies, analyzes, or generates identifiable private information or identifiable biospecimens.

B. Student Class Projects/Internships

Generally speaking, classroom projects do not require IRB review. Please contact the IRB office if you have questions about classroom assignments involving gathering information about people through interventions or interactions, or using collected data with identifiable private information. It is the responsibility of faculty members to ensure that any classroom activity that is "research" involving "human subjects" as defined by OHRP is reviewed and approved by the IRB before the project starts.

Students conducting research that falls under the purview of the IRB at an internship site outside of Binghamton University may obtain an IRB approval from the collaborating institution through a Reliance Agreement. Please contact the IRB office to discuss this process.

C. Quality Improvement (QI) and Program Evaluation (PE)

QI and PE generally do not require IRB oversight. However, some QI or PE activities may be considered research if they fit the definition of "research" as defined by OHRP. Please contact the IRB office to determine whether your QI or PE activity is considered research and requires IRB approval.

D. Types of Research Conducted at Binghamton University

The research conducted at Binghamton University is social-behavioral or biomedical in nature. The University does not participate in emergency research described in and covered under 21 CFR 50.54 and OHRP Guidance 97-01.

Categories of Research Subjects

Human subjects research at Binghamton University generally includes normal healthy individuals; adults and/or children. The IRB reviews and approves research proposing inclusion of vulnerable populations. The vulnerable populations most commonly included in research activities are children, prisoners, pregnant women, and decisionally impaired adults.

E. Review Procedures (Exempt, Limited, Expedited and Full Board)

The IRB must receive sufficient information from investigators to provide adequate review of proposed research and to make the determinations required by regulations for IRB approval. This policy describes the submission requirements and initial review process for research requiring IRB review.

Initial Review

Submission and Screening

1. The Principal Investigator (PI) or designee creates the study in PACS and submits it to the IRB. The following information should be submitted to the IRB office for review via PACS:
    - Protocol narrative or existing data application (for secondary research).
    - Informed consent/assent documents.
    - Recruitment materials (i.e. flyers, emails, letters, advertising blurbs, etc.).
    - Study instruments (i.e. survey, visual/auditory stimuli).
    - Letter(s) of agreement / site permission letter(s) from collaborating individuals, institutions, or organizations (if applicable).
    - Faculty statement if the Principal Investigator is a student.
    - Grant proposal (if applicable).
    - Any other supplementary documents relevant to the study.

2. Upon receipt of the application, the IRB staff will screen for completeness and make a preliminary determination based on the federal regulations as to whether the research is exempt from review or meets the criteria for expedited review.

3. If it is not clear if the application meets the criteria for exemption, the IRB staff will consult with the IRB Associate Director and/or IRB Chair to make a final determination whether the study is eligible for exempt status or expedited review. If necessary, the IRB staff or the IRB Associate Director will advise the PI to submit revised application materials for expedited or full board review.

4. After the application screening is complete the IRB staff will forward the application to the appropriate primary reviewer. Study submissions that qualify for exempt status will be handles administratively. Applications that require expedited or full-board review will be forwarded to the IRB Associate Director, who will then conduct a secondary screening to determine if additional reviewers should be assigned. The IRB Associate Director is a voting member of the IRB.

Exempt Review

The HHS regulations 45 CFR 46.104 define some research as exempt from IRB review. However, depending on the potential risks subjects may experience, the IRB may require a higher level of review either through the expedited process or by the IRB at a convened meeting. PIs are not allowed to make the final determination of exemption. Formal continuing review of exempt studies will not be required, but investigators will be contacted at least every three years to determine if the research is still ongoing.

Note: Regardless of exempt status, exempt studies at Binghamton University are reviewed in a similar manner to expedited studies, and any exempt study modifications must be formally submitted to the IRB via PACS. Modifications that involve a change in PI, increased risk, etc. may affect the criteria for exempt determination and, as such, will be reviewed by the IRB office staff upon submission.

Limited Review

The Binghamton University IRB does not conduct “Limited IRB Review”. Limited IRB review is required under the 2018 Revised Common Rule for certain Exempt human subjects research categories (45 CFR 26.104). The "Limited IRB reviewer" must determine that, per 45 CFR 46.111(a)(7), "When appropriate, there are adequate provisions to protect the privacy of

subjects and to maintain the confidentiality of data." In the event that research meets the requirements for exempt categories 45 CFR 46.104 2(iii) and 3(i)(C), thus becoming eligible for limited IRB review, the Binghamton University IRB will move the research to an expedited review. At that time it will be reviewed by a member of the IRB. Binghamton University does not permit research to be conducted under exempt categories 45 CFR 46.104 7 and 8, therefore no limited IRB review is necessary.

Assigning Reviewers

Expedited Reviewers

The IRB Associate Director, who is also a voting member of the IRB, typically serves as the primary reviewer for research that falls under expedited review. In reviewing new research applications, the primary reviewer considers whether he/she has the appropriate scientific or scholarly expertise. Given that all research eligible for expedited review must be minimal risk, the nature of the typical type of research can be adequately understood by most reviewers with a scientific background.

In the event that the IRB Associate Director has a conflict of interest, does not have the expertise to complete the review, or requires the assistance or another opinion on the research, the IRB Chair or other experienced members of the IRB will be assigned as designated reviewers.

At least one person reviewing each protocol must have appropriate scientific or scholarly expertise. If a reviewer with appropriate expertise is not available, the research will not be approved until one is available or the study can be scheduled for a future convened meeting of the IRB. If additional expertise is needed, the IRB reviewer may request the assistance of an ad hoc or cultural consultant. Any member of the IRB who is assigned as a designated reviewer may request that additional reviewers be added to provide further expertise. Before adding any designated reviewers or ad hoc/cultural consultants, the primary reviewer will confirm if these individuals have any potential conflict of interest. If a conflict of interest is found, replacement designated reviewers will be sought.

At least one IRB member reviews the complete protocol, including any protocol modifications previously approved by the IRB.

Convened IRB Reviewers

The comprehensive screening conducted by the IRB staff and the IRB Associate Director allows the staff to make additional designated reviewer assignments, including assignment to full-board review (based on the study's scientific or clinical area of focus, significant ethical or regulatory issues, or issues related to local context of the research such as cultural issues). Once a study is assigned to a primary reviewer, that member of the IRB will make the determination (alone or in conjunction with other members of the IRB) if additional designated reviewers should be assigned or the full-board should be assigned for review. Designated reviewers are

assigned to each study based on the IRB member's educational background, experience, and expertise; and in line with the federal regulations.

Designated reviewers for expedited and full-board studies receive access to all application documents submitted by the PI in PACS.

Expedited Review

The following evaluative criteria are utilized by the IRB when making a determination of if an expedited review process is appropriate.

The research:

- Involves no more than "minimal risk". Research appearing on the HHS list of expedited review categories is deemed to be no more than minimal risk. If a reviewer finds that research appearing on the expedited review list is greater than minimal risk, the reviewer must document the rational for this determination and the rationale for review by the convened IRB (HHS only).
- Represents one or more approvable expedited review categories.
- Does not include activities where identification of the participants or their responses would reasonably place then at risk of criminal or civil liability or be damaging to the participants' 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.
- Does not involve classified research.
- When research involves vulnerable populations, additional safeguards have been included in the study to protect the rights and welfare of these participants.

Expedited review procedures allow the IRB Chair, the IRB Associate Director or Designee to review and approve studies that meet the criteria without convening a meeting of the full IRB. Collectively, these individuals will be referred to as "expedited reviewers" in this document.

The reviewer(s) only approves research that meets the federal criteria for approval as specified in the common rule (e.g., 45 CFR 46.111 and 21 CFR 56.111) when research involves only procedures listed in one or more of the specific nine categories published in the Federal Register. In addition, the expedited reviewer(s) ensures that the informed consent process and documentation as specified in 45 CFR 46.116 and 117, 21 CFR 50.25, are carried out unless the IRB can waive the requirements in accord with federal regulations.

Expedited review categories for DHHS-regulated or FDA-regulated research:

Category 1: Clinical studies of drugs and medical devices only when condition (a) or (b) is met.

- 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.)
- Research on medical devices for which (i) an investigational device exemption application (21 CFR Part 812) is not required; or (ii) the medical device is cleared/approved for marketing and the medical device is being used in
- accordance with its cleared/approved labeling.

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

- From healthy, nonpregnant 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

- 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:

- hair and nail clippings in a non-disfiguring manner;
- deciduous teeth at time of exfoliation or if routine patient care indicates a need for extraction;
- permanent teeth if routine patient care indicates a need for extraction;
- excreta and external secretions (including sweat);
- 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;
- placenta removed at delivery;
- amniotic fluid obtained at the time of rupture of the membrane prior to or during labor;
- 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;
- mucosal and skin cells collected by buccal scraping or swab, skin swab, or mouth washings;
- 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:

- 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 participant or an invasion of the participant's privacy;
- weighing or testing sensory acuity;
- magnetic resonance imaging;
- electrocardiography, electroencephalography, thermography, detection of naturally occurring radioactivity, electroretinography, ultrasound, diagnostic infrared imaging, doppler blood flow, and echocardiography;
- 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 for nonresearch purposes (such as medical treatment or diagnosis), or
- will be collected solely for nonresearch purposes (such as medical treatment or diagnosis).

(NOTE: Some research in this category may be exempt from the DHHS regulations for the protection of human participants.)

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.

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

- the research is permanently closed to the enrollment of new participants;
- all participants have completed all research-related interventions; and the research remains active only for long-term follow-up of participants; or
- where no participants have been enrolled and no additional risks have been identified; or
- 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.

Expedited Review Processes

The expedited reviewer(s) exercises all of the authority of the IRB except that the reviewer(s) may not disapprove the research. If an expedited reviewer is unable to approve a study, the issue may be forwarded to the convened IRB for review. Only the convened IRB may disapprove a research study as provided in the HHS regulations.

The expedited reviewer(s) reviews all information in the expedited review packet in enough depth to be familiar with the protocol, to determine whether the research is eligible for expedited review and to be prepared to determine whether the research meets the regulatory criteria for approval.

The expedited reviewer(s) can determine that the research is eligible for a less stringent mechanism of review (i.e. the project is exempt from requirements for review or the activities do not fall under the purview of the IRB). In these cases, the IRB does not require a new application be provided to the IRB. The IRB staff will document the exempt status determination and provide rationale to the PI in PACS.

1. The expedited reviewer(s) will contact the PI via PACS for any clarification needed or modifications necessary for approval.

2. The IRB Associate Director, in conjunction with feedback from any other expedited reviewers, will complete the Protocol Narrative Reviewer Checklist to confirm the research meets the federal criteria for IRB approval.

3. The expedited reviewer(s) documents their determinations in PACS regarding expedited eligibility, applicable expedited category, and whether the research meets the federal criteria for approval, should be conditionally approved, or requires modifications. The

IRB expedited reviewer may determine that the protocol requires full review by the convened IRB. Communication with the PI regarding the status of the study under review will be done via PACS.

4. For new studies approved via the expedited review process on or after January 21, 2019, the expedited reviewer will determine the need for continuing review at the time of study approval. Most expedited studies will not require a continuing review, however, if a continuing review is required, the interval for continuing review will be at least once per year (not to exceed 365 days; 366 days during a leap year) but may be shorter.

The IRB agenda report for convened meetings advises the IRB of research studies approved using expedited review procedures. Any member can request to review the entire IRB file for an expedited study

Protocols that may be minimal risk but are not included on the list of activities that may undergo expedited review are reviewed at a convened meeting of the IRB. The IRB may then designate that a protocol is minimal risk and determine that the protocol may undergo an expedited review process during its subsequent reviews for continuation.

Approved Consent Forms

All approved consent/assent forms are stamped with an approval/expiration date and are available in PACS under the study history. Investigators must use the stamped consent/assent forms when distributing to study subjects unless providing electronic consent (in which case the exact language from the approved consent/assent form must be utilized). If any changes need to be made to the informed consent/assent forms, investigators must submit a modification through PACS and upload the modified documents. The modified consent/assent forms will be stamped with a new approval date. Please note that the expiration date does not change (if applicable). Investigators will receive a new expiration date only when the study is due for a continuing review and the continuing review application has been reviewed and approved by the IRB.

Full Committee Review

The comprehensive pre-screening conducted by the IRB staff and the IRB Associate Director allows the staff to make additional designated reviewer assignments, including assignment to full-board review.

By regulation, action on protocols that require full IRB review may be taken only at convened meetings at which a majority of the members are present, including at least one member whose primary concerns are in nonscientific areas. Convened meetings are scheduled once every month during spring and fall semesters, as needed. There are no convened meetings during summer or winter breaks. However, in urgent cases, meetings may be scheduled during break periods as necessary to ensure the protection of human subjects.

In order for research under review by the full board to be approved, it must receive the approval of a majority of those members present at a convened meeting. In the event a quorum is lost during a meeting, the IRB cannot take a vote until it is restored.
Once an IRB submission is received, reviewed administratively, and determined that it will require full board review, the following steps are invoked:

1. All application materials are initially reviewed by the primary reviewer to ensure that all documents are complete and sufficiently prepared to be reviewed at the convened meeting (administrative pre-review). The primary reviewer will contact the PI via PACS to communicate the findings of the pre-review and/or to request clarification/revisions in preparation for the full board review.

2. All IRB committee members will be notified through PACS once a study is added to the meeting agenda and will be provided access to the application materials at least 7 days prior to the convened meeting. IRB members will review the materials and post their comments in PACS in preparation for the convened meeting. All IRB members are expected to review all documents in enough depth to be familiar with the protocol, to be prepared to discuss the protocol at the meeting, and to be prepared to determine whether the research meets the regulatory criteria for approval.

3. IRB office staff will assure members with appropriate scientific expertise, local knowledge, and other expertise specific to the protocols under review are present at the IRB meeting, along with at least one member who is knowledgeable about or experienced in working with vulnerable subjects, when research involving subjects who are vulnerable to coercion are reviewed. If a member with the appropriate expertise, knowledge, or experience cannot be present, the IRB office staff will notify the IRB Chair to defer the review to another meeting or obtain a consultant, if needed, to provide a written report of their evaluation of the protocol.

4. In the event that committee members cannot attend a full board meeting in person, they may participate through teleconference.

5. Investigators with studies under full board review will be invited to attend the convened IRB meeting (by phone, teleconference, or in-person) to answer any questions and/or to provide additional information to the committee. If the investigator is a student, faculty advisors will also be invited to attend the meeting.

6. After those with declared conflicts of interest (members, ad hoc and cultural consultants or others) have left the room, the IRB reviews the application and discusses any controverted issues and their resolution prior to voting.

   During discussion, the IRB members raise only those issues that the committee determines do not meet the federal criteria for approval as specified in 45 CFR 46.111, and 21 CFR 56.111. In addition, the IRB determines the overall risk level for the study. Also, the IRB considers whether the PI's preliminary assessment of federally mandated specific findings requirements (e.g., request for waiver of informed consent) is acceptable with respect to meeting federal requirements.

   For research involving a new drug or new device where the PI has not obtained an IND or IDE, the committee determines what action(s) is needed (whether the PI needs to get an IND/IDE or whether PI needs to contact the Food and Drug Administration [FDA] for guidance).

7. For full board reviews to be properly executed a quorum of the IRB members, which must include a non-scientist, an unaffiliated member and a prisoner representative (if research including prisoners is discussed), must be present for the entire

presentation, discussion, and deliberation of the proposed study. The IRB office staff will determine if a quorum of members in present and inform the IRB Chair when quorum is met. Members not present for a substantial part of the discussion and deliberations should abstain from voting. The presence of a quorum of members is documented in the meeting minutes.

8. PIs will be notified of full board IRB decisions through PACS within(7) business days following the convened meeting at which the study was discussed or votedon.

IRB Determinations

The IRB may render one of the following determinations for each protocol reviewed at a convened meeting:

- **Approved***:* In order to approve research, the IRB will perform an ethical and scientific review of all human subjects research to the extent necessary to determine that all of the requirements of 45 CFR 46.111, criteria for IRB approval of research, are satisfied.
- **Approved with conditions** (i.e. approved once more information is provided or revisions are made): In such cases, the IRB will vote whether the revised documents can be reviewed and approved by the IRB Chair, with any designated member, or by the full committee.
    - Substantive changes or requirements, requests for more information for IRB consideration, and other issues related to the criteria for approval require review and approval by the convened IRB.
    - Minor or prescriptive changes or requirements may be reviewed for approval by the IRB Associate Director, IRB Chair or designated IRB member.
    - When the convened IRB requests substantive clarifications or modifications that are directly relevant to the determinations required by the IRB, the protocol must return to the convened IRB and not be approved by the expedited procedure.
- **Approve some components of the proposed research and defer taking action on other components:** The committee may approve components of the proposed research and allow the investigator to initiate research activities only related to those approved components. In such circumstances, the committee must ensure that the approved components of the research study are scientifically valid and satisfy all criteria required for IRB approval, even if the other components are never approved andconducted.
- **Disapproved:** The IRB may determine that a protocol describes a research activity that is deemed to have risks which outweigh potential benefits or the protocol is significantly deficient in several major areas. In such cased the protocol and/or other documents will need to be completely re-written and re-submitted as a new submission.

Length of Approval

For studies approved or conditionally approved by the IRB, the IRB determines the length of approval, as appropriate to the degree of risk but not longer than one year from the meeting date that the study was approved or conditionally approved.

The IRB may set a shorter approval period for:

- High risk protocols;
- Protocols with high risk/low potential benefit ratios;
- Studies involving the first use of an experimental drug or device in humans where safety data is limited;
- Studies involving research procedures not normally reviewed by the IRB;or

- Any other study the IRB determines a shorter approval period and the resultant continuing review are appropriate.

The date of the meeting (convened IRB review) or date of determination (expedited IRB review) becomes the first day (start) of the approval period with the expiration date being the first date that the protocol is no longer approved. However, studies conditionally approved by the IRB may not begin until the IRB's conditions of approval (revisions) are approved by the designated IRB reviewer (final approval).

If the research is approved for one year, the expiration date is determined to be the same date one year from the date which the IRB (or IRB expedited reviewer) approved the protocol or conditionally approved the protocol. For example: the IRB reviews and approves a protocol without any conditions or approves a protocol with minor conditions for one year at a convened meeting on October 1, 2020. September 30, 2021 is the last day that research may be conducted under this approval. October 1, 2021 is the first day that the study approval is expired.

For studies that are tabled/deferred due to substantive issues identified during the review at one convened meeting and subsequently reviewed and approved by another convened meeting, the approval period starts with the date of the subsequent convened IRB meeting.

Review of Responsive Materials

When the convened IRB requires modifications to the proposal in order to secure approval (conditional approval), the following procedures are followed:

1. The PI submits a response to stipulations to the IRB that may include the following response materials:
    - A point-by-point response detailing how each IRB stipulation was addressed;
    - If applicable, an electronic copy of each document that was revised with the changes tracked;
    - Electronic copies of additional documents requested

2. The IRB staff review the responsive materials to confirm the package is complete. The materials are provided to the designated reviewer via assignment in PACS. The designated reviewer may be an expedited reviewer (IRB Associate Director, IRB Chair, other IRB member designated by the IRB).

3. The designated reviewers verify that all of the modifications to the proposal have been completed. Since the modifications to secure approval are limited to minor changes that require a simple concurrence by the investigator, the responses received are generally affirming the modification was made. If a response is contrary to the IRB's stipulation, the designated reviewer may:
    - Accept the investigator's alternative explanation/solution;
    - Require the original modification be followed; or
    - Make no determination of approval and forward the response materials to the convened IRB that originally reviewed the study following the scheduling procedures listed in this policy.

Continuing Review

The Institutional Review Board (IRB) conducts substantive and meaningful continuing reviews at intervals appropriate to the degree of risk. The research protocol must satisfy the criteria set

forth in 45 CFR 46.111 or 21 CFR 56.111, for the IRB to approve the protocol for continuation. In accordance with federal requirements, the IRB approval period can extend no longer than one year after the start of the approval period in which the study was approved or conditionally approved.

For studies approved via the expedited review process on or after January 21, 2019, the expedited reviewer will determine the need for continuing review at the time of study

approval. Most expedited studies will not require a continuing review however, if a continuing review is required, the interval for continuing review will be at least once per year (not to exceed 365 days; 366 days during a leap year) but may be shorter. Continuing review for exempt studies is not be required. In order to maintain oversight of all open studies, even where laws, codes, and regulations do not require continuing review, study submissions in PACS will undergo staff review at least every three years and investigators will be contacted by the IRB staff to determine if the research is still ongoing.

The IRB will determine the interval for the continuing review of the research, appropriate to the degree of risks that will be experienced by subjects. The interval for continuing review will be at least once per year (not to exceed 365 days; 366 days during a leap year) for studies requiring a continuing review, but may be shorter. The following conditions are likely to require review more often than annually:

- There is a high degree of risk to subjects.
- The stage of research is such that many of the risks are unknown.
- The proposed procedures have not been used in humans.
- There have been confirmed instances of serious or continuing noncompliance.
- An IRB member believes more frequent review is required.
- Other reasons for which the IRB requests closer monitoring.

If the IRB voted to approve the expedited review of the annual continuing review, the continuing review can be reviewed and approved by the IRB Associate Director, IRB Chair or other IRB designated reviewer. If no such vote was made, the continuing review must be reviewed by the full committee. The PI may not continue research after the expiration of IRB approval; continuation is a violation of federal requirements specified in 45 CFR 46.103(a), 21 CFR 56.103(a). If the IRB approval has expired, the PI must cease all research activities and may not enroll new subjects in the study after the expiration of the IRB approval. Continuing participation of already enrolled subjects in a research project during the period when IRB approval has lapsed may be appropriate, for example, when the IRB determines the research interventions hold out the prospect of direct benefit to the subjects or when withholding those interventions poses increased risk to the subjects.

Continuing Review Submission Process

1. Reminders are generated by PACS and automatically sent to the PI (and a proxy, if designated) before the IRB approval period expires (starting 90 days prior to expiration). The PI is responsible for responding to those requests in a timely manner.

2. The PI is responsible for completing the application for Continuing Review in PACS according to the instructions provided. The PI must submit continuing review reports for studies as long as the research:
    - Remains open to enroll new subjects; or
    - Continues to carry out research procedures or interventions; or

- Remains active for long-term follow-up (even when the research is permanently closed to enrollment and all subjects have completed all research-related interventions); and/or
- Requires analysis of data with identifiers.

3. In the continuing review application PI's must provide a status report on the progress of the research including:
    - Number of participants accrued
    - A summary since the last IRB review of:
        - o Adverse events, untoward events, and adverse outcomes experienced by participants.
        - o Unanticipated problems involving risks to participants or others.
        - o Participant withdrawals
        - o The reasons for the withdrawals.
        - o Complaints about the research.
        - o Amendments or modifications.
        - o Any relevant recent literature.
    - Any interim findings.
    - Any relevant multicenter trial reports.
    - The researcher's current risk-potential benefit assessment based on study results.

4. Upon receipt of the Continuing Review materials, the IRB staff will screen the application to determine if the submission is complete.

5. Once the submission is determined to be complete it is assigned to the IRB Associate Director, IRB Chair, or other IRB member to serve as the primary reviewer

6. The primary reviewer will make the determination if the study is eligible for expedited or full board review procedures.

Expedited Continuing Review Procedures

The IRB may only use expedited review procedures for continuation review (CR) under the following circumstances:

a) The study was initially eligible and continues to be eligible for expedited review procedures; OR
b) The research is permanently closed to the enrollment of new subjects; all subjects
c) have completed all research-related interventions; and the research remains active only for long-term follow-up of subjects; OR
d) Where no subjects have been enrolled at the UTSW and no additional risks have been identified either at the UTSW or at any site if the research involves a multi-site study; OR
e) The only remaining research activities are limited to data analysis; OR
f) The IRB previously determined and documented at a convened meeting that the research is no greater than minimal risk, and no additional risks have been identified.

The IRB Associate Director, or designee, serves as the designated reviewer for expedited Continuing Review protocols. If the individual performing expedited review has a conflict of interest (i.e. is study personnel on a protocol for continuation review), is unavailable, or does not have the appropriate expertise to review the CR, the IRB staff may re-assign responsibility

for the CR to another Chair, Alternate Chair, or designated reviewer. If no other reviewer is available, the HRPPO staff may assign the CR to the convened IRB.

1. If the primary reviewer determines that a study is eligible for expedited review procedures, designated reviewers will be assigned accordingly.
    - Other IRB members are always called on to serve as designated reviewers when the IRB Associate Director has a conflict of interest with a study under continuing review, does not have the expertise to complete the review, or requires additional assistance/another opinion on the research.
2. Designated reviewers are provided access to all study-related materials via PACS, including the Continuing Review progress report information. All study materials and communication with the study team since study creation is included in the PACS study history.

3. The designated reviewer(s) will compare the Continuing Review materials with the IRB's protocol records to identify inconsistent, inaccurate or omitted information. The designated reviewer(s) makes corrections when appropriate and contacts the PI regarding any remaining issues and asks the PI to review any concerns raised. If appropriate, corrected reports are requested prior to final review.

4. If the Continuing Review submission includes information to indicate changes were made without IRB approval the IRB staff flag the study for further analysis and consult the IRB Associate Director, or IRB Chair, for guidance. The IRB staff may contact the investigator to clarify the statement, request submission of a report of noncompliance or other appropriate actions. If the information indicates possible noncompliance, the IRB staff requests submission of a reportable event and follows guidance provided in the IRB Policies and Procedures for reports of noncompliance.

5. The designated reviewer(s) is responsible for reviewing all information in Continuing Reviewer submission in PACS in enough depth to be familiar with the protocol, to determine whether the research is eligible for expedited review, and to determine whether the research meets the regulatory criteria for approval (45 CFR 46.111, 21 CFR 56.111).

6. The designated reviewer ensures the PI provides any significant new findings that might relate to the subject's willingness to continue participation in accordance with regulations.

7. For expedited Continuing Review, the designated reviewer(s) may make the following determinations:
    - Approved;
    - Conditional approval; or
    - Review by the convened Board required.

8. The designated reviewer(s) applies the same criteria for approval as outlined above for full review (i.e., applies 45 CFR 45.111, and 21 CFR 56.111), and documents the determination in PACS.

Designated expedited reviewers exercises all the authority of the full IRB except the reviewer may not disapprove the Continuing Review. Only the convened IRB may disapprove the

Continuing Review. The expedited reviewer determines the duration of approval.
The IRB agenda report for convened meetings advises the IRB of research studies provided Continuing Review approval using expedited review procedures. Any member can request to review the entire IRB file for an expedited study.

Convened IRB Continuing Review Procedures

1. All IRB committee members will be notified through PACS once a study is added to the meeting agenda and will be provided access to the Continuing Review application materials at least 7 days prior to the convened meeting. IRB members will review the materials and post their comments in PACS in preparation for the convened meeting. All IRB members are expected to review all documents in enough depth to be familiar with the protocol, to be prepared to discuss the protocol at the meeting, and to be prepared to determine whether the research meets the regulatory criteria for approval.

2. IRB office staff will assure members with appropriate scientific expertise, local knowledge, and other expertise specific to the protocols under review are present at the IRB meeting, along with at least one member who is knowledgeable about or experienced in working with vulnerable subjects, when research involving subjects who are vulnerable to coercion are reviewed. If a member with the appropriate expertise, knowledge, or experience cannot be present, the IRB office staff will notify the IRB Chair to defer the review to another meeting or obtain a consultant, if needed, to provide a written report of their evaluation of the protocol.

3. All IRB members have the opportunity to discuss each research protocol during the convened meeting.

4. The convened IRB assesses the Continuing Review materials using the federal criteria for approval (45 CFR 46.111, 21 CFR 56.111). The IRB considers each Continuing Review scheduled for full review separately for approval. At the meeting, the IRB reviews the Continuing Review report and any controverted issues and their resolution prior to voting. During discussion, the IRB members only raise those controverted issues that the IRB determines do not meet the federal criteria for approval as specified in 45 CFR 46.111, and 21 CFR 56.111. IRB approval of the Continuing Review materials documents that the IRB agrees with the PI assessment of any specific findings included in the Continuing Review report that were not previously addressed by the IRB.

5. The IRB ensures the PI provides any significant new findings that might relate to the subject's willingness to continue participation in accordance with regulations.

6. The convened IRB makes the final determination as to the outcome of the review. The meeting deliberations are documented in the meeting minutes.

Study Modifications to Previously Approved Research
Investigators may not initiate any minor or major changes in research protocol, procedures or consent form(s) without prior IRB review and approval, except where necessary to eliminate apparent immediate hazards to the subject.

Emergency Deviations
If the investigator makes protocol changes without prior IRB approval to eliminate apparent

immediate hazards or to protect the life or physical well-being of subjects or others, investigators must promptly report the changes to the IRB via a Reportable New Information submission in PACS as outlined in the reportable events section of the IRB Policies and Procedures.

Review Determination:

1. Following the PI's submission of a modification in PACS, the IRB staff will review the documentation provided for completeness and request additional information from the PI, if necessary.

2. The IRB staff will make an initial determination if the changes are administrative, and if so, they may be approved by IRB staff and do not require IRB member review. Examples of administrative changes include (but are not limited to): translations of approved consent forms and recruitment materials, verification of media advertisements based on IRB approved scripts, minor changes to contact information, removal of study sites, changes requested by affiliated institutions, and changes that correct administrative errors made during previous IRB review, etc.

3. If the IRB staff determine that a change is not administrative, or it is not clear, the application will be forwarded to the IRB Associate Director, IRB Chair, or designated IRB member (collectively referred to as the designated reviewer) to make the determination if it is an administrative, minor, or major change.
    - Minor changes may be reviewed via the expedited IRB review procedure or by the convened IRB. See Table 1 below.
    - Major changes are reviewed by the convened IRB.

4. If the designated reviewer(s) determines the changes are administrative, they may review and except them, or send back to the IRB staff to review and accept.

5. If the designated reviewer determines the change is minor, then the review follows the expedited IRB review procedures outlined below.

6. If the designated reviewer determines the changes are major, the modification request is scheduled for review at a convened IRB meeting following procedures outlined as part of the review of submissions procedures.

Minor Changes: Expedited IRB Procedures

1. Minor Changes require review and approval by a member of the IRB. Examples include, but are not limited to: clarifications of procedures, new minimal risk procedures (not involving radiation), changes to recruitment methods/materials, new/modified safety monitoring procedures to decrease risks, etc.

2. The IRB may use the expedited IRB review procedure to review minor changes in previously approved research during the period (of one year or less) for which approval is authorized. In all cases, the modifications are reviewed by the IRB Associate Director, IRB Chair, or another experienced IRB member designated by the IRB Associate Director or IRB Chair (collectively they are designated reviewers).

3. The designated reviewer conducts the review, using standard expedited IRB review procedures and is provided access to all study-related materials in PACS. The designated

reviewer exercises all of the authority of the IRB except that the reviewer may not disapprove the modification.

4. The IRB is notified of the expedited IRB approvals via a report provided at each convened meeting. During the meeting, the members are reminded that they can request additional information related to the expedited IRB approvals.

5. The designated reviewer also considers if the proposed changes to the study may impact:
    - Currently enrolled subject's willingness to continue participation in the research. If applicable, the IRB will consider whether the information should be provided to the subject through an updated consent process.
    - Subjects who have completed research involvement. If applicable, the IRB will consider whether the PI should re-contact these subjects and provide them with additional information

6. If the Designated Reviewer would prefer or requires additional expertise during the review, an IRB consultant may be requested. Documentation of the consultant's review will be recorded with the designated reviewer's documentation to support the determination.

7. When the modification involves the addition of categories of subjects vulnerable to coercion or undue influence, the designated reviewer considers whether consultation is necessary for review of the research involving vulnerable human subjects.

8. The designated reviewer documents the determination regarding whether the convened IRB or expedited IRB review procedures are appropriate in PACS.

9. The designated reviewer documents the applicable approval determinations regarding expedited IRB review eligibility, whether the research meets the criteria for IRB approval, and whether any research categories of the currently approved protocol are affected by the proposed modification in PACS.

Major Changes: Convened IRB Review Procedures

1. Major Changes are reviewed by the convened IRB. Examples include (but are not limited to): major changes to study design, new/increased risks, change in the use of drugs, new vulnerable populations (when research is more than minimal risk), new more than minimal risk procedures, new/revised procedures involving radiation, reducing safety monitoring procedures, etc.

2. The IRB staff may invite the PI to attend the IRB meeting if the modification is unusually complex, the staff anticipates a controverted issue will arise during the review, or at the request of a reviewing IRB member. The full IRB reviews the modification proposal following procedures outlined in the Initial Review of Research Policy and Procedure and apply the federal criteria for approval as applicable to the request.

3. All IRB committee members will be notified through PACS once a study modification is added to the meeting agenda and will be provided access to the Modification application materials at least 7 days prior to the convened meeting. IRB members will

review the materials and post their comments in PACS in preparation for the convened meeting. All IRB members are expected to review all documents in enough depth to be familiar with the protocol, to be prepared to discuss the protocol at the meeting, and to be prepared to determine whether the research meets the regulatory criteria for approval.

4. IRB office staff will assure members with appropriate scientific expertise, local knowledge, and other expertise specific to the protocols under review are present at the IRB meeting, along with at least one member who is knowledgeable about or experienced in working with vulnerable subjects, when research involving subjects who are vulnerable to coercion are reviewed. If a member with the appropriate expertise, knowledge, or experience cannot be present, the IRB office staff will notify the IRB Chair to defer the review to another meeting or obtain a consultant, if needed, to provide a written report of their evaluation of the protocol.

5. The IRB also considers if the proposed changes to the study may impact:
    - Currently enrolled subject's willingness to continue participation in the research. If applicable, the IRB will consider whether the information should be provided to the subject through an updated consent process.
    - Subjects who have completed research involvement. If applicable, the IRB will consider whether the PI should re-contact these subjects and provide them with additional information.

6. For review of modifications, the outcomes of IRB review are the same as those outlined in the Initial Review of Research Policy and Procedure.

7. If the IRB approves the modification, the end date of the approval period remains the same as that assigned at initial or continuation review unless the IRB specifically shortens the current approval period (requiring continuing review earlier) as part of the motion voted on by the members.

F. Notification of Determinations

Investigators will receive a determination letter via PACS that informs them whether their research is approved, requires a modification, or is disapproved. PACS will send an email notification to the investigators alerting them that a decision has been made. Approval and modification request letters can be accessed once they are logged into PACS. Investigators are to respond to any IRB requests via PACS unless otherwise directed.

Before initiating research, the IRB Associate Director, in coordination with the Office of Sponsored Programs and the Assistant Vice President for Research Compliance/IO, reviews any applicable contract language to confirm obligations, roles, and terms held by the Researchers and Sponsors regarding the dissemination of findings from the research, when appropriate/applicable.

G. Appeal of IRB Decisions

By federal regulation, organizational officials may not approve research that has not been approved by an IRB. Consequently, NIH does not have an appeal procedure if a protocol is not approved by an IRB. PIs may request an IRB reconsider a decision regarding a human subjects research activity. Investigators do not have the option to seek the reversal of an IRB decision by submitting the same protocol to another IRB.

If an IRB study application is disapproved, the reason(s) for disapproval will be conveyed to the investigator in writing via PACS. This letter will include the committee's decision and concerns regarding the study, listing the federal guidelines that the committee considered in its decision. The investigator may request the IRB reconsider its decision by responding in writing, and may request an opportunity to appear before the IRB.

The IRB allows investigators various levels of appeal from the time a study receives initial review through approval or disapproval. IRB decisions are contingent upon the response of the investigator. If the IRB finds that the negotiation is at an impasse, intramural or extramural independent consultant review may be requested.

H. Reportable Events: Adverse Events, Unanticipated Problems, and Noncompliance

It is a condition of the Binghamton University Federalwide Assurance of Protection for Human Subjects (FWA) that the institution have written procedures for ensuring prompt reporting to the IRB, appropriate institutional officials, the head (or designee) of any federal department or agency conducting or supporting research, and any applicable regulatory bodies, including the HHS OHRP or the FDA for research subject to FDA oversight, of any:

- Unanticipated problems involving risks to research participants or others;
- Serious and/or continuing noncompliance with the federal regulations or the requirements or determinations of the IRB(s); and
- Suspension or termination of IRB approval.

Reportable Event Definitions

Adverse Event (AE) - OHRP defines an AE as "any untoward or unfavorable medical occurrence in a human subject, including any abnormal sign (for example, abnormal physical exam or laboratory finding), symptom, or disease, temporally associated with the subject's participation in research, whether or not considered related to the subject's participation in the research." Further, “adverse events encompass both physical and psychological harms. They occur most commonly in the context of biomedical research, although on occasion, they can occur in the context of social and behavioral research.

”The FDA defines an AE as "any untoward medical occurrence associated with the use of a drug in humans, whether or not considered drug related." (21 CFR 312.32).

Unanticipated Problem (UAP) - OHRP considers unanticipated problems, in general, to include any incident, experience, or outcome that meets all of the following criteria:

a. It is “unexpected” in terms of its nature, severity, or frequency given 1) the research procedures described in the protocol-related documents, such as IRB-approved research protocol and informed consent documentation; and 2) the characteristics of the subject population being studied;
b. It is “related” or "possibly related" to the participation in the research; meaning there is a reasonable possibility that the incident, experience, or outcome may have been caused by the procedures involved in the research; and
c. It suggests that the research places subjects or others at greater risk of harm (including physical, psychological, economic, or social harm) than was previously known or recognized.

The FDA indicates an AE observed during the conduct of a study should be considered a UAP involving risk to human subjects, and be reported to the IRB, only if it was unexpected, serious,

and would have implications for the conduct of the study (e.g. requiring a significant, and usually safety-related, change in the protocol such as revising inclusion/exclusion criteria or including a new monitoring requirement, informed consent, or investigator's brochure). An individual AE occurrence ordinarily does not meet these criteria because, as an isolated event, its implications for the study cannot be understood.

Noncompliance - The failure of a person or organization to act in accordance with the requirements of a law, regulation, policy, or the requirements and/or determination of an IRB. This includes protocol deviations.

Serious Noncompliance - Noncompliance that materially increases risks or causes substantive harm to research participants or materially compromises the rights or welfare of participants, including consideration of the following:

- Harm to participants;
- Exposure of participants to a significant risk of substantive harm;
- Compromised privacy and confidentiality of participants;
- Willful or knowing research misconduct on the part of the researcher;
- A violation of ethical principles for human research; or
- Damage caused to the scientific integrity of the data collected.

Continuing Noncompliance - Noncompliance that recurs after a researcher has been notified of a similar or related noncompliance concern pertaining to one or more protocols.

Allegation of Noncompliance – An unconfirmed report of noncompliance.

Reporting Responsibilities of the Investigator

The PI of each research project is responsible for tracking, documenting, and reporting to the

IRB the following:

- AEs that are (1) unexpected in terms of nature, severity, or frequency given the study protocol procedures and documents approved, and (2) related or likely related to the research as determined by the PI.
- Information that indicates a change to the risks (physical, psychological, economic, or social) or potential benefits of the research (i.e. an interim analysis or safety monitoring report indicates that frequency or magnitude of harms or benefits may be different than initially presented to the IRB).
- Incidents of noncompliance that adversely affect the rights and welfare of human subjects, or significantly compromise the quality of the research data.
- Any inspection, audit, or investigation reports issued by internal or external sponsors or oversight authorities as required by the IRB or by a study-specific reporting plan approved by the IRB.

Examples of AEs and UAPs that require reporting to the IRB include:

- Breaches of confidentiality.
- Changes in FDA labeling or withdrawal from marketing of a drug, device, or biologic used in a research protocol.
- Specific protocol-defined events that require prompt reporting to the sponsor.
- Sponsor imposed suspension of a protocol due to possible increased risk.
- Accidental or unintentional deviations from the IRB approved protocol that place one or more subjects at increased risk or that have the potential to occur again.

- Emergency protocol deviations taken without prior IRB review to eliminate apparent immediate hazard to research participants.
- Complaints of participants that indicate unanticipated risk or which cannot be resolved by the research staff.

Examples of noncompliance that must be reported to the IRB include:

- Performing human subjects research without obtaining IRB approval.
- Implementing protocol modifications without obtaining IRB approval.
- Initiating research activities prior to obtaining subject consent.
- Altering the informed consent process from the approved study protocol.
- Having research activities performed by individuals who are not sufficiently trained.
- Conducting research during a lapse in IRB approval.
- Performing research at an unapproved site.

Note: Failure to report the above information is a breach of the conditions under which IRB approval is given, and could result in suspension or revocation of study approval.

Reports to the IRB should be made via PACS (under the Reportable New Information tab)within five (5) business days of the occurrence of the activity. For assistance with reporting procedures, please contact the IRB directly at 607-777-3818 or hsrrc@binghamton.edu.

Reports of Noncompliance (not from the PI)

Allegations or reports of protocol deviations or noncompliance may be identified via IRB monitoring visits or via communication from subjects in the research, faculty, staff, students, or anonymous persons. The IRB Associate Director and/or the IRB Chair are the individuals to receive reports of noncompliance via e-mail, telephone, or any method of communication. The identity of an individual who makes a report will remain confidential unless the individual provides permission to disclose his or her identity.

Responsibilities of the IRB

Response to Reports of Unanticipated Problems (UAP) Involving Risks to Subjects or Others

Upon receipt of a report, the IRB Associate Director will conduct an initial review to ensure completeness and to make a preliminary assessment of whether the report meets the OHRP's or FDA's definition of UAP.

If the information contained in the report indicates a UAP did NOT occur and/or it was an AE, the issue will be handled administratively by the IRB Associate Director in conjunction with the IRB Chair. The IRB does not review AEs unless the AE meets the criteria to be a UAP. If there is a corrective action plan that can be readily implemented to prevent recurrence, then the matter may be handled as a protocol deviation. The IRB Associate Director and/or the IRB Chair will work with the PI to develop an appropriate corrective action plan. If the PI does not work with the IRB Associate Director and/or IRB Chair in a collaborative effort to develop a corrective action plan, the report will then be handled as serious or continuing noncompliance.

If the information contained in the report suggests a UAP DID occur, it will be handled by the convened IRB. The IRB Associate Director will provide the report and any supporting documentation or communication to the IRB Chair (if not done so already) and the Assistant Vice President for Research Compliance. The IRB Associate Director, IRB Chair, and the Assistant Vice President for Research Compliance will serve as the primary reviewers of the report. The

documents provided to the primary reviewers may include but are not limited to:

- Report provided to the IRB Associate Director;
- Approved study protocol, continuing reviews, and protocol modifications;
- Investigational reports issued by internal or external sponsors or oversight authorities as required by the IRB or by a study-specific reporting plan approved by the IRB; and
- Communication from the research team or research subjects regarding the research.

Upon review of the report, the primary reviewers will prepare a summary of findings including the possible action to be taken by the IRB. This summary of findings will be distributed to all IRB members 7 days prior to the next scheduled convening meeting for review. IRB members may request to review any documents that informed the summary of findings.

The convened IRB will determine by vote whether a UAP involving risks to subjects or others did occur and, if so, corrective actions to be taken will be voted on.

Possible corrective actions to be taken by the IRB:

- Suspension of the research.
- Termination of the research.
- Notification of study subjects when information about the noncompliance may affect their willingness to continue participation.
- Modification of the protocol.
- Modification of the continuing review schedule.
- Modification of the informed consent process or documents.
- Providing additional information to past subjects.
- Requiring current subjects to re-consent to participate.
- Monitoring of the research or the consent process.
- Referral to other organizational entities.
  ***Note that it is required that PI's notify current participants when such information might relate to the participants' willingness to continue to take part in the research.*

If after reviewing the summary of findings, the IRB determines that the event was not a UAP, the issue will be returned to the IRB Associate Director to be handled administratively. These determinations will be reflected in the minutes of the convened meeting. The determinations will be promptly reported to the PI, as well as the Institutional Official by the IRB Associate Director for immediate implementation.

Response to Reports or Allegations of Noncompliance (i.e. Protocol Deviations or Violations)

Upon receipt of a report or allegation of noncompliance, or upon identifying noncompliance as part of a review process, the IRB Associate Director and the IRB Chair will review the potential incidence of noncompliance to determine the legitimacy and/or seriousness of the allegation. Based on the preliminary evaluation, one of the following actions will be taken:

1. If noncompliance is not found, no further action will be taken.
2. Problems that are clearly not serious and/or continuing noncompliance will be managed by IRB Associate Director in conjunction with the IRB Chair. If there is a corrective action plan that can be readily implemented to prevent recurrence, then the matter may be handled as a protocol deviation. The IRB Associate Director and the Chair will work with the PI and noncompliant parties to develop an appropriate corrective action plan. If the PI or noncompliant parties do not work with the IRB in a collaborative effort to develop a corrective action plan, the noncompliance will then

be handled as serious or continuing noncompliance.

3. If serious or continuing noncompliance is found, or it cannot be determined, it will be forwarded to the Assistant Vice President for Research Compliance for further review.

Incidents appearing to involve serious and/or continuing noncompliance with a basis in fact, or if it cannot be determined if there is a basis in fact, may be the subject of further inquiry. In such cases, the IRB Associate Director will conduct and provide an inquiry report to the Assistant Vice President for Research Compliance and the IRB Chair within 7 business days of determining that further inquiry is warranted. The IRB Associate Director, IRB Chair, and the Assistant Vice President for Research Compliance will serve as the primary reviewers. The documents comprising the inquiry report may include but are not limited to:

- Investigator reports or allegations of noncompliance;
- Approved protocol, continuing reviews, and protocol modifications;
- Investigational reports issued by internal or external sponsors or oversight authorities as required by the IRB or by a study-specific reporting plan approved by the IRB; and
- Communication from research subjects, faculty, staff, students or anonymous persons regarding the research.

Upon review of the inquiry report, the primary reviewers will prepare a summary of findings including the possible action to be taken by the IRB. This summary of findings will be distributed to all IRB members 7 days prior to the next scheduled convening meeting for review. IRB members may request to review any documents that informed the summary of findings.

The convened IRB will determine by vote whether serious and/or continuing noncompliance are present and, if so, vote on the corrective actions to be taken. These determinations will be reflected in the minutes of the convened meeting. The determinations will be promptly reported to the PI, as well as the Institutional Official by the IRB Chair for immediate implementation.

Possible corrective actions to be taken by the IRB:

- Suspension of the research.
- Termination of the research.
- Notification of study subjects when information about the noncompliance may affect their willingness to continue participation.
- Modification of the protocol.
- Modification of the continuing review schedule.
- Modification of the informed consent process or documents.
- Providing additional information to past subjects.
- Requiring current subjects to re-consent to participate.
- Monitoring of the research or the consent process.
- Referral to other organizational entities.

***Note that it is required that PI's notify current participants when such information might relate to the participants' willingness to continue to take part in the research.*

Upon a determination made by the IRB, all actions will be reported to the applicable regulatory and sponsoring agencies according to the requirements of the IRB's Federalwide Assurance (FWA). Reports of unanticipated problem involving risks to subjects and others, incidents of serious and/or continuing noncompliance, and suspensions and terminations of research

activities, will be sent to the applicable regulatory and sponsoring agencies within 30 days of the determination.

The following will be reported to the DoD human research protection program within five days of the completion of the report:

- Results of for-cause audits, reviews, or assessments.
- Allegations of serious or continuing noncompliance substantiated by investigation, and subsequent actions taken based on the findings.

In addition, if it is determined by the Assistant Vice President for Research Compliance that the serious noncompliance may be an action of research misconduct as defined in the Policy on Responsible Conduct of Research, the process for reviewing the serious noncompliance under this policy will ensue.

Immediate Actions to Protect Study Subjects

Problems that indicate a significant risk or severity will be evaluated to determine if immediate actions are necessary to ensure the ongoing protection of research subjects, and, if so, the IRB office staff will communicate directly with the PI to implement temporary measures intended to prevent harm to subjects. Such action may take the form of:

- Suspending recruitment or enrollment;
- Altering or suspending current interventions; or terminating the IRB's approval of the project.

Research Suspension/Termination Conditions

- *Suspension*- Temporarily or permanently withdrawing approval for some or all research procedures. Investigators must cease all research activities. Suspended research must undergo continuing review if reinstituted.
- *Termination*- Permanently withdrawing approval for all research procedures. Terminated research is closed and does not require continuing review.
- *Closure*- Administrative status whereby a previously approved protocol's expiration date has passed and an investigator has not submitted a renewal, or the investigator has submitted a request to close a study. The IRB assumes that no human subjects research activities are ongoing and, for administrative record keeping, the study record may be closed.

The IRB can suspend or terminate approval of research that:

- Is not being conducted in accordance with IRB's requirements.
- Has been associated with unexpected serious harm to subjects.
- The IRB may suspend or terminate research based on information received during its continuing review, monitoring visits, or from complaints made to the IRB.

The following individuals are authorized to suspend or terminate research, including suspension of IRB approval on an urgent basis to remove immediate hazards:

- Convened IRB
- Institutional Official (IO)
- IRB Chair

Individuals or bodies other than the convened IRB suspending or terminating research must report that action to the IRB for review. When the research is suspended or terminated, the convened IRB or the individual ordering the suspension or termination must take the following

actions into consideration that will protect the rights and welfare of currently enrolled participants, such as:

- Whether procedures for withdrawal of enrolled participants take into account their rights and welfare (i.e. making arrangements for medical care of a research study or transfer to another investigator).
- Whether participants should be informed of the termination or suspension.
- The need to report any adverse events or outcomes to the IRB.

The IRB must notify PIs in writing via PACS immediately after research activities are suspended or terminated. The notification should contain information on the facts leading to the decision for the action, a plan for notifying and safely withdrawing current subjects, if applicable (taking into account the subjects rights and welfare), and, if applicable, a plan for notifying former subjects of the suspension/termination and any follow-up that may be required to assure their ongoing safety. The PI will be notified of the decision immediately and required to submit a response to the IRB.

Administrative Holds

An administrative hold is a voluntary interruption of research enrollments and ongoing research activities by the researcher. Administrative holds are not suspensions or terminations. Protocols on administrative holds remain open and require continuing review.

An administrative hold does not apply to interruptions of research related to concerns regarding the safety, rights, or welfare of human research participants, researchers, research staff, or others. If there is an unanticipated problem involving risks to participants or others, the study is not eligible for an administrative hold.

An administrative hold must not be used to avoid reporting deficiencies or circumstances that are otherwise require reporting by regulatory agencies.

An administrative hold cannot be used to extend IRB approval beyond the expiration date of a protocol without IRB approval of continuing review.

Procedures for PI's to Request to Place a Study on Administrative Hold

- Notify the IRB via a modification submission in the electronic PACS system of the request to voluntary place an entire study, or specific research activities, on administrative hold.
- In PACS provide a rationale for the PI initiated request and a description of the research activities that will be stopped. Research activities may include but are not limited to recruitment, screening/enrollment, research intervention/interaction, follow-up, or all research activities. Provide any supporting documents.
- Continue to report via the PACS Reportable New Information option any unanticipated problems involving risks to subjects or others that occur while the research activities are on PI initiated administrative hold.
- Notify the IRB through a PACS modification, of the intent to resume research activities when the issues that led to the PI initiated administrative hold have been resolved.
- Notification of approval to resume research must be received by the IRB before research activities placed on hold may commence.

Examples of when an Administrative Hold will be granted include, but are not limited to:

- When a PI goes on sabbatical or takes a leave of absence.

PI Authority to Suspend or Terminate Research Activities

A PI should always be aware of subject safety issues and should suspend research activities on a study when necessary to remove immediate hazards to subjects. If it is apparent that hazards cannot be eliminated by modification of various aspects of the study (i.e. the study design or inclusion/exclusion criteria) the study should be terminated. PIs must notify the IRB in writing immediately after suspending research activities or terminating a study via PACS (the Reportable New Information tab). The notification should contain information of the facts leading to the decision for the action, a plan for notifying and safely withdrawing current subjects, if applicable (taking into account the subjects rights and welfare) and, if applicable, a plan for notifying former subjects of the suspension/termination and any follow-up that may be required to assure their ongoing safety. The IRB will review reports of PI suspensions or terminations and determine what, if any further actions are required on the part of the PI, and report the suspension/termination to the IO.

Reporting to Regulatory and Sponsoring Agencies

Upon a determination made by the IO as part of the Policy on Responsible Conduct of Research, all actions will be reported to the applicable regulatory and sponsoring agencies according to the requirements of the IRB's Federalwide Assurance (FWA). Reports of unanticipated problem involving risks to subjects and others, incidents of serious and/or continuing noncompliance, and suspensions and terminations of research activities, will be sent to the applicable regulatory and sponsoring agencies within 30 days of the IO's determination.

The following incidents require reporting to the OHRP per 45 CFR 46.103(a) and (b)(5):

- Any unanticipated problems involving risk to subjects or;
- Any serious or continuing non-compliance with this policy or the requirements or determinations of the IRB; and
- Any suspension or termination of IRB approval.
- These reporting requirements apply to all nonexempt human subjects research that is conducted at Binghamton University, State University of New York. As per the New York State Department of Health Public Health Law Section 2445, Binghamton University has an attestation to apply or FWA for all research.

Federal reports should be copied to the following individuals, as applicable:

- The Institutional Official (IO).
- OHRP (if the research is federally funded).
- FDA (if the study is subject to FDA regulations).
- Any other federal agency that may have oversight of the study.
- The PI.
- PI's Chairperson and/or Dean.
- The faculty advisor, if PI is a student.
- The Office of Sponsored Programs (if the research is funded).
- The sponsor (if the research is funded).

Reports should contain the following information:

- The nature of the event (unanticipated problem involving risks to subjects and others, incident of serious and/or continuing noncompliance, or suspension or termination of research activities).

- Name of the institution conducting the research.
- Title of the research protocol and associated grant proposal, if applicable in which the problem occurred.
- Name of the PI.
- The number assigned to the protocol by the IRB and the number of any applicable federal award, grant, contract, or cooperative agreement.
- The IND or IDE number associated with the study, if applicable.
- A description of the problem including findings and the reasons for the IRB's determination.
- A description of any corrective action plan approved by the IRB.

Lifting a Suspension

Only the IRB can lift a suspension once all concerns that led to the suspension have been addressed. The IRB Chair or IRB Associate Director may use the expedited review process to lift the suspension, but both reserve the right to require full board review. The IRB will send written notification to the PI when the suspension is lifted. The letter will be reviewed and signed by the IRB Chair, and sent out by the IRB via PACS. A copy of the letter lifting the suspension will be sent to all entities who received a copy of the notification of suspension.

I. Post-Approval Monitoring

There are four primary goals of Post Approval Monitoring (PAM) or compliance monitoring:

1. To confirm by observation, documentation comparison, and direct communication with the Primary Investigator (PI) and study team that all approved research is being conducted in accordance with the IRB approved protocol, federal, and state regulations. In the event of noncompliance, the Institutional Review Board (IRB) and the IRB staff will provide guidance for self-reporting deviations or unapproved changes to the study protocol, and implementing any necessary actions such as submitting a protocol modification.
2. To provide education in identified areas of need. During reviews the IRB is able to explain the IRB process, the importance of following the IRB approved protocol, what is expected from investigators and study team members, and best practices for conducting compliant human subjects research.
3. To ensure the well-being of human subjects in research.
4. In some cases, to help PIs and study teams prepare for external audits by granting, regulatory, and accreditation agencies.

Roles in the PAM Process

The IRB has the authority to approve, require modifications, disapprove, suspend, or terminate all human subjects research activities conducted at Binghamton University. As such, the IRB may determine whether a PAM visit is needed.

To achieve the objective stated above the IRB monitoring representative will work with PIs and their study teams to arrange for observations and confirmation of procedures for an approved study protocol. The IRB monitoring representative will observe the research activities, prepare reports, provide recommendations for maintaining compliance, provide training, if needed, and, if appropriate, assist in the execution of corrective and/or preventative actions.

The IRB Associate Director and the IRB Chair will jointly provide oversight and management of the PAM program and will assure that reports or updates on items of concern are

communicated to the IO.

Protocol Selection/Categories of Audits

All non-exempt studies are subject to post-approval monitoring. Nonetheless, emphasis will be placed on monitoring studies involving:

- vulnerable populations
- deception
- confidentiality concerns
- more than minimal risks to subjects

There are three primary types of monitoring visits:

1. *Routine/Not-For-Cause Audits:* The IRB will randomly select studies to audit based on the list of approved, expedited and full-board protocols. This includes studies with and without a required continuing review. In addition, the IRB may opt to select specific topics for auditing across multiple protocols such as recruitment or informed consent procedures, participant procedures, or maintenance of study records. *Note: The IRB will make an effort not to select multiple studies from the same PI within the same calendar year for PAM review.*
2. *For-Cause Audits:* Monitoring visits may also be conducted at the discretion of the IRB Associate Director, IRB Chair, or the IO as deemed necessary. These reviews are performed when concerns regarding compliance, protocol adherence, or subject safety are brought to the attention of the IRB. This includes review of any or all study-related activities.
3. *Investigator Initiated Audits:* A PI may request an on-site review to audit records and procedures to ensure compliance with federal and state regulations, institutional policies, and/or to prepare for an external audit by a sponsor or federal agency.

PAM visits are not designed to "catch" individuals. Rather, they are conducted to verify that research is being carried out as approved. The IRB recognizes that if noncompliance is detected, it may be a result of a lack of understanding or inadequate training.

Elements of A PAM Visit

Before the monitoring visit:

- An IRB monitoring representative will schedule the visit with the PI and study team members (if necessary), making every attempt to accommodate schedules. Prior to the visit, the IRB monitoring representative will collect and thoroughly review all approved documents in preparation for the visit. Once the visit is scheduled, the PI is provided a copy of the "PI Self-Assessment" form to use to prepare for the visit. Note that more than one IRB member may participate in the PAM visit. When there is more than one IRB member, a lead monitoring representative will be designated.

During the monitoring visit:

- The IRB monitoring representative will compare procedures being conducted in the study area with those listed in the approved protocol and any approved modifications. Documented discrepancies between observed and approved activities will be brought to the attention of the PI. As needed during the visit, the IRB monitoring representative will provide recommendations on compliance related issues. Documents pertaining to research will remain strictly confidential.

At PAM visits the IRB monitoring representative will review and assess areas such as, but not limited to, the following:

- Consent processes
- Current enrollment and verification of informed consent
- Participant payment
- Privacy and confidentiality issues
- Publications from the study
- Recruitment procedures
- Reports of adverse events
- Research team composition and training
- Screening procedures
- Storage of study documents and data
- Study procedures

After the monitoring visit is complete:

- The IRB monitoring representative will prepare a written report which will be sent to the PI within 10 business days via email.
- If necessary, the IRB monitoring representative will meet with the PI and the study team to provide a brief summary of any findings.
- Within 10 business days of receiving the written summary report the PI will respond in writing to the IRB addressing each indication of non-compliance and providing a plan of corrective action.
- Once sufficient corrective actions have been taken by the PI and communicated in writing to the IRB, the IRB will send a PAM close-out email to the PI.

Preparing for A PAM Visit / PI Self-Assessment

The most effective way for a PI to prepare for a PAM visit is to carefully and objectively read the approved study protocol and to make sure that all study staff are performing the research activities as described and approved by the IRB. There are many reasons why adjustments will need to be made to the design, procedures, etc. of a protocol. The key thing to remember is that any changes to the IRB approved protocol must be formally submitted to the IRB as modification(s) via PACS and approved by the IRB prior to implementation.

PIs can prepare for the monitoring visit by reviewing the checklist of questions below (note that not all items on the checklist apply to all research studies):

Approval and Record Keeping

- Does the project have current IRB approval?
- Were there changes to the approved study since the last review and, if yes, was a modification submitted to the IRB via PACS?

Study Team Personnel

- Is CITI certification current for all investigators listed on the study protocol?
- Are all research team members who have contact with participants or the participants' data listed as study team members on the IRB approved protocol in PACS?
- Is the study team member identified to train study personnel doing so in line with approved protocol-specific procedures? Are records of training maintained?
- Are study team members performing duties as described and approved?
- Are all study team members (i.e., PIs, co-Is, research staff) aware of all approved study modifications?

Consent Forms

- Is the informed consent document being used the most current version? Does it have the IRB stamp? If electronic consent is provided, does the language match exactly with that on the stamped consent document?
- Were all consent forms signed by subjects prior to enrollment or was verbal consent recorded by a study team member?
- If using an oral consent, was the IRB approved script used to enroll subjects?
- Do you have a signed and dated consent form on file for every subject enrolled in the study?

Recruitment

- If the timeframe of the research was extended, was a modification to the study protocol submitted to the IRB?
- How many participants are currently enrolled in the study? Is the number enrolled in line with the number approved?
- Were subjects identified and recruited according to the methods approved by the IRB?
- Were all advertising or recruitment materials used to recruit participants approved by the IRB? Were changes to materials submitted as modifications to the IRB and approved before use?
- If subjects received compensation is there documentation that compensation was provided and received?

Research Protocol

- Have any changes been made to the approved data collection materials(questionnaires, interview questions, etc.)? Has IRB approval been sought prior to implementing these changes?
- Are study procedures being conducted in accordance with what was approved by the IRB?
- Have there been early withdrawals from the study? Have they been reported during the continuing review process (if applicable)?
- Have there been any adverse and/or unanticipated events? Were they reported to the IRB via the Reportable New Information tab in PACS?

Privacy, Data Storage and Confidentiality

- Are documents stored exactly as outlined in the IRB-approved protocol?
- If you proposed to collect the data anonymously, has anonymity been maintained in the physical and electronic records as specified in the protocol?
- If applicable, are hard copies of consent forms and data stored in a secure, locked location?
- If applicable, is electronic data stored in a secure manner as specified in the study protocol?
- Is access to electronic and physical files limited to appropriate study personnel?

Information Sharing and Monitoring Visit Follow-Up

A written report that includes a detailed summary of the review of findings and any recommendations for improvement will be sent to the PI within 10 business days after the review has been completed. Within 10 business days of receiving the report, the PI will respond in writing to the IRB addressing each indication of non-compliance and providing a plan of corrective action.

Findings of non-compliance will be reported to the IRB at its next fully convened meeting and a determination will be made if additional follow-up is needed.

It is anticipated that in most cases serious violations involving risk of injury to participants will have already been reported to the IRB. However, if a review demonstrates that a serious protocol violation was not reported, it will be reported immediately to the IRB Chair and the IO.

Appeal Process

If PIs disagree with IRB findings from the PAM visit or required corrective actions, they are invited to address these concerns with the IRB monitoring representative who conducted the review within 10 business days of being sent the findings report. If a satisfactory resolution cannot be determined, the PI may then contact the IRB Associate Director and/or the IRB Chair within 5 business days of speaking with the IRB monitoring representative. If at that point no satisfactory resolution is agreed upon, the PI may address the IRB committee directly at the next full-board meeting. If at that point a satisfactory resolution is still not agreed upon, the PI may address any concerns with the IO within five business days of the full-board meeting.

Recordkeeping

A copy of the PAM visit report and the PAM close-out email will be kept on file indefinitely by the IRB in PACS. Additional documentation including the monitoring visit checklist, email correspondence, and any relevant study files, will be kept in a corresponding electronic folder by the IRB staff for at least three years after the study is closed. Records may be kept longer if other requirements apply (i.e., VA requirements, HIPAA requirements, sponsor requirements). The staff of the IRB are always willing to assist in answering questions or to help facilitate

modification to your protocol. They can be reached at 607-777-3818 or hsrrc@binghamton.edu.

IX. OPERATIONS OF THE IRB

A. Scheduling of IRB Meetings

Convened meetings are scheduled once every month during the fall and spring academic semesters. There are no convened meetings during summer or winter breaks. However, in urgent cases, meetings may be scheduled during breaks as necessary to ensure the protection of human subjects.

B. Information Provided to the IRB Prior to Meetings

Prior to each full board meeting the IRB office staff and the IRB Chair will formulate and review the meeting agenda. Once finalized, IRB members can access the meeting materials (i.e. meeting agenda, protocol(s) to be reviewed, past meeting minutes, etc.) through PACS. All protocols and relevant documents are uploaded to PACS at least seven (7) days prior to the scheduled full board meeting. The members are informed via email that the materials are available online and asked to review the documents and post their comments in PACS. The meeting materials include:

- Meeting agenda.
    - New research
    - Modification requests
    - Continuing review requests
- Minutes from the previous meeting.
- Adverse event / complaint reports.

- All relevant documents for protocol review.
- New business and or topics to be discussed.

C. Full Board Meeting Requirements

A majority of the IRB members and at least one member whose primary concerns is in non-scientific areas are required to review protocols and vote at meetings. It is strongly recommended that IRB members be physically present at the meeting. If physical presence is not possible, a member may be considered present if participating through teleconferencing or videoconferencing. In this case the member must have received all pertinent material prior to the meeting and must be able to participate actively and equally in all discussions. For research to be approved, it has to receive approval of a majority of members present at the meeting.

If this requirement is not achieved or lost at a meeting due to members with conflict of interest being excused, early departures, or a loss of a non-scientist, the meeting is terminated from further votes unless the quorum can be restored. Any absence or loss of quorum should be noted in the meeting minutes.

The IRB may invite consultants with competence in special areas to assist in the review of issues that require expertise beyond or in addition to that available on the IRB. These individuals may not be involved in final discussions or vote with the IRB.

D. IRB Communication Methods

Faculty, research staff, students, research subjects, or any other individual who has a question, concern, complaint, suggestion, or input regarding the IRB, or feels that they have been subjected to coercion or undue influence regarding aspects of human subjects research, or feels that they have observed issues of concern regarding human subjects research, may contact the IRB:

- Human Subjects Research Review Committee/IRB
- Biotechnology Building, 2204
- Phone: 607-777-3818
- E-mail: hsrrc@binghamton.edu
- IRB Website

Any and all concerns, complaints, input, or suggestions regarding the Binghamton University human subjects research protection program and all allegations of coercion, undue influence, or noncompliance will be thoroughly investigated and, if applicable, corrective actions will be taken to rectify the situation(s). If it appears that the concern/complaint could be an incident of noncompliance, further inquiry will follow procedures previously outlined in this document.

Communication with Investigators

All IRB applications are submitted via PACS which can be accessed by going to the IRB website. The IRB office staff primarily communicates with researchers regarding IRB decisions and requests for additional information or clarification via PACS. At times, the IRB office staff may also contact researchers via phone or email to further discuss study related information. Major revisions or changes concerning IRB applications, IRB policies and procedures, or issues pertaining to human subjects research compliance will be communicated to researchers through the IRB listserv, Binghamton University's "Dateline" announcement, and the Division of Research website.

Communication with the Institutional Official (IO)
The IO can access all minutes of convened IRB meetings (including board voting decisions) via PACS or upon request directly to the IRB office staff. Additionally, the IRB communicates all allegations of serious or ongoing non-compliance directly to the IO.

Communication with Research Sponsors
Upon request from the Sponsored Programs office, IRB approval/determination letters or other information pertinent to research funding will be provided to the Sponsored Programs staff.

Communication with Research Subjects
In addition to providing the IRB contact information on the Research Compliance Human Subjects website, contact information is also provided on all informed consent/assent documents. When the IRB office staff receives contact from research subjects the staff will take down the subject's name and contact information. In the event that the subject has a question regarding the research he or she is involved in, the IRB office staff will provide appropriate answers and let the subject know that the study PI will be forwarded the information and provided with the subject's name and contact information. In the event that a subject wishes to file a formal complaint, the IRB office staff will gather pertinent additional information from the subject and follow the policies and procedures outlined in this document for allegations and findings of noncompliance.

X. IRB RECORD REQUIREMENTS

A. Member Roster
In the fall of each year, the IRB office staff will submit to the IO a copy of the IRB member roster and current curriculum vitae demonstrating the qualifications of each committee member.

B. Written Policies and Procedures
Written IRB policies and procedures are contained on the Binghamton University Human Subjects Research website. Hardcopies can be downloaded or obtained by contacting the IRB office.

C. Meeting Minutes
The IRB Coordinator will take notes during the IRB full board meetings. The minutes are recorded in sufficient detail to allow an outside observer to reconstruct protocol specific discussion and determinations. Minutes will be provided for IRB review prior to the next convened meeting and all comments will be reviewed by the IRB office staff and addressed as appropriate. A vote for approval of the final version of the minutes occurs at the subsequent convened IRB meeting.

At minimum, meeting minutes will contain the following information:

- A record of members present and absent, with consultants, guests, or other attendees listed separately.
- When an alternate member replaces a primary member.
- A record of members who left the meeting during protocol discussions and voting due to a conflict of interest.
- A record of separate deliberations for each protocol reviewed.
    - Actions taken by the IRB, including documenting the criteria for approval are met.

    - Separate deliberations for each action.
- The basis for requiring changes, tabling, or dis approving research.
- Justification for any deletion or substantive modification of information concerning risks or alternative procedures contained in an approved sample consent document.
- For initial and continuing reviews, the specified approval period.
    - Records must include the rationale for conducting continuing review on research that otherwise would not require continuing review.
- The voting record for each protocol reflecting the number of members for, against, or abstaining from the vote and when alternate members replaced a primary member.
- A written summary of the discussion of controverted issues and their resolution.
- If applicable, summaries of deliberations of protocols for the inclusion of vulnerable populations.
- If applicable, the rationale for significant risk/non-significant risk device determinations.
- If applicable, protocol specific justifications for waivers of consent and/or research involving vulnerable populations.

All minutes will be stored in the IRB PACS system for 3 years after research is completed or otherwise terminated. Only the IRB Associate Director formally completes the Protocol Narrative Reviewer Determination Form and uploads into PACS at the time a study is given final approval or is not approved. Reconciliation of controverted issues by board members are documented within the meeting minutes and via communication with the board members and/or PI in PACS.

D. IRB Files

The IRB will retain all records required by the regulations (i.e. meeting minutes, correspondence between the IRB and investigators, IRB member rosters, and written procedures required by regulations) for at least three years, and retains all records relating to research that has been conducted or cancelled for at least three years after completion or cancellation of the research. If a protocol is cancelled without participant enrollment, the IRB records will be maintained for at least three years after cancellation. In the case of new drug investigations, IRB records will be maintained for two years after the marketing application is approved or, if no application is filed or if the application is not approved, until two years after the investigation is discontinued and the FDA is notified.

IRB records document determinations required by laws, regulations, codes, and guidance, including documenting the criteria for approval are met, and other required determinations, including whether non-compliance is serious or continuing, and whether a reported event is an unanticipated problem involving risks to participants or others.

The IRB office staff will make records accessible for inspection and copying by authorized representatives of federal agencies or departments at reasonable times and in a reasonable manner.

In order to allow a reconstruction of a complete history of IRB actions related to the review and approval of protocols, the IRB records include copies of:

- Research applications, protocol narrative documents, consent documents, recruitment materials, investigator brochures, and all other documents submitted for review of proposed human subjects research.
- IRB meeting minutes.

- Progress reports submitted by the investigators.
- Significant new findings.
- Reports of injuries to participants.
- Data and safety monitoring reports, if any.
- Modifications to previously approved research.
- Records of continuing review activities.
- Unanticipated problems involving risks to subjects or others.
- Documentation of noncompliance.
- All correspondence between the IRB and researchers.
- Scientific evaluations, when provided by an entity other than the IRB.
- When applicable, the frequency for the next continuing review.

IRB records for initial and continuing review of research by the expedited procedure include:

- Justification for using the exempt and expedited procedure and actions taken by the reviewer.
- Justification that the criteria for approval are met.

If applicable, study records must include the rationale for an expedited reviewer's determination that research appearing on the expedited review list is more than minimal risk.

If applicable, study records must include documentation specifying the responsibilities that a relying organization and an organization operating an IRB each will undertake to ensure compliance with the requirements of the Common Rule.

For exempt research, the primary reviewers formal review in the PACS electronic system, the notice of determination generated by the reviewer, and the Exempt Reviewer Checklist are the primary ways that the specific category of exemption is documented. Copies of all materials are maintained in the study records in PACS.

For expedited research, the primary reviewers formal review in the PACS electronic system, the notice of determination generated by the reviewer, and the Protocol Narrative Reviewer Checklist are the primary ways that the specific category of expedited determination is documented. Copies of all materials are maintained in the study records in PACS.

E. Investigator Retention of Research Record

Regulations require that all human subjects research records be retained for three years following the completion of the research unless otherwise specified by the IRB or funding agency. For research covered by the HIPAA Privacy Rule, the requirement is six years after the completion of the research. Investigators must maintain all research records (including a copy of the entire protocol, consent form, amendments, and copies of signed consent forms for each research participant, if applicable, in the approved location noted in the study protocol. These files are to be available for inspection by HHS, FDA, and the University.

Investigators Who Leave the University

If the investigator leaves Binghamton University, the records must be kept at the University in the IRB office or with a designated investigator. The IRB office must be informed of this transfer of records prior to the investigator's departure. The records will be accessible for inspection and copying by authorized representatives of HHS, FDA, and the University.

When a student graduates or otherwise leaves the University, the faculty advisor is then responsible for retaining the research records.

Study Closure

Closure of a protocol should occur when all of the following conditions are met:

- The research is permanently closed to the enrollment of new subjects;
- All subjects have completed all research-related interventions;
- Collection of private identifiable information is complete; and
- Analysis of identifiable information is complete.
- Instructions on how to submit a Study Closure via PACS can be found on the IRB website.

The IRB Associate Director, in coordination with the Office of Sponsored Programs and the Assistant Vice President for Research Compliance/IO, will review any applicable contract language to confirm the terms by which at the conclusion of the study the researcher and/University will be notified of results by the Sponsor that may impact participants and to determine how best to communicate such information, when appropriate. Contracts or other funding agreements describe the steps followed to communicate findings from a closed research study to the researcher or Binghamton University when those findings directly affect participant safety. Contracts or other funding agreements specify a time frame after closure of the study during which the sponsor will communicate such findings. Alternatively, the time frame may be based on a specific triggering event (such as completion of data analysis), or left open-ended, or the requirement can be included or referred to in a survivor clause. This should be based on the appropriate timeframe for each individual study.

XI. INFORMATION INCLUDED IN IRB STUDY APPLICATIONS

A. Study Team Member Qualifications

The IRB is responsible for reviewing all applications to ensure that all investigators have the necessary skills and qualifications to conduct the research under review. This includes ensuring that, when applicable, investigators have appropriate licensure, accreditation, or experience. In addition, the IRB will consider the facilities and equipment to be used for conducting the research and seek to maintain the rights and welfare of the research subjects.

All key personnel (PI, Co-PI, faculty advisor, students), including investigators from other institutions, originally listed or later added to a study protocol through a modification, must complete the required human subjects research training through the Collaborative Institutional Training Initiative (CITI). This includes modules relating to ethics, regulations, risk assessment, informed consent, and privacy and confidentiality. More information on the required training can be found on the IRB website. Protocol submissions (initial, continuing reviews, and modifications) are checked by the IRB staff to ensure all research staff listed on the study protocol have completed CITI training. Protocol determinations, including approvals, are not made until training is complete for all investigators.

B. Subject Recruitment and Participation

The IRB reviews all recruitment procedures associated with proposed research to ensure scientific merit, the protection of subjects from unnecessary risks, and the equitable and non-discriminatory recruitment of subjects. Subjects inclusion and criteria must be appropriate with respect to the safety and well-being of the participants. Additionally, the IRB will consider the

scientific and ethical justification for exclusion of classes of persons who might benefit from the research and determine if exclusion is justifiable and allowable. There are several questions in the IRB application in which the PI must describe the proposed study population, the number of subjects to be enrolled, and the procedures to be used for recruitment.

Advertisements and Recruitment Materials

The IRB considers all forms of brochures, advertisements, and recruitment incentives as being directly related to the informed consent process and, as such, these materials must not contain any coercion or undue influence. Advertisements used to recruit research subjects should be focused on information that a potential subject would need to determine if they are eligible and interested in participating. This includes information such as, but not limited to, the following:

1. The name and address of the investigator and/or research facility;
2. The purpose of the research, with reference to the fact that the study is investigational;
3. A list of potential benefits, if applicable;
4. Criteria for eligibility to participate;
5. The time and other commitments that will be required of the participant;
6. The location of the study;
7. Contact information for the PI; and
8. A statement similar to: "This study has been approved by The Binghamton University Institutional Review Board."

The IRB must review the final copy of printed advertisements to evaluate the relative size of font type used and other visual effects and must review the script of the final audio or video taped advertisements, before study approval will be given.

Subject Pre-Screening

In some cases a research study may require a pre-screening process in which potential subjects are asked for personal or sensitive information to determine eligibility for the study. Questions asked during this pre-screening process are subject to IRB review to determine if proper procedures are in place for protecting the privacy and confidentiality of the information collected (i.e. shredding of screening answers after pre-screening is complete). This includes evaluating whether or not the description of potential risks and benefits is presented in a fair and balanced manner.

Recruitment of Students and Staff

Binghamton University students and staff have the same rights as any other potential subject to participate in a research project, irrespective of the degree of risk, provided all of the following conditions exist:

- Recruitment should not be conducted in ways that students may reasonably perceive to be undue influence.
- The research must not bestow upon participating University subjects any competitive academic or occupational advantage over other students or staff who do not volunteer. The investigators must not impose any academic or occupational penalty on those not volunteering.
- Due to the potential for perceived or undue influence to participate, University students and staff who desire to participate in the research must not be under the direct supervision of anyone who is involved in the collection of or has access to identifiable data.

- If incentives for participation are offered (i.e. extra course credit), the incentives should not be so large as to cause undue influence. Typically this means that any credit or extra credit must be only a small portion of the total grade.

Researchers Recruiting from Their Own Courses

One circumstance that raises ethical considerations is when researchers recruit students from courses that they are teaching. Of particular concern is the potential for undue influence. Instructors have inherent power over students (i.e. through their responsibility for assigning grades). Because of this, it is likely that some students will feel pressure to comply with requests made by their instructors, regardless of if the instructors actually try to pressure the students. In the rare instances in which recruiting from one's own class is permissible, researchers are expected to minimize the potential for students to feel pressure to participate. This can be done through a variety of ways including:

- Assigning an individual who does instruct the course or is not affiliated with course grades in any way, to oversee participant recruitment.
- Design the study so that the instructor is blind to the identity of the participants (at least until after the final grades have been assigned). For example, a researcher can run the study and keep any identifying information from the instructor. Before being asked to participate, potential subjects should be informed that the instructor will not know who did and who did not participate (at least until after the final grades have been assigned). The research should be designed so that the instructor cannot infer who participated through indirect means (e.g., by seeing who walks into the laboratory, by getting a list of who earned extra credit for participating in the study).
- If extra credit is being provided for participation in the study, instructors should provide an alternate assignment that class members not wishing to participate in the research can complete.

Whenever possible, researchers should avoid recruiting subjects from their own classes.

Subject Pool

It is commonplace in institutions of higher education for academic departments to have subject pools that serve as a registry of individuals who are interested in participating in research and agree to be contacted for potential participation in a study. The IRB provides guidance and oversight of departmental subject pools (i.e. the Department of Psychology SONA pool), and reviews all research requesting subject pool participation. Student subject pools are typically composed of undergraduate students enrolled in particular departmental courses that provide course credit for participation in one or more research projects. All student participation in subject pool research must be completely voluntary.

Departments may provide students with incentives (usually extra credit) to participate in the subject pool. However, reimbursement for participation must not jeopardize the subject confidentiality or anonymity, and subject pools offering extra credit to participating students must provide alternative opportunities for student who do not wish to participate in research to earn the equivalent amount of extra credit.

Subject pools including subjects under 18 years-of age are required to obtain parental permission prior to their involvement in research unless those individuals are emancipated. It is up to the student to decide whether to participate in any study. Course instructors cannot mandate or require student participation.

C. Compensation for Research Subjects

When reviewing research protocols, the IRB is required to review both the amount of compensation proposed and the method and timing of disbursement to ensure that neither are coercive or present undue influence. What is considered "reasonable" is based upon the time involved, the inconvenience to the subject, and reimbursement for expenses incurred while participating. The amount of compensation and any prorating or scheduling of payments should be clearly described in the informed consent document. Payment to research subjects for participation is part of the recruitment incentive. If a subject withdraws early, payment may need to be prorated to reflect the time and inconvenience of the subjects participating up to that point.

In coordination with the Office of Sponsored Programs and the Assistant Vice President for Research Compliance/IO, the IRB Associate Director reviews the study protocol, any applicable contract language, and consent documents to ensure the language regarding contractual responsibility and medical care and any compensation for research participants that incur a research-related injury, when appropriate/applicable, is congruent. Contract or other funding agreements indicate who will provide care and who is responsible to pay for it.

D. Cost Incurred by Research Participants

When applicable, the informed consent document should include a statement that addresses any costs to subjects that may result from participation in the research. All potential participants must be fully informed of the nature and estimated extent of these costs during the consent process.

E. Protection of Subject Privacy and Confidentiality of Data

The potential invasion of privacy or loss of confidentiality resulting from participation in research should be of great concern to investigators conducting human subjects research and must be addressed in the study protocol submission. At times, the risk of serious harm resulting from loss of privacy or confidentiality may exceed the physical or other risks associated with the research. Moreover, loss of privacy or confidentiality associated with a research activity can be considered a moral wrong.

When the IRB considers whether or not a subject's privacy is adequately and appropriately protected in a particular study, consideration will be given to the following:

- The methods used to identify and contact potential participants, and the nature of the information being sought.
- The setting in which participants will be recruited and/or interacting with the investigator.
- The methods used to obtain information about and from participants.
- The nature of the information being obtained from individuals other than the direct participants (i.e. survey information about a family member).
- Whether or not the information is publicly available.
- Whether or not information about the subject is recorded in such a manner as to prevent identification.
- The methods used to limit access to data and consent forms, and if signed consent forms will be kept in a secure location separate from raw data.

Before research is initiated all measures used to ensure confidentiality of data must be understood by all research staff and, once research is initiated, all measures should be followed

as outlined in the approved study protocol. Confidentiality procedures must be described in research applications that come before the IRB, including specific steps that will be taken to ensure any information linking participants to the study is maintained in confidence. The requirement of signed consent forms is often waived in sensitive studies if the consent document is the only written record linking participants to the project and a breach of confidentiality presents the principal risk of harm anticipated in that research. A request for waiver of documentation must be noted in the IRB application.

The following information will be considered when the IRB makes a determination of whether or not subject confidentiality is adequately and appropriately protected:

- The anonymity of the data.
- The methods used by the investigator to ensure that information obtained is not improperly divulged (i.e. secure storage).
- The nature and adequacy of the safeguards that will be used to ensure protection of sensitive data.
- The methods used to de-identify data (i.e. substituting codes for participant identifiers, removing names from survey instruments containing data).
- Proper disposal of identified data at the earliest possible time.
- Limiting access to data.

Use or disclosure of subjects' Protected Health Information (PHI) is generally required to have the subject's signed authorization (see PHI section). Even in circumstances where a waiver of the requirement for written documentation of informed consent has been approved by the IRB, a signed authorization from the research subject permitting the use and disclosure of their Protected Health Information (PHI), will still be required. The requirement for written documentation authorizing use or disclosure of PHI may also be waived by the IRB under certain circumstances (see PHI section). Confidentiality is best maintained by anonymous data collection. In the event that the HIPAA Privacy Act is more restrictive than the procedures described in the consent requirements, the more restrictive rule must be followed.

Use of Data if Participant Withdraws from a Study

For a variety of reasons, a participant enrolled in a research study may decide to withdraw from the research, or an investigator may decide to terminate a subject's participation. Investigators may retain and analyze already collected data relating to any subject who chooses to withdraw from a research study or whose participation is terminated by an investigator, provided such analysis falls within the scope of the analysis described in the IRB approved protocol. However, for research not subject to Food and Drug Administration (FDA) review, PIs can choose to honor a subject's request to destroy data relating to the participant or exclude the data from further analysis. Additionally, PIs are encouraged to consider discussing during the enrollment process, verbally or in the consent form, the use or analysis of collected data if a subject chooses to withdraw from a research study. In deception research, subjects should be permitted to withdraw their data at the time of the debriefing.

Use of Data if a Participant Withdraws from a Clinical Trial

When a participant withdraws from a study, the data collected on the participant to the point of withdrawal remains part of the study database and may not be removed. The consent document cannot give the participant the option of having data removed.

A researcher may ask a participant who is withdrawing whether the participant wishes to

provide continued follow-up and further data collection subsequent to their withdrawal from the interventional portion of the study. Under this circumstance, the discussion with the participant distinguishes between study-related interventions and continued follow-up of associated clinical outcome information, such as medical course or laboratory results obtained through non-invasive chart review, and address the maintenance of privacy and confidentiality of the participant's information. The researcher must obtain the participant's consent for this limited participation in the study (assuming such a situation was not described in the original consent document). The IRB must approve the consent document.

If a participant withdraws from the interventional portion of a study and does not consent to continued follow-up of associated clinical outcome information, the researcher must not access for purposes related to the study the participant's medical record or other confidential records requiring the participant's consent. However, a researcher may review study data related to the participant collected prior to the participant's withdrawal from the study and may consult public records, such as those establishing survival status.

Certificates of Confidentiality (CoC)

CoCs provide additional privacy protections to research participant by protecting investigators and institutions from being compelled to release information that could be used to identify subjects with a research project. Certificates are issued by NIH and other Department of Health and Human Services (HHS) agencies to institutions or universities where the research is conducted. They allow 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. Researchers may apply for a certificate of confidentiality for non-federally funded research.

Certificates of confidentiality are only issued for research projects that are:

- Collecting subject names or other identifying characteristics, on a sensitive research topic
- Approved by an Institutional Review Board (IRB) operating under a Federalwide assurance (FWA) issued by the DHHS Office of Human Research Protections (OHRP) or with the approval of the FDA
- On a topic that is within the HHS health related research mission
- Storing research data in the United States
- Allowable under federal regulations
- Federal funding is **not** required but issuance is at the discretion of the issuing agency.

NIH Policy on Certificates of Confidentiality

As of October 1, 2017, NIH funded researchers will no longer have to request a CoC. The 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 law will become 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 Certificate through this policy. The NIH will continue to consider applications for CoCs for applicable non-federally funded research submitted to NIH institutes and centers through the existing online CoC application system.

What does the NIH consider to be research in which identifiable, sensitive information is collected or used?

- Human subjects research as defined in the Federal Policy for the Protection of

Human Subjects (45 CFR 46), including exempt research except for human subjects research that is determined to be exempt from all or some of the requirements of 45 CFR 46 if the information obtained is recorded in such a manner that human subjects cannot be identified or the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects;

- Research involving the collection or use of biospecimens that are identifiable to an individual or for which there is at least a very small risk that some combination of the biospecimen, a request for the biospecimen, and other available data sources could be used to deduce the identity of an individual;
- Research that involves the generation of individual level, human genomic data from biospecimens, or the use of such data, regardless of whether the data is recorded in such a manner that human subjects can be identified or the identity of the human subjects can readily be ascertained as defined in the Federal Policy for the Protection of Human Subjects (45 CFR 46); or
- Any other research that involves information about an individual for which there is at least a very small risk, as determined by current scientific practices or statistical methods, that some combination of the information, a request for the information, and other available data sources could be used to deduce the identity of an individual, as defined in subsection 301(d) of the Public Health Service Act.

Determination of if the NIH CoC Policy Applies

To determine if the NIH policy on CoCs applies to research conducted or supported by NIH, the investigator will need to ask and answer the following questions:

- Is the activity biomedical, behavioral, clinical, or other research?

If the answer to this question is "no," the activity is not issued a CoC. However, it the answer is "yes," the following questions will need to be answered:

- Does the research involve Human Subjects as defined by 45 CFR Part 46?
- Is the investigator "collecting or using biospecimens that are identifiable to an individual as part of the research?
- If collecting or using biospecimens as part of the research, is there a small risk that some combination of the biospecimen, a request for the biospecimen, and other available data sources could be used to deduce the identity of an individual?"
- Does the research involve the generation of individual level, human genomic data?

In the answer is "yes" to any these questions, the NIH Policy will apply to the research.

Examples of research in which a CoC will be automatically issued by the NIH:

- Biomedical, behavioral, clinical or other research, including exempt research, except where the information obtained is recorded in such a manner that human participants cannot be identified or the identity of the human participants cannot readily be ascertained, directly or through identifiers linked to the participants.
- The collection or use of biospecimens that are identifiable to an individual or for which there is at least a very small risk that some combination of the biospecimen, a request for the biospecimen, and other available data sources could be used to deduce the identity of an individual.
- The generation of individual level, human genomic data from biospecimens, or the use of such data, regardless of whether the data is recorded in such a manner that human participants can be identified or the identity of the human participants can readily be

ascertained.

- Any other research that involves information about an individual for which there is at least a very small risk, as determined by current scientific practices or statistical methods, that some combination of the information, a request for the information, and other available data sources could be used to deduce the identity of an individual.

Researcher Disclosure of Personally Identifiable Information

Researchers who are the recipient of a CoC may 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.

Researchers who are the recipient of a CoC may disclose personally identifiable information only when:

- 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.

Researchers conducting NIH-supported research covered by a CoC, or research covered by a CoC even if not federally funded, must ensure that if identifiable, sensitive information is provided to other researchers or organizations, regardless of whether or not the research is federally funded, the other researcher or organization must comply with applicable requirements when research is covered by a CoC.

What Researchers Must Include in the Informed Consent Document

When research is covered by a CoC, researchers must inform participants (i.e. in the informed consent document) of the protections and limitations of the CoC.

- For studies that were previously issued a Certificate, and participants were notified of the protections provided by that Certificate, NIH does not expect participants to be notified that the protections afforded by the Certificate have changed, although IRBs may determine whether it is appropriate to inform participants.
- If part of the study cohort was recruited prior to issuance of the Certificate, but are no longer actively participating in the study, NIH does not expect participants consented prior to the change in authority, or prior to the issuance of a Certificate,

to be notified that the protections afforded by the Certificate have changed, or that participants who were previously consented to be re-contacted to be informed of the Certificate, although IRBs may determine whether it is appropriate to inform participants.

NIH Funded Research - Procedures for when a CoC is automatically issued

1. The IRB application in PACS (or modification application) must address the CoC in the confidentiality sections of both the protocol narrative and the informed consent document(s)
2. Ensure that the informed consent document(s) contain appropriate language about the protections and limitations of the CoC.

Non-NIH Funded Research - Procedures for when a CoC is not obtained prior to IRB Submission

Generally, a CoC application is submitted after the IRB approval, as approval is required as a pre-requisite for issuance of the Certificate.

- If an Investigator wants to apply for a CoC, submit an IRB application (or modification application) that addresses the intent to apply for a CoC in the confidentiality sections of both the protocol narrative and the informed consent document(s).
- Ensure the informed consent document(s) contain appropriate language about the protections and limitations of the CoC.
- Complete the CoC application via the NIH on-line application system.
- Provide a copy of the CoC application and CoC assurance page, signed by the Investigator, with the IRB application.
- The IRB application, protocol documents, and CoC application will be administratively reviewed by the IRB staff to confirm completeness and accuracy. If revisions to the IRB documents or CoC application are required, the Investigator will be notified via PACS.
- Once the CoC application has been verified by IRB staff, the requisite signature will be obtained. After it is signed, the IRB staff will forward the CoC assurance via email to the Investigator to include with their CoC application on-line.
- Immediately upon receiving the CoC Approval letter, the investigator should submit a study modification in PACS and upload a copy to the study record.
- If the research project will extend beyond the expiration date on the CoC, the Investigator may submit a written request to the NIH for extension of the date. If the request is approved, an amended Certificate will be issued. The amended CoC Approval letter must be uploaded in the study record in PACS via submission of a study modification.

F. Informed Consent

Researchers are required to describe in the research protocol how informed consent will be sought from each prospective participant or the participant's legally authorized representative (LAR) in keeping with the criteria outlined in the OHRP regulations. Protocol descriptions should identify the setting in which consent will occur and the methods in place to allow for questions and to prevent undue influence on a potential subject. Obtaining consent is to be viewed as both a legal and ethical obligation, and must be obtained prior to enrolling subjects in a study.

Any consent form used to enroll subjects in a research protocol must be reviewed and approved by an IRB prior to enrollment. Approved consent/assent forms will be stamped by the IRB. Modifications to an existing consent/assent form must be approved prior to

implementation, at which time the revised consent form will be stamped and dated by the IRB and be accompanied by a formal approval notification. In addition, the IRB may request to observe the informed consent process to ensure adequate consent when the research involves particularly vulnerable populations.

Consent/Assent Form Templates

Researchers are expected to utilize the template informed consent and assent documents provided on the IRB website. The consent form template contains all the required regulatory elements of consent. Written materials define for researchers what Binghamton University considers "key information" and what it considers a "concise" presentation of key information. Information given to potential participants must be in language that is understandable to the subject or representative. If it is anticipated or known that there will be non-English speaking potential participants, the consent form must be translated for IRB review and approval.

Long-Term Studies

For long-term studies, researchers are reminded that the informed consent process is ongoing and does not end with the signing of the consent form. Participants should be kept apprised of events that might affect their willingness to participate. Participants who reach the age of majority (18 or older in New York state) while continuing participation in a study, must be consented as adults before participating in any further study activities.

Documentation of Informed Consent

The IRB follows the federal and state regulations for documentation of consent. Please visit the OHRP website for more information about the federal regulations concerning documentation of consent and Article 24-A for New York state regulations concerning documentation of consent. Please contact the IRB office for any question or concern regarding the consent documentation process. At the conclusion of the consent process the person obtaining informed consent should ask the subject who agrees to sign and date the consent form and the researcher must also sign and date the document. Each study subject must be given a copy of the signed consent form.

Informed Consent for Online Research

Internet consent documents should include all the elements of a regular signed consent form. Researchers should maintain the format of the template consent document, with study specific information added, as much as possible.

Parental Permission/Child Assent

For any research involving minors (individuals under the age of 18 years) the federal regulations require the assent of the child or minor and the permission of the parent(s). Children, while not legally capable of giving informed consent, may possess the ability to assent. Similar to the consent process, the assent process should involve investigators taking the time to explain to the child what is going on in the proposed study, why the study is being done, what will be done to them, and that if they object, the research will be terminated. Assent means the potential subject's affirmative agreement to participate in the research. Investigators are expected to utilize the template assent documents provided on the IRB website.

Waiver or Alteration of the Consent Process

The IRB may approve a consent procedure that does not include, or that alters some or all of

the elements of informed consent, or that waives the requirement to obtain informed consent provided that the IRB finds and documents all of the following:

1. The research involves no more than minimal risk to the subjects;
2. The waiver or alteration will not adversely affect the rights and welfare of the subjects;
3. The research cannot practicably be carried out without the waiver or alteration;
4. If the research involves using identifiable private information or identifiable biospecimens, the research could not practicably be carried out without using such information or biospecimens in an identifiable format;
5. Whenever appropriate, the subjects will be provided with additional pertinent information after participation; and
6. The research is not FDA-regulated.

A less common set of conditions for a waiver or alteration of consent includes:

1. The research or demonstration project is to be conducted by or subject to the approval of state or local government officials and is designed to study, evaluate, or otherwise examine: (i) public benefit or service programs; (ii) procedures for obtaining benefits or services under those programs; (iii) possible changes in or alternatives to those programs or procedures; or(iv) possible changes in methods or levels of payment for benefits or services under those programs; and
2. The research could not practicably be carried out without the waiver or alteration.

Waiver of Documentation of Consent

The IRB may waive the requirement for the researcher to obtain a signed consent form for some or all subjects if it finds any of the following (45 CFR 46.117 (c)):

- The only record linking the subject and the research would be the consent document and the principal risk would be potential harm resulting from a breach of confidentiality.
- Each participant will be asked whether he/she wants documentation linking the subject with the research, and the subject's wishes will govern.
- The research presents no more than minimal risk of harm to subjects and involves no procedures for which written consent is normally required outside of the research context.
- The subjects are members of a distinct cultural group or community in which signing forms is not the norm, that the research presents no more than minimal risk of harm to subjects and provided there is an appropriate alternative mechanism for documenting that informed consent was obtained.

Broad Consent

In the revised Common Rule, broad consent is an alternative consent process for use only for the storage, maintenance, and secondary use of identifiable private information or identifiable biospecimens for future, yet-to-be specified research. At this time, the Binghamton University IRB will not implement the institutional use of broad consent, as the tracking requirements are too burdensome. Exempt categories 7 and 8, which rely on broad consent, will not be utilized. The IRB will continue to support investigators seeking subject permission for the collection and storage of identifiable private information/biospecimens for future secondary use research through other processes including comprehensive IRB review and consent procedures as appropriate.

Emergency Waiver of Consent

The waiver of consent may be carried out in human subjects who are in need of emergency

therapy and for whom, because of the subjects' medical condition and the unavailability of legally authorized representatives of the subjects, no legally effective informed consent can be

obtained. Due to special regulatory limitations relating to research involving prisoners (subpart C of 45 CFR part 46) and research involving fetuses, pregnant women, and human in vitro fertilization (subpart B of 45 CFR part 46), this waiver is inapplicable to these categories of research.

Binghamton University does not have the faculty, staff or facilities to conduct research that would require an Emergency Waiver of Consent. Binghamton University does not oversee the use of emergency uses of test articles in a life-threatening situation.

Posting of Clinical Trial Consent Forms

For each clinical trial supported by a federal department or agency, one IRB approved informed consent form used to enroll subjects has to be posted by the PI on a publicly available federal website that will be established as a repository for such forms. The requirement applies to all federally-funded clinical trials including social, behavioral or educational research studies that meet the definition of a clinical trial.

Responsibility for Posting

Adherence to the posting requirement is the responsibility of the awardee. For federally-funded projects where Binghamton University is the only awardee, the Binghamton PI bears the responsibility of ensuring the requirement for posting of the consent form is met. For multi-site research, generally the prime awardee is considered the responsible party and must ensure compliance with the posting requirement.

Where to Post Consent Forms

The consent form must be posted on a publicly available website approved for such posting. Two publicly available federal websites have been identified by OHRP that will satisfy the consent form posting requirement. These include:

- ClinicalTrials.gov
- A docket folder on Regulations.gov (Docket ID: HHS-OPHS-2018-0021). For studies that are registered on ClinicalTrials.gov, the consent form must be posted on ClinicalTrials.gov.

When Posting Must Occur

The form must be posted on the federal website after the clinical trial is closed to recruitment, and no later than 60 days after the last study visit by any subject.

For studies that are registered on ClinicalTrials.gov, the informed consent form should be uploaded at the same time the Overall Status is updated to reflect the trial is closed to recruitment.

Version of the Consent Form that Must be Posted

OHRP requires that the version of the consent document that is posted must a) be IRB-approved and b) have been used to enroll a participant in the clinical trial. It should be the most recent IRB-approved version used.

Any requests to redact certain information prior to posting must be submitted to the Federal department or agency supporting the clinical trial. Only the Federal agency supporting the

clinical trial may permit or require redactions to the information posted.

Requirements for Posting a Consent Form on ClinicalTrials.gov

- The document date entered must match the date of IRB approval as listed on the stamped consent form.
- When uploading the consent form, it must have a cover page with the following elements:
    - Study Title
    - Document Date [Date of IRB approval on the stamped consent form]
    - NCT number
    - The consent form and corresponding cover page must be saved in a PDF/A format for upload.

Requirements for Posting a Consent Form to the Docket Folder on Regulations.gov

To use regulations.gov to satisfy the 45 CFR 46.116(h) requirement, you must submit the informed consent form as a comment to the appropriate docket folder (Docket ID: HHS-OPHS-2018-0021).

OHRP has released instructions for posting consent forms to this folder. These instructions are available at the following link:
https://www.hhs.gov/ohrp/regulations-and-policy/informed-consent-posting/index.html

Proxy Consent - Research Conducted in New York State

New York state law requires that surrogate consent, other than that of a parent or legal guardian (a legal guardian is defined as an individual who has obtained legal guardianship through the Surrogate Courts Proceedings Act §1700 ff., Domestic Relations Law §81 and Article Six of the Family Court Act), is not allowable, unless there is a legal document that specifically authorizes another to act on behalf of someone for research purposes (Public Health Law Section 2442). For example, the consent of a friend would not be allowed. Those individuals allowed to give consent to a third party include:

- Persons appointed as health care agents.
- Court appointed guardians.
- Next of kin in the following order: spouse, adult child, parent, and adult sibling when there is a legal document that specifically authorizes another to act on behalf of someone for research purposes as per Public Health Law Section 2442.
- Research conducted outside New York state.

It is the PI's responsibility to ensure that federal guideline 45 CFR 46.102(i) is followed: Legally authorized representative means an individual or judicial or other body authorized under applicable law to consent on behalf of a prospective subject to the subject's participation in the procedure(s) involved in the research. Therefore, the PI must provide to the IRB documentation of state law concerning proxy care where the research is being conducted and these laws must be incorporated in the consent process.

Research Conducted Outside of New York State

It is the PI's responsibility to determine which individuals are considered ,"children" or "guardians" outside of New York state to ensure that federal guideline 45 CFR 46.102(i) is followed: (c) Legally authorized representative means an individual or judicial or other body authorized under applicable law to consent on behalf of a prospective subject to the subject's

participation in the procedure(s) involved in the research.

FDA requirements for permission by parents or guardians and for assent by children (21 CFR 50.55(e)(1)).

- Where parental permission is to be obtained, the IRB may find, if consistent with state law, that the permission of one parent is sufficient for clinical investigations to be conducted under 21 CFR 50.51 or 21 CFR 50.52.
- Where clinical investigations are covered by 21 CFR 50.53 or 21 CRF 50.54, and permission is to be obtained from parents, both parents must give their permission unless one parent is deceased, unknown, incompetent, or not reasonably available, or when only one parent has legal responsibility for the care and custody of the child if consistent with State law.

Therefore, the PI must provide to the IRB documentation of state law concerning proxy care where the research is being conducted and these laws must be incorporated in the consent process.

Re-Consenting Subjects

Researchers are responsible for informing subjects of any new information that might affect their willingness to continue participation in the research. In these cases, an amended consent form, delineating the findings and the changes to research risks/benefits, must be reviewed and approved by the IRB. Participants should then be briefed on the changes, asked if they wish to continue participation and signify their willingness to continue participation by signing the amended consent form.

Research Involving Audio, Video, and/or Photographic Recordings

Recording the voice or image of an individual creates a type of record that requires unique handling and storage, particularly if the content may be considered sensitive. Research subjects must be informed that such recordings will occur, and be provided with information about the storage, confidentiality, and future use of the recordings in the consent document. The subjects must be informed of the following:

- The type of recording that will be utilized;
- Specific identifiers that will be recorded;
- Who will have access to the recordings;
- Processes in place for protecting confidentiality of the recordings;
- When the recordings will be destroyed or if they will be kept indefinitely; and
- Purposes the recordings will be used for: educational, commercial, analysis, and/or unspecified use.
- The informed consent should include an additional signature line for recording permission. If recording is required in order to participate in the research, informed consent must clearly state signing the informed consent indicates agreeing to participate in research and giving permission to be recorded.

G. Research Utilizing Surveys

Survey instruments have become some of the most used data collection tools in the social sciences and now, more than ever, researchers are using the internet for ease of survey distribution. Regardless of how surveys are distributed (in-person or online), the IRB must review the proposed research, including a final version of the survey instrument. While research involving the use of surveys is often minimal risk and able to be reviewed by an

exempt or expedited process, there is always a requirement to obtain informed consent from research participants. For research utilizing surveys, approval is usually granted for an informed consent process that includes a consent document in the form of a cover letter that is presented at the beginning of the survey. In many cases the requirement for obtaining written documentation of consent (a signature) is waived as subjects agree to participate by completing the survey.

Researchers who utilize e-mail surveys should add the following information to their message:

- The message should state at the outset where the e-mail addresses were obtained.
- Include either a statement that there will be no future mailings or an "opt-out" message that directs the researcher to remove the subject's name from future mailings.
- If there will be future e-mails, add the statement, "If you do not respond to this survey or return the "opt-out" message, you will receive repeat e-mail messages X times during the next Y weeks.
- Include the PI's contact e-mail address and telephone number.
- Use a "blind copy format" so that the list of recipients will not appear in the message header.

H. Community-Based Research (CBR) / Community-Based Participatory Research (CBPR)

CBR is an important subset of research being widely conducted at Binghamton University. While "community-based research" is a term that carries many different meanings, the IRB will use the term to refer to any research that takes place in or involves a community. The degree of engagement of the community or degree of shared governance can be along a spectrum with CBPR engaging the community to the greatest extent. The community generally actively participates in the full spectrum or majority of the research process, such as the conceptualization or design, conduct or implementation, analysis and interpretation of data, conclusions, and communication of results.

CBR Continuum

Traditional Research	Community-Placed Research	Community-Based Research	Community-Based Participatory Research

When investigators conduct these types of research activities, there's is an intent to strengthen community partnerships and to demonstrate respect for community values. While traditional human subjects research protections have focused on the risks and benefits to individual research participants, CBR involves interactions with the community at large, and therefore requires consideration of the risks and benefits to the entire stakeholder community. Because there is a continuum of involvement between University investigators and communities, a single set of guidelines is not appropriate. However, all research involving communities should follow best practices for respectful and productive relationships.

The following principles are in addition to those required for all human subject research:

1. Be certain that the research topic addresses a community-defined need, question or problem.
2. Recognize research as a partnership (i.e. engagement of research projects is to be led by a team of academic and community Co-Investigators as partners).
3. Respect the community partner's interest in the research.
4. Be open to the guidance of community insights and experiences.
5. Maintain a balance in decision making between the researchers and community participants.

6. Provide continuous feedback to enhance the partnership and its outcomes.
7. Disseminate research findings to community stakeholders and participants.
8. Recognize partnerships can dissolve and a plan for closure should be developed.

Investigator Considerations

If you are conducting community-based participatory research, note that is important that the principal investigator, as well as the co-investigators from the community establish formal ground rules for the research project management. In addition to the relevant human research protection regulations, policies and guidance, the IRB submission should also specify the following:

- *What aspects of the research community members will be involved in, as well as how they will be involved.* This may include research design or conceptualization, conduct or implementation of the study, and dissemination or distribution of study results. In some topics or research areas, it may be necessary to involve the community members as well in the analysis and interpretation of data, and to seek their input into how the results or findings will be distributed or shared with others. This gives the community members the opportunity to include their views about the interpretation prior to final publication.
- *How the researchers will work with the community members to identify any risks and potential issues* (e.g., literacy, language barriers, local or cultural beliefs and attitudes). Risks should be considered for both individuals and the community. Appropriate measures to minimize any foreseeable risks can also be established in consultation with the community members.
- *If a collaborative IRB review may be necessary.* Some groups, agencies or entities (e.g., tribes, retirement communities, and school districts) may have their own ethical review process for research. If this is the case, researchers should apply to the local ethics review body for review and approval of their research. Institutional and/or investigator agreements may also be necessary.
- *Plans for IRB study modifications*. In CBR it is often necessary to make changes to the procedures or survey/data collection instruments as the research progresses or is implemented in the field. Researchers must anticipate and plan for this by including in the IRB application information that is sufficient enough to allow for a thorough review but general enough to allow flexibility. For example, describe a range of procedures that may be employed; avoid the use of specific dates but rather indicate a time period (i.e., state that "interview will be conducted in late fall of this year" rather than "interview will be on October 31"); avoid the use of specific locations unless necessary when describing where interview will take place (i.e., state that interview will take place at a "mutually agreed location" rather than "Room 123 in Building A"); if the questions cannot be fully listed as in a semi-structured interview (with possible follow-up questions based off earlier responses), describe instead the nature or key areas of the questions and the parameters or boundaries (limits) of topics to be discussed.
- *Plans for the disclosure of research findings.* Most group harms result from inappropriate disclosure of research findings. Researchers should work with the community to establish ground rules for how research findings will be communicated to the community members as well as possible implications of disclosure. This approach may reduce the possibility of harms resulting to the community as the research is published or presented.
- *Plans for how benefits will be made available to community groups.* Researchers should design studies so that they will provide benefits to the communities involved. Productive partnerships between researchers and community members should be encouraged to last beyond the life of the project. This will make it more likely that

research findings will be incorporated into ongoing community programs and therefore provide the greatest possible benefit to the community from research.

IRB Considerations

Individuals conducting IRB reviews of CBR protocols should ensure that principal investigators have submitted enough information to assess whether the study adequately meets the criteria for approval, including:

1. Evidence of an equitable partnership between the investigator and the community partner.
2. The Investigators have defined the relevant community or communities.
3. The investigators have identified the appropriate community or communities for the project.
4. The community Co-Investigator has identified the appropriate research partner for the project.
5. Community engagement is an integral part of the research.
6. Letters of support (from the community) are clear and 1well-defined.
7. There is an appropriate division of funding (if applicable).
8. There are adequate training opportunities for investigators and community members.
9. The research environment is adequate.
    a. The community benefits from the presence and implementation of the research.
    b. The research is conducted in an environment that enhances the likelihood of success.
10. The research strives for positive change in the community's outcomes.
11. The research fosters long-term relationships between the University and the community for the benefit of both.

IRB Support and Additional Resources

IRB staff are available to assist with education, project-specific questions, and submission requirements related to CBR, such as the following:

- Regulatory considerations related to researcher engagement, performance sites, and involvement of vulnerable populations
- Training requirements
- Institutional and/or investigator agreements
- Use of community advisory boards
- Involvement of participant advocates
- Establishing partnerships with community-based organizations

XII. RESEARCH INVOLVING DECEPTION

Sometimes information must be withheld from research subjects or false information needs to be provided to them. This may be for substantive reasons (i.e. to distinguish perceptual causes from other causes) or methodological reasons (i.e. to ensure natural reactions or to avoid placebo effects). These circumstances inherently involve a breach of the concept of informed consent. Consequently, several serious concerns must be addressed before such research can take place.

The following are potential risks associated with deception:

- Subjects may feel that they were coerced to act against their will.
- Subjects may feel ashamed, guilty, stressed, or embarrassed because they now have knowledge about themselves that they otherwise would not have known or

would not want to know.
- Subjects may feel a loss of control that will cause distrust and suspicion regarding human subjects research in general.
- The research may undermine the trust in professional standards governing human subjects research.

A. Guidelines for Studies Involving Deception

The following are general guidelines regarding the design, review and conduct of studies involving deception and incomplete disclosure:

- The use of deception is only acceptable for studies that are minimal risk.
- The use of deception should have no adverse effects on the well-being of the subjects.
- Subjects must be provided with sufficient information for them to decide whether to participate and, as in all other human subjects research, be allowed to withdraw at any point without penalty.
- No information can be withheld from subjects that could significantly affect their decision to participate (i.e. the subjects would likely participate anyway if they knew all the information).
- The IRB must be provided with sufficient information to determine that the value of the research outweighs the risk of waiving some aspects of the requirement for full disclosure in the informed consent process.
- There is no reasonable alternative to scientifically and effectively address the research question without the use of deception or incomplete disclosure.
- When the deception involves a falsehood told, no information can be provided to subjects that would have a harmful effect on them if the statement were believed.
- Subjects should be informed about the nature of the research in a way that does not invalidate the data.
- Subjects should be informed of their right to withdraw their data if theywish.
- Potential participants should be advised in the consent form that the information they are given is not complete and that they will be debriefed after the research procedures are completed.
- All subjects must be debriefed as soon as possible after their participation regarding the true nature of the research.

B. Debriefing Requirements for Use of Deception in Research

Debriefing is an essential part of the informed consent process and is mandatory when the research study involves use of deception. Debriefing provides participants with a full explanation of the hypothesis being tested, procedures to deceive participants, and the reason(s) why it was necessary to deceive them. It should also include other relevant background information pertaining to the study (see below).

Timing

The timing of the debriefing is an important consideration. Generally, the IRB expects that participants will be debriefed immediately following their participation in the study. However, it is possible that an immediate debriefing may compromise study results (i.e., participants who have completed the study might tell others about it). The IRB recommends the use of the following strategies to handle this situation.

1. If participant names and contact information are collected as part of study procedures, debriefing information can be sent when the study is completed via mail,

email or by phone.

2. If participant names and contact information are not collected researchers can:
    a. Give participants a URL where they can get debriefing information and a date upon which it will be available.
    b. Have each participant address an envelope to themselves before they leave the study session and send them debriefing information when the research is completed.

Types of Debriefing

In most cases, the IRB expects that participants will be given a debriefing statement to take with them after the study is complete or be given an oral debriefing (script) immediately following completion of the study. Both the debriefing statement and the debriefing script must be reviewed and approved by the IRB. The process to debrief participants must be explained in the IRB protocol application and include the following elements:

- Who will debrief participants. The IRB expects that this person is a member of the research team, someone knowledgeable about the research and the deception.
- When participants will be debriefed. Again, the IRB generally expects that participants will be immediately debriefed after they complete the study. Any delay in debriefing must be explained and justified.
- A rationale for any elements of the deception that will not be revealed to participants.

What to Include in the Debriefing Statement/Script

At a minimum, the debriefing statement must include the following:

- Label the form as "Debriefing Statement"
- Study title
- PI name and contact information for follow-up questions
- Thank participants for taking the time to participate in the study
- Explain what was being studied (i.e., purpose, hypothesis, aim). Use lay terms and avoid jargon
- Explain how participants were deceived
- Explain why deception was necessary in order to carry out the research
- Explain how the results of the deception will be evaluated
- A statement that subjects may withdraw their data if they wish. Particularly in cases where audio or videotaping was used, the IRB suggests that participants be given at least 48 hours to make this decision and provide contact information for whom participants should contact regarding their withdrawal from the study. If a participant decides to withdraw, the PI must use video editing tools to make an individual who withdraws unidentifiable. If tools are not available, the PI cannot use the video or audiotape.

Consider adding the following, additional elements, to the debriefing statement:

- Provide references/website for further reading on the topic.
- Emphasize that it was the not the gullibility of the participant but rather the skill of the experimenter that is responsible for the success of the deception.
- If the study did not involve use of audio or videotaping but involves sensitive topics, it may be appropriate to give participants an opportunity to withdraw their consent to participate.

XIII. GENETIC RESEARCH

The following Binghamton University procedures and New York state laws must be taken into consideration when designing a research protocol that involves the use and storage of human genetic materials:

- NY Civil Rights Law Section 79-L: Each disclosure or re-disclosure (human subjects identified) of the test results requires the express informed consent of the test subject, and no general waivers are deemed informed consent.
- NY Civil Rights Law Section 79-L: While informed consent is required to allow research access to specimens; explicit re-consent is not required once linked identifiers are removed.

For the purpose of this manual, "Genetic Materials" are defined as human tissue samples (saliva, blood, serum, tumor, etc.) on which genetic-related research, such as identification and location of specific genes, study of gene products, inherited human traits, or identification and analysis of DNA mutations, may be performed. Research involving genetic materials may require the Institution Biosafety Committee approval prior to beginning the research.

In the informed consent, researchers need to explain whether the collected genetic samples (de-identified or with identifiers) will be used for future research.

Prospectively Acquired Anonymous Samples

For research in which samples (blood, tissue, saliva, etc.) will be prospectively acquired without identification, the following issues must be presented in the consent document:

- How anonymity of the samples will be accomplished (some basic information, such as age and gender, may be retained with the sample);
- Ownership of the genetic material (usually the University);
- The general scope of the investigation, but new avenues of investigation in the future are permissible if this possibility is presented and explained during the consent process;
- Whether the sample or its genetic material will be shared by other investigators'
- That information specific to an individual subject cannot be shared due to sample de- identification. However, information that accrues from the study that is valuable to society will be shared through publications.

Identified Samples

Research utilizing samples collected with identifiers must consider the following issues as appropriate:

- If genetic material is linked to the donor by specific identifiers, ownership of the material will generally remain with the institution. If a commercial use is anticipated for the genetic material, the individual must be notified.
- If identifiers are present, new experiments (not described in the original consent form) must be reviewed by the IRB and new consent obtained from the research subject regardless of the details of ownership.
- The PI may include a provision in the consent form for new experiments not requiring new consent if identifiers are irrevocably removed from the samples. If the PI anticipates future experiments without identifiers, this possibility should be presented in the original consent form. The methods for removal of identifiers must be approved by the IRB. Removal of identifiers must not be employed as a method of

avoiding ownership issues.

- A satisfactory method for sharing or withholding information gained by the research must be in the research protocol and clearly indicated in the consent form.
- Details for sharing or not sharing the genetic material with other investigators must be present in the protocol and clearly indicated in the consent form.
- The length of time the genetic material will be maintained must be indicated in the consent form.

XIV. HUMAN TISSUE AND DATA REPOSITORIES

This section does not apply to PIs who collect biological fluids or other types of human tissue for analysis as a part of a specific research project. A human tissue or data repository is a collection of tissue samples or data with the intent of establishing a relatively large collection of data or tissue that will be accessed by other investigators who may or may not be located at the University.

Archived Specimen Repository Requirements

When proposing to establish an archive of biological materials, the researchers must contact University Environmental Health and Safety and the Institutional Biosafety Committee for consultation. An Archived Specimen Repository will require regular inspection by Environmental Health and Safety and Institutional Biosafety Committee approval.

The Archived Specimen Repository must be sufficiently secure to prevent theft, loss, or destruction of valuable information. The laboratory director should be aware of all individuals with access. The facility should be locked and accessible to laboratory personnel with key access. The Archived Specimen Repository should be equipped with key-card access which will provide electronic time-stamped recording of personnel entering the facility.

In order to function as human biological repository and specimen bank, the Archive will be required to establish an official material transfer agreement (MTA) and data use agreement (DUA) for those researchers interested in obtaining samples. The Office of Entrepreneurship and Innovation Partnerships-Technology Transfer unit (https://www.binghamton.edu/research/innovation/technologytransfer.html) in the Division of Research will oversee this process. Laboratory directors/PIs will be required to forward all MTAs to the IRB office.

The IRB must review and approve the procedures and conditions under which data and/or tissue specimens are collected, stored, and shared; and ensure that there are adequate provisions to protect the privacy of subjects and maintain the confidentiality of data. Documentation of informed consent should be obtained from each donor subject. The informed consent document should also contain an acknowledgement that collector-investigators and the repository are prohibited from providing recipient investigators with access to the identities of donor-subjects or to information through which the identities of donor-subjects could be readily ascertained.

If the specimens in the Archived Specimen Repository are identifiable and belong to living subjects, obtaining a Certificate of Confidentiality before sharing information may be required. This certificate can be obtained through the National Institutes of Health or other non-HHS agencies including but not limited to the CDC and FDA. The appropriate agency will be dependent on the research/repository.

XV. RESEARCH INVOLVING VULNERABLE POPULATIONS

For research involving vulnerable populations as participants, the IRB must consider additional safeguards to protect their rights and welfare such as: recruitment inclusion and exclusion criteria; informed consent and desire and capacity to volunteer; coercion and undue influence; and confidentiality of data. In addition to the responsibilities prescribed for IRB's under 45 CFR Part 46, Subpart A, the IRB must also follow special procedures with respect to pregnant women, fetuses, neonates of uncertain viability, prisoners, and children as specified in Subparts B, C, and D.

A. Pregnant Women, Human Fetuses and Neonates

Research Involving Neonates

When research involves neonates of uncertain viability and nonviable neonates, the IRB determines and documents:

- Where scientifically appropriate, preclinical and clinical studies have been conducted and provide data for assessing potential risks to neonates.
- Individuals engaged in the research have no part in determining the viability of a neonate.
- One of the following is true:
    - The research holds out the prospect of enhancing the probability of survival of the neonate to the point of viability, and any risk is the least possible for achieving that objective.
    - The purpose of the research is the development of important biomedical knowledge which cannot be obtained by other means and there is no added risk to the neonate resulting from the research.
- The consent of either parent of the neonate is required or, if neither parent is able to consent because of unavailability, incompetence, or temporary incapacity, the legally effective consent of either parent's legally authorized representative is required, except that the consent of the father or his legally authorized representative need not be obtained if the pregnancy resulted from rape or incest.

When research involves nonviable neonates, the IRB determines and documents:

- Where scientifically appropriate, preclinical and clinical studies have been conducted and provided data for assessing potential risks to neonates.
- Individuals engaged in the research have no part in determining the viability of a neonate.
- Vital functions of the neonate are not artificially maintained.
- The research will not terminate the heartbeat or respiration of the neonate.
- There is no added risk to the neonate resulting from the research.
- The purpose of the research is the development of important biomedical knowledge that cannot be obtained by other means.
- The consent of both parents is required, except:
    - If either parent is unable to consent because of unavailability, incompetence, or temporary incapacity, the consent of one parent is required.
    - If the pregnancy resulted from rape or incest the consent of the father need not be obtained.
- When the research involves non-viable neonates, the IRB is not allowed to approve the consent of a legally authorized representative.

Review of Non-HHS Funded Research Involving Pregnant Women and Fetuses
For studies not greater than minimal risk and not funded by HHS, 45 CFR Part 46, Subpart B may be used as a guide, but determinations of approval for inclusion of pregnant women will predominantly be made by assuring that risks to the fetus are minimal and all criteria for approval under 45 CFR 46.111 are met.

Review of Federally-Funded Research Involving Pregnant Women and Fetuses
Federally-funded research activities requesting inclusion of pregnant women may be undertaken if all the following conditions, 45 CFR 46.204, are met:

1. Where scientifically appropriate, pre-clinical studies, including studies on pregnant animals, and clinical studies, including studies on non-pregnant women, have been conducted and provide data for assessing potential risks to pregnant women and fetuses;
2. The risk to the fetus is caused solely by interventions or procedures that hold out the prospect of direct benefit for the woman or the fetus; or, if there is no such prospect of benefit, the risk to the fetus is not greater than minimal and the purpose of the research is the development of important biomedical knowledge which cannot be obtained by any other means;
3. Any risk is the least possible for achieving the objectives of the research;
4. If the research holds out the prospect of direct benefit to the pregnant woman, the prospect of a direct benefit both to the pregnant woman and the fetus, or no prospect of benefit for the woman nor the fetus when risk to the fetus is not greater than minimal and the purpose of the research is the development of important biomedical knowledge that cannot be obtained by any other means, the consent of the mother will be obtained in accordance with the informed consent provisions of 45 CFR 46, Subpart A unless altered or waived in accordance with 45 CFR 46.116(d);
5. If the research holds out the prospect of direct benefit solely to the fetus, then the consent of the pregnant woman and the father is obtained in accordance with the informed consent provisions of 45 CFR 46, Subpart A, except that the father's consent need not be obtained if he is unable to consent because of non-availability, incompetence, or temporary incapacity or the pregnancy resulted from rape or incest;
6. Each individual providing consent is fully informed regarding the reasonably foreseeable impact of the research on the fetus or neonate;
7. For children as defined in 46.402(a) who are pregnant, assent and permission are obtained in accord with the provisions of 45 CFR Part 46, Subpart D.
8. No inducements, monetary or otherwise, will be offered to terminate a pregnancy for the purposes of the activity;
9. Individuals engaged in the research will have no part in any decisions as to timing, method, and procedures used to terminate a pregnancy; and
10. Individuals engaged in the research will have no part in determining viability of the neonate.

B. Prisoners
Recognizing that prisoners may be influenced by their incarceration to participate in research and in order to ensure that their decision to participate is not coerced, research funded by HHS must adhere to Subpart C of 45 CFR Part 46.

- *Prisoner* means any individual involuntarily confined or detained in a penal institution. The term is intended to encompass individuals sentenced to such an institution under a criminal or civil statute, individuals detained in other facilities by virtue of statutes or commitment procedures which provide alternatives to criminal prosecution or

incarceration in a penal institution, and individuals detained pending arraignment, trial, or sentencing.

- *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.

Composition of the IRB When Reviewing Research Involving Prisoners

1. A majority of the IRB members (exclusive of the prisoner advocate) must have no affiliation with the prison system, apart from membership on the IRB; and
2. At least one IRB member who is a prisoner, or prisoner representative, with appropriate background and experience to serve in that capacity, must be present at any meeting at which protocols including prisoners will be discussed.

Additional Duties of the IRB When Reviewing Research Involving Prisoners

In addition to all other responsibilities prescribed under 45 CFR Part 46 Subpart A, the IRB shall review and approve federally-funded research for inclusion of prisoners only if it finds the research under review represents one of the categories of research permissible in 45 CFR 46.306 (a)(2) and meets all criteria under 45 CFR 46.305(a) as follows:

1. Any possible advantages accruing to the prisoner through his or her participation in the research, when compared to the general living conditions, medical care, quality of food, amenities and opportunity for earnings in the prison, are not of such a magnitude that his or her ability to weigh the risks of the research against the value of such advantages in the limited choice environment of the prison is impaired;
2. The risks involved in the research are commensurate with the risks that would be accepted by non-prisoner volunteers;
3. Procedures for the selection of subjects within the prison are fair to all prisoners and immune from arbitrary intervention by prison authorities or prisoners. Unless the principal investigator (PI) provides to the IRB justification in writing for following some other procedures, control subjects must be selected randomly from the group of available prisoners who meet the characteristics needed for that particular research project;
4. The information is presented in language that is understandable to the subject population;
5. Adequate assurance exists that parole boards will not take into account a prisoner's participation in the research in making decisions regarding parole, and each prisoner is clearly informed in advance that participation in the research will have no effect on his or her parole; and
6. Where the IRB finds there may be a need for follow-up examination or care of participants after the end of their participation, adequate provision has been made for such examinations or care, taking into account the varying lengths of individual prisoner's sentences, and for informing participants of this fact.

Permitted Research Involving Prisoners

The following biomedical or behavioral research conducted or supported by HHS may involve prisoners as subjects:

- 45 CFR 46.306(a)(2)(A) - The study of the possible causes, effects, and processes of incarceration, and of criminal behavior, provided that the study presents no more than minimal risk and no more than inconvenience to the subjects.
- 45 CFR 46.306(a)(2)(B) - The study of prisons as institutional structures or of prisoners as incarcerated persons, provided that the study presents no more than minimal risk and

no more than inconvenience to the subjects.

- 45 CFR 46.306(a)(2)(C) - Research on conditions particularly affecting prisoners as a class (i.e. vaccine trials and other research on hepatitis which is much more prevalent in prisons than elsewhere; and research on social and psychological problems such as alcoholism, drug addiction, and sexual assaults), provided that the study may proceed only after the Secretary of HHS has consulted with appropriate experts including experts in penology, medicine, and ethics, and published notice, in the Federal Register, of his/her intent to approve such research. Note: HHS Secretary consultation does not apply if research is not funded by HHS.
- 45CFR 46.306(a)(2)(D) - Research on practices, both innovative and accepted, that have the intent and reasonable probability of improving the health or well-being of the subject. In cases in which those studies require the assignment of prisoners, in a manner consistent with the protocols approved by the IRB, to control groups that may not benefit from the research, the study may proceed only after the Secretary of HHS has consulted with appropriate experts including experts in penology, medicine, and ethics, and published notice, in the Federal Register, of his/her intent to approve such research.

IRB Expedited Review of Research Involving Prisoners

Research involving interaction with prisoners may be reviewed by the expedited procedure if a determination is made that the research involves no greater than minimal risk for the prison population being studied. The prisoner representative must concur with the determination that the research involves no greater than minimal risk.

- The prisoner representative must review the research as a reviewer, designated by the IRB Chair. This may be as the sole reviewer or in addition to another reviewer, as appropriate.
- Review of modifications and continuing review must use the same procedure for initial review using this expedited procedure including the responsibility of the prisoner representative.

Research that does not involve interaction with prisoners (i.e. existing data, record review) may be reviewed by the expedited procedure if a determination is made that the research involves no greater than minimal risk for the prison population being studied.

- Review by a prisoner representative is not required.
- The prisoner representative may review the research as a reviewer or consultant if designated by the IRB Chair.
- Review of modifications and continuing review (if needed) must use the same procedures as initial review.

Issues Related to Consent

In a closed institution such as a prison there may be extraordinary organizational and interpersonal pressures which intrude on the decision whether or not to participate as a subject in research. This may be particularly evident in group situations and classroom environments. Wherever possible, prisoners should be given the opportunity to reflect on the decision to participate in private.

On occasion, research will be situated in a prison classroom setting assuring the structured program segment for the day. A prisoner who elects not to participate in such research should be offered an alternative program for the time in question to minimize coercion.

Some prisoners may feel they will lose privileges or be punished if they choose not to

participate in research; others may hope for favorable treatment or early release if they do participate. Prisoners must be assured they will be neither punished nor rewarded for their participation, and that they can discontinue their participation at any time without an institutional penalty.

Many adult prisoners are deficient readers, many have an incomplete formal education, and many speak English poorly or not at all. Investigators must use necessary measures to assure that these populations clearly understand the nature of the research and its potential risks.

Issues Related to Confidentiality

Special care should be taken to avoid requesting information in a group setting that could jeopardize the safety of individual prisoners. Additionally, care should be taken to ensure that confidential materials do not come into the possession of prison administrators, guards, and correctional officers, or other prisoners. Prisoners are much more likely than other populations to be associated with sensitive data. This could include, for example, involvement in illegal activity and HIV/AIDS. Appropriate safeguards are necessary regarding the collection, storage, and destruction of such information.

Issues Related to Research Content

Investigators must be aware that research into certain topic areas within the institution setting can be potentially dangerous for participants. For example, the mere act of interviewing a prisoner about sensitive topics such as gang activity, contraband, and prison prostitution may inadvertently label the respondent as an informant. Great care must be taken to balance the research against protection of the prisoner as subject.

The risk of suicide is an ever-present concern in the penal environment. The investigator must assure that debriefing is readily available to the prisoner whenever the subject is questioned about sensitive topics that could evoke self-injury once the prisoner has returned to the privacy of his or her cell.

Research Conducted with the Bureau of Prisons

- A non-employee of the Bureau may receive records in a form not individually identifiable when advance adequate written assurance that the record will be used solely as a statistical research or reporting record is provided to the agency.
- Except as noted in the consent statement to the participant, the researcher must not provide research information that identifies a participant to any person without that participant's prior written consent to release the information. For example, research information identifiable to a particular individual cannot be admitted as evidence or used for any purpose in any action, suit, or other judicial, administrative, or legislative proceeding without the written consent of the individual to whom the data pertain.
- Except for computerized data records maintained at an official Department of Justice site, records that contain non-disclosable information directly traceable to a specific person may not be stored in, or introduced into, an electronic retrieval system.
- If the researcher is conducting a study of special interest to the Office of Research and Evaluation (ORE) but the study is not a joint project involving ORE, the researcher may be asked to provide ORE with the computerized research data, not identifiable to individual participants, accompanied by detailed documentation. These arrangements must be negotiated prior to the beginning of the data collection phase of the project.

C. Children

When a proposed research study involves children and is supported or conducted by HHS and/or FDA, the IRB must take into consideration not only the general regulatory requirements of 45 CFR 46, subpart A, but the special regulatory requirements as prescribed in 45 CFR 46, subpart D. If the proposed research involves FDA-regulated products, then FDA's parallel regulations apply. Please visit the OHRP website for additional guidance on research involving children.

By regulatory definition, children are persons who have not attained the legal age for consent to treatments or procedures involved in the research, under applicable law of the jurisdiction in which the research will be conducted. Generally, the law considers any person under 18 years old to be a child. The IRB must consider the potential benefits, risks, and discomforts of the research involving children and assess the justification for their inclusion in the research. In assessing the risks and potential benefits, the IRB should consider the circumstances of the children to be enrolled in the study (i.e. their health status, age, and ability to understand what is involved in the research) as well as potential benefits to the participants, other children with the same disease or condition, or society as a whole.

For any protocol involving children, the IRB must determine which of the categories of research apply to that study, if any. OHRP recommends that the IRB document the rationale for this choice.

Requirements by Category of Research Involving Children

The HHS regulations at 45 CFR part 46, subpart D permit IRBs to approve three categories of research involving children as subjects:

1. Research involving no greater than minimal risk with or without a potential for direct benefit (45 CFR 46.404). Studies involving children that are determined to be minimal risk may be eligible for expedited review.
    a. Adequate provisions need to be made for obtaining assent of the children.
    b. Adequate provisions must be made to obtain permission of parents or guardians.
2. Research involving greater than minimal risk but presenting the prospect of direct benefit to each individual subject (45 CFR 46.405).
    a. IRB must find that the risk is justified by the anticipated benefits.
    b. The relation of the anticipated benefit to risk is at least as favorable as alternative approaches.
    c. Adequate provisions must be made for obtaining assent of the children.
    d. Adequate provisions must be made to obtain permission of parents or guardians.
3. Research involving greater than minimal risk and no prospect of direct benefit to each individual subject, but likely to provide generalizable knowledge about the subject's disorder or condition and (45 CFR 46.406):
    a. The risk represents a minor increase over minimal risk.
    b. The intervention or procedure presents experiences commensurate with those inherent in the subjects' actual or expected medical, dental, psychological, social, or educational experience.
    c. The intervention or procedure yields generalizable knowledge about the subjects' disorder or condition that is vital to understanding or ameliorating the subjects' disorder or condition.
    d. Adequate provisions must be made for obtaining assent of the children.
    e. Adequate provisions must be made to obtain permission of parents or guardians.
4. Research involving greater than minimal risk and no prospect of direct benefit to each

individual subject and does not meet the conditions of 45 CFR 46.404, 46.405, or 46.406, but the research presents a reasonable opportunity to understand, prevent, or alleviate a serious problem affecting the health or welfare of children (45 CFR 46.407). Research must meet the following requirements:

a. The IRB must find that the research presents a reasonable opportunity to further the understanding, prevention, or alleviation of a serious problem affecting the health and welfare of children.
b. A request must be made by the PI, through the IRB, to the Secretary of HHS or the Commissioner of FDA to approve the research. The Secretary or Commissioner, after consultation with a panel of experts in pertinent disciplines and following opportunity for public comment, may approve the research.
c. Adequate provisions must be made for obtaining assent of the children.
d. Adequate provisions must be made to obtain permission of parents or guardians.

Assent/Permission Requirements for Research Involving Children

The IRB shall determine that adequate provisions are made for soliciting the assent of the children, when in the judgment of the IRB the children are capable of providing assent.

Requirements for documentation of assent depend on the age, maturity, and psychological state of the child:

- For children under the age of 7, assent is waived or verbal assent is obtained as determined by the IRB.
- For children ages 7-12, a simple assent form is used and verbal assent is obtained. The child does not have to sign the assent form.
- For children ages 13-17, a simple assent form is used, verbal assent is obtained, and the child must sign the assent form.
- If the research is approvable under 45 CFR 46.404 46.405, only one parent's signature is required.
- If the research is approvable under 45 CFR 46, 406, 46.407, both parents must sign the parental permission form, unless one parent is unavailable or not competent to consent.
- For research approved under 45 CFR 46.404, 46.405, the parents can override a child's decision not to participate. Parents cannot override a child's decision not toparticipate if the research is approvable under 45 CFR 46.406, 46.407. The IRB could waive the requirement for the child's assent, in which case the parents could override the child's decision to participate for all research activities.
- A legal guardian could only give permission for inclusion of a child as a research subject if the document granting guardianship authorizes the person to give permission for "medical care including research."

Exceptions to Assent Requirements for Research Involving Children

When the IRB determines that assent is not a requirement for some or all children in a study, the IRB determines and documents one or more of the following:

1. The children are not capable of providing assent based on their age, maturity or psychological state.
2. The intervention or procedure holds the prospect of direct benefit that is important to the health or well-being of the child and is available only within the context of the\ research and the capability of the children is so limited that they cannot reasonably be

consulted.
3. Assent can be waived using the criteria for waiver of the consent process.

Waiver of Permission Requirements for Research Involving Children

If the IRB determines that a research protocol is designed for conditions or for a subject population for which parental or guardian permission is not a reasonable requirement to protect the subjects (for example, neglected or abused children), it may waive the consent requirements, provided an appropriate mechanism for protecting the children who will participate as subjects in the research is substituted, and provided further that the waiver is consistent with federal, state, or local law. Requests for a waiver of the requirement for parental permission and/or a waiver of the requirement to obtain written documentation of consent will be done on a case-by-case basis.

All research that is requesting waiver of parental permission, must be reviewed by the full board. An IRB may approve a consent procedure which does not include, or which alters, some or all of the elements of informed consent set forth in this section, or waive the requirements to obtain informed consent provided the IRB finds and documents that:

1. The research involves no more than minimal risk to the subjects;
2. The waiver or alteration will not adversely affect the rights and welfare of the subjects;
3. The research could not practicably be carried out without the waiver or alteration; and
4. Whenever appropriate, the subjects will be provided with additional pertinent information after participation.
5. Permission by parents or guardians shall be documented in accordance with and to the extent required by 46.117 of subpart A.
6. When the IRB determines that assent is required, it shall also determine whether and how assent must be documented.

Compensation to Children and/or Parents

In considering the amount of compensation to be given to a child and/or the child's parents, PIs must take special care to ensure a child would not simply assent to participate based on the amount or type of compensation. In addition, the amount of compensation should not be so large that the parents would provide undue pressure on the child to assent to participate. The PI should consider that the type or amount of compensation may be coercive in some situations and not coercive in others and make every effort to establish a compensation amount and schedule that will not be a factor in the child's decision to participate or the parent's decision to give permission.

Wards - 45 CFR 46.409

Children who are wards of the state or any other agency, institution, or entity can be included in research approved under §46.406 or §46.407 only if such research is:

1. Related to their status as wards; or
2. Conducted in schools, camps, hospitals, institutions, or similar settings in which the majority of children involved as subjects are not wards.

Research approved for inclusion of wards under 45 CFR 46.406 or 45 CFR 46.407 shall require appointment of an advocate for each child who is a ward, in addition to any other individual acting on behalf of the child as a guardian or in loco parentis. One individual may serve as advocate for more than one child. The advocate shall be an individual who has the background and experience to act in, and agrees to act in, the best interests of the child for the duration of the child's participation in the research and who is not associated in any way (except in the role as advocate or member of the IRB) with the research, the PI(s), or the guardian organization.

School Permissions
Schools do not have the authority to give consent for children to participate in research; only parents or guardians have that authority. However, permission from the school district(s) must be obtained before conducting research in schools. The letter of permission needs to be on the official school letterhead and signed by the school official (i.e. principals or superintendents). A template is provided on the Research Compliance Human Subjects website.

Minimizing Coercion
In conducting research on children, every attempt must be made to minimize coercion to participate. Researchers must remember that children are in a dependent relationship with adults and special care must be taken to ensure that the decision to participate as research subjects made by children is truly voluntary. When the investigator is unfamiliar with the population to be studied, he/she should consult experts to determine the degree of coercion in the procedures to be used. Such judgments are inevitably subjective and often result in negotiation between the IRB and investigators, who should be prepared to justify chosen study procedures.

D. Decisionally Impaired Participants
Individuals, for a variety of reasons, may be incapacitated to the extent that their decision-making capabilities are diminished or absent. Impaired capacity is not limited to individuals with neurologic, psychiatric, or substance abuse problems. Conversely, individuals with these problems should not be presumed to be cognitively impaired.
Cognitively impaired persons have a diminished capacity for judgment and reasoning due to psychiatric, organic, developmental, or other disorders that affects cognitive or emotional functions. Decision-making capacity may fluctuate.

Initially, the PI must assess whether or not the study could be performed utilizing competent subjects (those without impaired decision making capacity) and determine that competent persons are not suitable for the proposed research. PIs must demonstrate to the IRB that there is a compelling reason to include incompetent individuals or persons with impaired decision making capacity as subjects by considering the following:

- Incompetent persons or persons with impaired decision making capacity are not being proposed as subjects simply because they were readily available (they comprise the only appropriate subject population);
- The proposed research entails no significant risks, tangible or intangible, or if the research presents some probability of harm, there is at least a greater probability of direct benefit to the subject;
- The research does not impose a risk of injury, unless the research is intended to benefit each subject and the probability of benefit is greater than the probability of harm;
- Procedures are devised to ensure that subjects' legally authorized representative (LAR) is well informed regarding the investigators role and obligation to protect incompetent subjects or persons with impaired decision-making capacity;
- LARs will be told that their obligation is to try to determine what the prospective subject would do if competent, or if the prospective subject's wishes cannot be determined, what they think is in the incompetent person's best interest.

The IRB shall consider the ethical concern of how the individuals with psychiatric, cognitive, or developmental disorders, or those who are substance abusers, have the capacity to understand

the information presented and their ability to make a reasoned decision about participation. Both the IRB and PI must recognize that decision-making capacity may fluctuate and require ongoing assessment throughout the course of the research.

As the level of impairment increases, along with an increase in risks and discomforts, safeguards should also increase proportionate to the severity of the impairment. The autonomy of the individual with impaired decision-making capacity should be respected. Individuals with impaired decision-making capacity may need more time to consider the information they are given regarding the research. Information should be provided incrementally to facilitate understanding. Planned waiting periods to allow potential participants to consult with family members about whether to participate or not may be useful.

Surrogate Permission with Subjects Judged Incompetent to Consent

A research subject must be competent to give informed consent; otherwise, the consent of the legally authorized representative (LAR) of the patient must be obtained. In New York state incompetent subjects include children (those individuals under 18 years of age) and the mentally disabled. If competency issues are anticipated for a study, they must be acknowledged in the research proposal and the procedures used to evaluate competency must be described in detail.

HHS Definitions

- 45 CFR 46.402(e)
    - *Guardian:* an individual who is authorized under applicable State or local law to consent on behalf of a child to general medical care.
- 45 CFR 46.102(i)
    - *Legally authorized representative*: an individual or judicial or other body authorized under applicable law to consent on behalf of a prospective subject to the subject's participation in the procedure(s) involved in the research.

New York State Definition

- *Legal guardian:* an individual who has obtained legal guardianship through the Surrogate Courts Proceedings Act §1700 ff., Domestic Relations Law §81 and Article Six of the Family Court Act.

New York State law states that surrogate consent, other than that of a parent or legal guardian is not allowable, unless there is a legal document that specifically authorizes another to act on behalf of someone for research purposes (Public Health Law Section 2442). For example, the consent of a friend would not be allowed. Those individuals allowed to give consent to a third party include:

- Persons appointed as health care agents.
- Court appointed guardians.
- Next of kin in the following order: spouse, adult child, parent, and adult sibling when there is a legal document that specifically authorizes another to act on behalf of someone for research purposes as per Public Health Law Section 2442.

E. Other Vulnerable Populations

Students, employees, economically or educationally disadvantaged individuals, racial or ethnic minorities, terminally ill, and individuals with AIDS or HIV+ are also considered vulnerable subjects although the federal regulations do not provide explicit protections for subjects in these categories. When conducting research involving these populations, investigators need to

take the following into consideration:

- The compensation to human subjects should not be so great as to constitute an undue inducement.
- Recruitment should be conducted in such a manner that individuals with any power or authority over subjects are not engaged in the recruitment process.
- Sensitive subjects such as health, sexual activity, or the use of illicit drugs or alcohol, and personal health information present increased confidentiality risk to subjects and they should be made aware of and protected from these risks to the greatest extent possible.

XVI. TRANSNATIONAL RESEARCH

Research in foreign countries also presents special concerns regarding the rights and welfare of human subjects. All policies and procedures that are applied to research conducted domestically are applied to research conducted in other countries. It is also expected that researchers will comply with local laws and take into account the cultural context of the country in which the research will be conducted. In general, the IRB accepts the standards of the location in which the research is taking place, unless those standards grossly violate the basic principles of ethical human subjects' research. In some cases the Binghamton University IRB will rely on the foreign IRB as the IRB of record through coordination of a reliance agreement.

Special Note: If you are or will be conducting research outside of the United States, please be aware that Binghamton University has an International Travel Safety Committee that approves student, faculty, and staff travel to areas of high risk. Please contact the committee if you anticipate conducting research involving international travel.

A. PI Considerations

Federal regulations for oversight of transnational research, as well as expectations of the Association for Accreditation of Human Research Protection Programs (AAHRPP) require that when conducting transnational research, the researcher:

1. Will provide the same or equivalent protections to human subjects in research conducted in other countries.
    a. The protections need not be the same as provided in the U.S. but should be equal in function or effect.
    b. Subject autonomy and dignity should be respected.
    c. Protections should encompass the ethical principles of respect for person, beneficence, and justice.
2. Is aware of local laws, regulations, political and socio-economic factors, and cultural context in all locations where the research is conducted.
    a. Researchers must have sufficient knowledge of the local context to enable carrying out of the research in ways that protect the rights and welfare of subjects.
    b. Knowledge of the local context may influence all aspects of the research design.
3. Will comply with local laws and adhere to cultural norms.
4. Will demonstrate whether the University or investigator has permission to conduct research in the country by local ethics committee review and approval or by certification (approval) by the local government when there is no local ethics committee.

The Binghamton University IRB will require certain information be submitted by the investigator in order to fulfil these requirements. The following information should be addressed in the submitted study protocol:

1. Whether the researcher speaks the language of the country in which participants will be enrolled and the research will be conducted. If the researcher does not speak the local language, describe how communication with the research subjects will be accomplished.
2. Whether the researcher is familiar with the local customs and culture or whether a local collaborator will be used and the involvement of the local collaborator will have in the conduct of the research.
3. Whether the subjects will be paid and, if paid, the amount and how it relates to the local economy and subject income.
4. If consent will be obtained, how or from whom will consent be obtained along with the following information, if applicable:
    a. Describe local customs/culture in which the subject might not have the autonomy to provide consent and a family member or other person will be providing consent to participate.
    b. How the researcher will assure that there is no coercion for participation if a person other than the subject will be providing consent.
5. If written documentation of consent will be obtained, and:
    a. If so, a description of how or from whom the consent will be translated.
    b. If not, a description of how consent will be documented or if there are cultural/other prohibitions regarding use of consent forms. Describe how the privacy for the subjects and confidentiality of their research data will be assured and if there is a local custom that research data be revealed to someone other than the subject. Describe how the communications with the University IRB/local EC will be achieved for requesting amendments or reporting unanticipated problems.
6. For student researchers, a description how the academic advisor/faculty sponsor will oversee conduct of the research.

All study materials submitted by the PI, including consent forms and recruitment advertisements, must be in the participant's native language as well as provided in the English translation.

The review of transnational research may fall under exempt, expedited or full board review.

B. Risk Assessment/Involvement of External Consultant

OHRP requires that the IRB have knowledge of the local research context in order to make an accurate risk assessment. This can be accomplished through use of an outside consultant who is familiar with the proposed research site location. In such cases, external consultants who are familiar with the local context/laws of the foreign research site will be asked to sign a confidentiality statement. Once the confidentiality statement is received, they will be given access to the study materials via PACS.

The following information should be considered by the consultant:

1. Questions that might be innocuous in the U.S. could be offensive in certain foreign sites.
2. Assuring and maintaining confidentiality may be difficult in other countries.
3. Breach of confidentiality in the research locale could have dangerous consequences.
4. Depending on political and other factors, there may be dangers to the researcher.
5. The informed consent process must honor local custom.
    a. Some cultures may have a different authority structure for consent. The local consent structure may seem coercive and clash with the researcher's, reviewer's,

or IRB's views on autonomy.

b. Consent is best obtained using the language most familiar to the participants, taking into account some languages/dialects are not written, subjects may be unable to read, or there may be word in the foreign language that do not translate to/from English.
c. If researchers are not fluent in the local language, interpreters/translators who are fluent should be used.
d. Documentation of consent may be difficult because subjects are illiterate, it may be inappropriate to ask for a signature, subjects may be suspicious or distrustful of giving up their rights, or there may be legal implications when signing documents.

Consultants will be asked to write a summary assessing any risk involved in the study given its cultural context and the appropriateness of the proposed research.

C. National Ethics Board

Some countries require a separate national ethics board review. Please visit the OHRP website for a list of countries that require additional review from their ethics board. If you are conducting transnational research always consult the Binghamton IRB first to confirm what and to whom documentation must be submitted.

D. Single IRB of Record for Collaborative Projects

If a project will be conducted in collaboration with a foreign institution and the foreign institution has an FWA, the IRB can sign an Institutional Authorization Agreement (IAA) or Reliance Agreement to rely on them for review of the study. Please contact the IRB office to determine whether such an agreement can be made.

XVII. RESEARCH WITH INVESTIGATIONAL DRUGS

If a proposed research activity involves evaluation of an investigational drug or biological material in humans or before a Food and Drug Administration (FDA)-approved drug can be used for unapproved indications, the sponsor or researcher may need to obtain an FDA Investigational New Drug Exemption (IND). PIs should understand that by obtaining and holding an IND they assume sponsor and investigator responsibilities for the conduct of the research as described in 21 CFR 312.

The IRB office staff will review all documentation submitted by the PI to confirm that one of the following is true:

- The drug has an IND number.
- The sponsor protocol is imprinted with the IND number,
- There is written communication from the sponsor documenting the IND number;
- There is written communication from the FDA documenting the IND number (Required if the investigator holds the IND.); or
- The drug falls into one of the categories of exemption from an IND. [See 21 CFR 312.2(b)]

The FDA defines a drug as:

1. An article recognized in the official United States Pharmacopoeia, official Homoeopathic Pharmacopoeia of the United States, or official National Formulary, or any supplement to any of them; and
2. An article intended for use in the diagnosis, cure, mitigation, treatment, or prevention

of disease in man or other animals; and
3. An article (other than food) intended to affect the structure or any function of the body of man or other animals; and
4. An article intended for use as a component of any article specified in the numbered statements 1, 2 and 3 above.

An FDA-regulated study is a study in which a PI uses a drug in one or more persons and the drug is not an approved drug in the course of medical practice and/or the data collected in the study is intended to be submitted to or held for inspection by the FDA. Some examples are:

1. Study of an approved drug to determine safety and/or efficacy in a new disease state.
2. A psychology professor gives people ginkgo biloba to look at its effects on learning or memory.
3. The agriculture department has developed a genetically modified watermelon with high levels of vitamin A and wants to test if it can be used to treat vitamin A deficiency.

A. IND Exemptions

Although IND numbers are generally required for drug studies there are several FDA exemptions from this requirement listed in 21 CFR 312.2(b). PIs must submit documentation to support an exemption and may contact an FDA consumer safety officer for confirmation that the investigation fits one of the exemptions.

B. Applying for and/or Filing an IND

An IND application should include the facts that satisfy the FDA that the agent may be justifiably administered to a human as proposed. If the PI wishes to apply for and hold an IND, they must give the FDA the information specified in Form FD-1571 Investigational New Drug Application. Visit the FDA website for guidance on completing and submitting an IND.

INDs go into effect 30 days after the FDA receives the IND unless the sponsor receives earlier notice from the FDA. The 30-day period can be extended if the FDA requires additional time for the sponsor to correct deficiencies.

C. Investigator Responsibilities

The IRB will review the plan for storage, control, and dispensing of the drug to evaluate whether the plan is adequate to ensure that only authorized investigators will use the drug and they will use the drug only in subjects who have provided consent. When completing the application, the PI will be asked to provide a copy of the research and informational materials generated by the drug company, if applicable.

In general, investigators are responsible for the following:

1. Ensuring that the clinical research is conducted according to the signed investigator statement for clinical investigations, the investigational plan and applicable regulations.
2. Informing subjects, or any persons used as controls, that the drugs/biologics are being used for investigational purposes. This includes a statement in the consent form.
3. Administering the study drug or biologic only to subjects under the investigator's personal supervision or the supervision of an IRB approved study team member.
4. Not supplying the study drug or biologic to any person not authorized to receive it (patient or another investigator).
5. Complying with all requirements regarding the obligations of clinical investigators

and all other pertinent requirements of 21 CFR 312.

6. Maintaining adequate records of the disposition of the study drug or biologic to include dates, quantity and use by subjects.
7. Returning any unused supply of study drug to the sponsor upon completion, suspension, termination or discontinuation of the clinical investigation. (21 CFR 312.59 and312.62).
8. Permitting the FDA to have access to and copy and verify records or reports (generally not required to divulge subject names) made during the study. (21 CFR 312.68).
9. If the investigational drug is subject to the Controlled Substances Act, taking adequate precautions, including storage of the drug in a securely locked, substantially constructed cabinet or enclosure to which access is limited to prevent inappropriate distribution.(21 CFR 312.69).
10. Reading and understand information in the Investigator's Brochure, including potential risks and side effects of the drug.
11. As noted above, researchers who apply for and hold an IND are also subject to sponsor responsibilities.
12. Complying with Data and Safety Monitoring in Research.
13. Following the reporting requirements outlined in the IRB Policies and Procedures.

Additional Reporting Requirements

If the PI does not hold the IND and an external sponsor funds or supports the study, then the PI is responsible for notifying the sponsor of any serious adverse events or unanticipated problems. For any studies under FDA jurisdiction, it is the PI and/or sponsor's responsibility to notify the FDA within 24 hours of any serious adverse events or unanticipated problems.

Similarly, if the study is a multi-site project and the unanticipated problem occurs at a site other than the University, then the sponsor (PI if they hold the IND) is required to inform researchers of unanticipated problems or reactions that occur at other sites. When PIs are informed of unanticipated problem(s) in sponsor safety memos or other correspondence, then the PI must notify the IRB as promptly as possible after receipt of the report from the sponsor.

XVIII. RESEARCH WITH INVESTIGATIONAL DEVICES

The IRB office staff will review all documentation submitted by the PI to determine that when an investigator proposes to conduct research that involves evaluating the safety of effectiveness of a device that one of the following is true:

- The device has an IDE number;
- The sponsor protocol is imprinted with the IDE number;
- There is written communication from the sponsor documenting the IDE number;
- There is written communication from the FDA documenting the IDE number (Required if the investigator holds the IDE.); or
- The device falls into one of the categories of exemption from an IDE. [See 21 CFR 812.2(c)]

A. IDE Exemptions

The regulations at 21 CFR 812.2 do not apply to investigations that fit one of the following categories:

A device, other than a transitional device, in commercial distribution immediately before May 28, 1976, when used or investigated in accordance with the indications in labeling in effect at that time;

- A device, other than a transitional device, introduced into commercial distribution on

or after May 28, 1976, that the FDA has determined to be substantially equivalent to a device in commercial distribution immediately before May 28, 1976, and that is used or investigated in accordance with the indications in the labeling that the FDA reviewed under Subpart E of part 807 in determining substantial equivalence;

- A diagnostic device, if the sponsor complies with applicable requirements in 21 CFR 809.10(c) and if the testing is i) non-invasive, ii) does not require an invasive sampling procedure that presents significant risk, iii) does not by design or intention introduce energy into a subject, and iv) is not used as a diagnostic procedure without confirmation of the diagnosis by another, medically established diagnostic product or procedure;
- A device undergoing consumer preference testing, testing of a modification or testing of a combination of two or more devices in commercial distribution, if the testing is not for the purpose of determining safety or effectiveness and does not put subjects at risk;
- A device intended solely for veterinary use;
- A device shipped solely for research on or with laboratory animals and labeled in accordance with 21 CFR 812.5(c);
- A custom device as defined in 21 CFR 812.3(b), unless the device is being used to determine safety or effectiveness for commercial distribution.

B. Applying for and/or Filing an IDE

An IDE application should include the facts that satisfy the FDA that the agent may be justifiably administered to a human as proposed. If the PI wishes to apply for and hold an IDE, they must provide the FDA with the information specified in the guidance for applying for an IDE.

C. Significant/Non-Significant Risk Determinations

If a PI or sponsor claims a device is not a significant risk, then the IRB will review research involving the investigational device at a convened meeting. The IRB will determine whether the study using the device is significant risk, within the context of the overall study, by reviewing the criteria in 21 CFR 812.3(m). A significant risk device means that the device:

- Is intended as an implant and presents a potential for serious risk to the health, safety, or welfare of a subject;
- Is purported or represented to be for use supporting or sustaining human life and presents a potential for serious risk to the health, safety, or welfare of a subject;
- Is for a use of substantial importance in diagnosing, curing, mitigating, or treating disease or otherwise preventing impairment of human health and presents a potential for serious risk to the health, safety, or welfare of a subject;or
- Otherwise presents a potential for serious risk to the health, safety, or welfare of a subject.

A non-significant risk device study is one that does not meet the definition for a significant risk device study.

If the IRB disagrees with the sponsor's or PI's assessment that a device study is "non-significant risk" and determines that the study using the device is "significant risk," it will notify the PI, and where applicable, the sponsor (21 CFR 812.66) and document its determination in the IRB minutes. The study will be tabled, the sponsor or PI must apply for an IDE, and the study may not begin until the FDA approves the IDE application and the IRB approves the study. Upon receipt of FDA approval, the sponsor or PI must provide the IRB with the FDA's approval letter or conditional approval letter as part of the re-submission process.

D. Investigator Responsibilities

Investigators conducting studies in which an investigational device will be used must ensure adequate control of the device. Adequate control and handling of investigational devices include all of the following:

- Not beginning the study or obtaining informed consent of any subjects prior to IRB and FDA approval.
- Ensuring that the investigational device is used in accordance with the IRB approved protocol and the investigational plan and any condition of approval imposed by the reviewing IRB and FDA.
- Supervising all testing of the device involving human subjects in accordance with 21 CFR 812.43(c)(4)(ii) and 812.110(b).
- Permitting use of an investigational device only with subjects under the supervision of the PI and supplying the investigational device only to persons authorized to receive it.
- Providing for control or taking adequate precautions, including storage of the device in a securely locked area to which access is limited to prevent inappropriate use of the device in accordance with 21 CFR 812.100.

    - Investigational devices must be stored in a locked room designated for research or in a locked cabinet within a room designated for research that is under the direct control of the PI and accessible only to the PI and his/her authorized and IRB-approved staff. If applicable, the storage area for investigational devices must be separate from storage areas for approved devices. An investigational device or its packaging must be labeled with the following information:
        - The name and place of business of the manufacturer;
        - Packer or distributor;
        - The quantity of contents, if appropriate: and
        - The following statement: "CAUTION - Investigational device. Limited by Federal law to investigational use." The label or other labeling must describe all relevant contraindications, hazards, adverse effects, interfering substances, or devices, warnings, and precautions.
- Maintaining accurate, complete, and current records relating to participation in the clinical investigation. Specifically, records of receipt, use or disposition of a device that relate to:
    - The type and quantity of the device, the dates of its receipt, and the batch number or code mark.
    - The names of all persons who received, used, or disposed of each device.
    - Why and how many units of the device have been returned to the sponsor, repaired, or otherwise disposed of.
- Permitting the FDA to inspect and copy any records pertaining to the investigation, including those which may identify subjects (21 CFR 812.145).
- Preparing and submitting to the sponsor:
    - Progress reports,
    - A final report,
    - Financial disclosure reports; and
    - Any other information requested by the FDA (21 CFR 812.110).
- Returning any remaining supply of the device (or otherwise dispose of it as directed by the sponsor) upon completion or termination of the clinical investigation or the PI's part of an investigation.

XIX. PROTECTED HEALTH INFORMATION AND HIPAA

In certain cases, research projects may involve the collection, disclosure, or use of *Protected Health Information (PHI)*. *PHI* is defined as information that can be linked to a particular person (i.e., is person-identifiable) that arises in the course of providing a health care service. Studies involving the use of PHI raise issues of confidentiality that must be carefully addressed by the investigator and the official custodian of the records.

The Health Insurance Portability and Accountability Act of 1996 (HIPAA), as modified by the Health Information Technology for Economic and Clinical Health Act, mandates privacy and security safeguards for information about an individual's health status, care, or payment for care. The HIPAA Privacy Rule governs PHI.

A *covered entity* is the organization that has to comply with HIPAA. For example, this may be a health plan, a health care clearinghouse, or a health care provider transmitting health information. At Binghamton, the Institute for Child Development is a covered HIPAA entity.

When PHI is communicated inside of a covered entity, this is called a *use of the information*. When PHI is communicated to another person or organization that is not part of the covered entity (i.e., released, transferred, or provided access to), this is called a *disclosure.* HIPAA allows both use and disclosure of PHI for research purposes, but such uses and disclosures have to follow HIPAA guidance and have to be part of a research plan that is reviewed and approved by an IRB.

Authorization is required by HIPAA for disclosures or uses other than for Treatment Payment Operations (TPO), which are covered in the Notice of Privacy Practices. Treatment cannot be conditioned on granting of an authorization. An authorization is a specific, detailed document requesting patient-subject permission for the use of covered PHI. For research studies, if authorization is not obtained initially and, depending upon the design of the study, HIPAA or state law may require the investigator to obtain specific authorization for the use of the PHI in that particular study.

A. List of 18 PHI Identifiers (Health information protected by the HIPAA Privacy Act)

With certain exceptions, HIPAA protects a subset of individually identifiable health information, known as protected health information or PHI. There are eighteen (18) elements, as defined by the HHS, that could be used to identify the individual or the individual's relatives, employer, or household members.

1. Patient names
2. Geographical elements (such as a street address, city, county, or zip code)
3. Dates related to the health or identity of individuals (including birthdates, date of admission, date of discharge, date of death, or exact age of a patient older than 89)
4. Telephone numbers
5. Fax numbers
6. Email addresses
7. Social security numbers
8. Medical record numbers
9. Health insurance beneficiary numbers
10. Account numbers
11. Certificate/license numbers
12. Vehicle identifiers
13. Device attributes or serial numbers

14. Digital identifiers, such as website URLs
15. IP addresses
16. Biometric elements, including finger, retinal, and voiceprints
17. Full face photographic images
18. Other identifying numbers or codes

B. Binghamton University as a Hybrid HIPAA Entity

Individuals, organizations, and agencies that meet the definition of a "covered entity" or "business associate" under HIPAA must comply with its requirements.

At some institutions, it likely that PIs will desire to use individual's PHI, collected at that institution, for research purposes. The State University of New York has designated itself as a hybrid HIPAA entity. A hybrid HIPAA entity is a single, multidisciplinary entity at which certain departments use PHI as part of their business operations, and other departments do not. A HIPAA covered function is any function that, if performed, makes the performer a health plan, a health care provider, or a health care clearinghouse. **Note that only the Binghamton University Institute for Child Development is classified as a covered entity**.

C. Research that is Covered by HIPAA

HIPAA affects only that research which uses, creates, or discloses Protected Health Information (PHI). In general, there are two ways a research study would involve PHI:

- The study involves review of medical records as one (or the only) source of research information. Retrospective studies involve PHI in this way. Prospective studies may do this also, such as when a researcher contacts a participant's physician to obtain or verify some aspect of a person's health history.
- The study creates new medical records because as part of the research a health-care service is being performed, such as testing of a new way of diagnosing a health condition or a new drug or device for treating a health condition.

Most sponsored clinical trials that submit data to the US Food and Drug Administration (FDA) will involve PHI because study monitors have an obligation to compare research records such as Case Report Forms (CRFs) to the medical records of the persons participating in the study, in order to verify that the information transcribed onto the CRFs is accurate.

Human biological specimen data which includes PHI is also considered clinical research.

D. Use or Discloser of PHI for Research and Complying with the HIPAA PrivacyRule.

HIPAA permits the use or disclosure of PHI for research under the following circumstances and conditions:

- If the subject of the PHI has granted specific written permission through an *authorization*
- If the IRB has granted a *waiver of the authorization requirement*
- If the *PHI has been de-identified* in accordance with the standards set by HIPAA
- If the information is released in the form of a *limited data set*, with certain identifiers removed, and with a *data use agreement* between the researcher and the covered entity

De-Identified PHI - PHI can be used or disclosed for research purposes if it has been de-identified and linkage back to a specific subject would not be possible. National Institutes of Health Department of Health Regulations at 45 CFR 164.514(e) provides more details for de-

identified information.

Identifiable PHI - Research use or disclosure of identifiable PHI with authorization of the research subject is permitted providing that use or disclosure is for only the PHI that was originally authorized.

Getting Authorization to Use PHI

The principle of respect for persons means that, if it is feasible to get the consent of someone before using their PHI for research, then consent should be obtained. HIPAA refers to consent for use of information as an "Authorization". In order to use or disclose additional information, the PI would either have to obtain authorization or request a waiver of the requirements to obtain authorization. HIPAA requires that the following elements be present in an Authorization to use PHI for research purposes:

- A description of information to be used or released,
- The name of person(s) or class of persons (e.g., project staff) who will use the information,
- The name of persons or organizations to whom PHI will be released. (e.g., central coordinating offices of multi-center trials),
- The expiration date or event that ends authorization to use PHI (e.g., completion of the research), or statement that authorization does not expire,
- A statement that the research participant has the right to revoke authorization (as part of withdrawal from study procedures),
- A statement that if information will be disclosed to other organizations the information may no longer be protected, and
- A statement that individuals may inspect or copy their records. The researcher may stipulate that records will not be available until after the study iscomplete.

Waivers of Authorization

If the use or disclosure of PHI involves minimal risk for the subjects, a request for waiver of the requirement for signed authorizations may be requested. The IRB must review requests for waiver of the requirement for obtaining authorization for use and disclosure of PHI. If a waiver is approved, the IRB will notify the investigator in writing of its determination.

To use or disclose identifiable PHI without authorization of the research subject, the IRB must determine that the following criteria have been met by the PIs request submission:

1. The use or disclosure of PHI is solely used to design a research protocol or to assess feasibility of conducting a study;
2. Document that the use or disclosure is solely for research on the PHI of decedents;
3. The use or disclosure of PHI involves no more than minimal risk to the research subjects;
4. The alteration or waiver will not adversely affect the privacy rights and welfare of the subjects;
5. The research cannot practicably be conducted without the alteration or waiver;
6. The research could not practicably be conducted without access to or the use of the PHI;
7. The privacy risks to individuals whose PHI is to be used or disclosed are reasonable in relation to the anticipated benefits, if any, to the individuals, and the importance of the knowledge that may reasonable be expected to result from the research;
8. There is an adequate plan to protect the identifiers from improper use and disclosure;
9. There is an adequate plan to destroy the identifiers at the earliest possible opportunity consistent with the conduct of the research, unless there is a health or research justification for retaining the identifiers;

10. There are adequate written assurances that the PHI will not be reused or disclosed to any other person or entity, except as required by law, for authorized oversight of the research project, or for other research for which the use or disclosure of PHI would be permitted by this policy; and
11. Whenever appropriate, the subjects will be provided with additional pertinent information after participation.

Limited Data Set with a Data Use Agreement

Where only certain identifiers are needed, a covered entity may provide a researcher with a limited data set. Unlike de-identified data, PHI in limited data sets may include the following: city, state, ZIP code, date of birth, date of death, or date(s) of service.

Because limited data sets may contain identifiable information, they are still PHI.

A *data use agreement* is the means by which covered entities obtain satisfactory assurances that the recipient of the limited data set will use or disclose the PHI only for specified purposes. Even if the person requesting a limited data set from a covered entity is an employee or otherwise a member of the covered entity's workforce, a written data use agreement meeting the Privacy Rule's requirements must be in place between the covered entity and the limited data set recipient.

The HIPAA Privacy Rule requires a data use agreement to contain the following provisions:

- Specific permitted uses and disclosures of the limited data set by the recipient consistent with the purpose for which it was disclosed (a data use agreement cannot authorize the recipient to use or further disclose the information in a way that, if done by the covered entity, would violate the Privacy Rule).
- Identify who is permitted to use or receive the limited data set.
- Stipulations that the recipient will
- Not use or disclose the information other than permitted by the agreement or otherwise required by law.
- Use appropriate safeguards to prevent the use or disclosure of the information, except as provided for in the agreement, and require the recipient to report to the covered entity any uses or disclosures in violation of the agreement of which the recipient becomes aware.
- Hold any agent of the recipient (including subcontractors) to the standards, restrictions, and conditions stated in the data use agreement with respect to the information.
- Not identify the information or contact the individuals.

Need to Know and Minimum Necessary Access

For both healthcare and for research, HIPAA requires that PHI be communicated on a need to know and minimum necessary basis. In short, individually identifiable information should be made available only to persons whose job requires access to that information and only that information which is the minimum necessary to get the job done should be provided.

In most cases, scientific data about individuals in research studies should be shared with other researchers at outside institutions only in a format where it is stripped of all identifying information. De-identified data may be linked to personal identifiers via an alphanumeric code. *Do not use Medical Record Number* (or any other person-identifiable element) as part of the code. In most cases, the key to the code should not be available to other researchers and in all

cases it should be stored securely. Information such as names, addresses, phone numbers, e-mail addresses, and other contact information should not be disclosed unless it is essential to the conduct of the research.

For more information on HIPAA and personal health information (PHI) researchers are encouraged to contact the IRB Office at hsrrc@binghamton.edu or (607) 777-3818.

XX. DATA AND SAFETY MONITORING IN RESEARCH

Federal regulations require that for any research involving human subjects, when appropriate, adequate provisions for monitoring data to ensure the safety of research participants should be made. The regulations do not specify when or how this monitoring should be accomplished. For each study, researchers and the IRB must determine the type and level of monitoring required to ensure participant safety and well-being.

A. Minimal Risk Studies

Much of the research conducted at Binghamton University is social and behavioral in nature, and may be considered not to be greater than minimal risk. As such, these studies will not require a Data and Safety Monitoring Plan (DSMP). However, sponsors or the IRB may require DSMPs regardless of risk. In all research, regardless of whether a formal data and safety monitoring plan is required, investigators are responsible for providing ongoing oversight to protect the safety and welfare of study participants.

B. Greater Than Minimal Risk

All human subjects research involving the use of drugs, biologics, or devices require a DSMP. For other types of interventional human subjects research involving greater than minimal risk, a DMSP should be strongly considered and may be required by the IRB.

C. Types of Data and Safety Monitoring Plans

DSMP's can range from monitoring by the researcher or a group of researchers to the establishment of a Data and Safety Monitoring Board (DSMB). The methods and amount of monitoring required are dictated, in part, by the type and magnitude of risk involved, the population to be studied, and the complexity of the research.

- *Monitoring by an individual investigator:* for studies that involve small numbers of research participants at a single site and interventions unlikely to lead to major changes in risks and benefits. Close, continuous monitoring by the researcher and prompt reporting of unanticipated problems to the IRB and sponsor are generally considered to be adequate.
- *Monitoring by a group of investigators:* for studies where assessments may require additional expertise or objectivity from individual(s) who may or may not be directly involved with the design and/or conduct of the study. Studies overseen by a monitoring group of this type are generally short-term in nature, study endpoints do not include serious events, and risks to participants can be assessed through simple comparisons.
- *Data and Safety Monitoring Board (or Committee):* for studies involving large numbers of research participants, particularly vulnerable populations, multiple performance sites, blinded study groups, particularly high-risk interventions or when sophisticated data monitoring/statistical analysis is required. FDA regulated studies generally require establishment of a DSMB.

Data Safety Monitoring Boards (DSMB)

Multi-site research that involves a large population may require additional oversight, allowing

one group to view all data and monitor any adverse events, unanticipated problems, or complaints. A Data Safety Monitoring Board (DSMB) is a group of individuals who are experts in their field, which are applicable to the study under review. Individuals may have statistical experience, be lay representatives, administrators, etc. This group usually meets one to two times a year and reviews all adverse events reports from all of the study sites.

The DSMB has the power to recommend termination of the study based on the evaluation of these results. There are typically three reasons a DSMB might recommend termination of the study: safety concerns, outstanding benefit, and futility.

While it is important to remember that all studies require careful monitoring, it is also important to know that not all studies require a DSMB. The following questions are designed to help make a determination as to whether or not a DSMB may be needed.

- Are there multiple study sites that involve a large subject population?
- Is there more than minimal risk to subjects?
- Is the clinical trial intended to provide definitive information about effectiveness and/or safety of an intervention?
- Would it be ethically important for the trial to stop early if the primary question addressed has been definitively answered, even if secondary questions or complete safety information were not yet fully addressed?

For more information regarding the guidelines for DSMB's, please visit the NIH website or contact the IRB office at hsrrc@binghamton.edu.

D. Sponsored Research

In coordination with the Office of Sponsored Programs and the Assistant Vice President for Research Compliance/IO, the IRB Associate Director reviews any applicable contract language to confirm any obligations by a sponsor data and safety monitoring body that the organization be promptly notified of any information discovered by the sponsor that could affect the safety of subjects, affect the willingness of subjects to continue participation, influence the conduct of the study, or alter the IRB's approval to continue the study, when appropriate/applicable.

Department of Defense (DOD) Sponsored Research:

Research sponsored or funded by the U.S. Department of Defense (DOD) must be reviewed by the IRB under an additional set of regulations (32 CFR 219) that involve special protections for research participants, as well as additional review and reporting requirements for investigators and IRBs. Researchers must meet additional DOD requirements prior to initiation of the research. The DOD follows the DHHS and FDA regulations on human subjects research but also applies DOD Directive 3216.02, Protection of Human Subjects and Adherence to Ethical Standards in DOD Supported Research. Investigators should review these requirements when planning a DoD-supported research project as they may add a significant amount of time to the review and approval process of research.

XXI. DEPARTMENT OF DEFENSE REGULATED RESEARCH

The IRB follows DoD regulations when reviewing human subject research supported and regulated by the DoD. This section of the IRB Policies and Procedures contains information specific to DoD regulations for reviewing studies that involve greater than minimal risk or that require special consideration (i.e. classified research, research with vulnerable populations, etc.).

Below is a brief overview of how the IRB will review such studies. This is not a comprehensive list of guidelines and policies for DoD research, but represents guidelines and policies commonly referenced for research reviewed at Binghamton University. Please reference the following documents for further explanation of the policies that apply to DoD research:

- 32 CFR 219: Department of Defense Protection of Human Subjects
- DoD Directive (DoDD) 3216.02: Protection of Human Subjects and Adherence to Ethical Standards in DoD-Conducted and-Supported Research.

A. Evaluating Risk

The definition of minimal risk based on the phrase "ordinarily encountered in daily life or during the performance of routine physical or physiological examination or tests" shall not be interpreted to include the inherent risks certain categories of human participants face in their everyday life. For example, the risks imposed in research involving human participants focused on a special population should not be evaluated against the inherent risks encountered in their work environment (e.g., emergency responder, pilot, soldier in a combat zone) or having a medical condition (e.g., frequent medical tests or constant pain).

B. Scientific Review

All IRBs at non-DoD and DoD institutions reviewing DoD-supported research must consider the scientific merit of the research, including consideration of feasibility of study completion. The IRB may rely on outside experts to provide an evaluation of the scientific merit.

C. Research Involving Experimental Subjects

Research involving an experimental subject is defined as "an activity, for research purposes, where there is an intervention or interaction with a living individual for the primary purpose of obtaining data regarding the effect of the intervention or interaction. Research involving a human being as an experimental subject is a subset of research involving human subjects." This definition relates only to the application of section 980 of Reference (g); it does not affect the application of part 219 of Reference (c). This definition excludes activities that are not considered research involving human subjects, activities that meet the exemption criteria at section 219.101(b) of Reference (c), and research involving the collection or study of existing data, documents, records, or specimens from living individuals.

The following activities are NOT considered research involving human participants:

- Public or internal information collections of facts or opinions, obtained initially or in follow-up requests, from individuals (including individuals in control groups)under
- treatment or clinical examination in connection with research on, or prophylaxis to prevent, a clinical disorder;
- Direct treatment of that disorder; or
- The interpretation of biological analyses of body fluids, tissues, or other specimens; or the identification or classification of such specimens.

D. Survey Research

Surveys performed on Department of Defense personnel must be submitted, reviewed, and approved by the Department of Defense after the research protocol is reviewed and approved by the IRB. When a survey crosses DoD Components, additional review is required.

E. Classified Research

The Binghamton University IRB does not review classified research. For all Department of

Defense conducted or supported non-exempt human subject research involving classified information (as defined in Executive Order 13526), additional requirements must be applied. The review of research involving classified information is rare and requires Secretary of Defense approval. When conducting classified research, the chosen IRB of record must comply with DoD 3216.02.13.

F. Prohibited Research

Human participant research involving the testing of chemical or biological agents is prohibited, pursuant to Section 1520a of Title 50, United States Code (U.S.C.).

- Some exceptions for research for prophylactic, protective, or other peaceful purposes apply. Before any excepted testing of chemical or biological agents involving human subjects research can begin, explicit written approval must be obtained from the DoD Office for Human Research Protections (DOHRP).

Research involving a detainee or a prisoner of war as a human participant is prohibited.

- This prohibition does not apply to activities covered by investigational new drug or investigational device provisions of FDA regulations, when the purpose is for diagnosis or treatment of a medical condition in a patient.
- Such treatment may be offered to detainees or prisoners of war with their informed consent when the medical products are subject to FDA regulations, and only when the same product may be available to DoD-affiliated personnel consistent with established medical practices.
- The IRB is aware of the definition of "prisoner of war" for the DoD component granting the addendum.

G. Human Subject Research Training

All personnel who conduct, review, approve, oversee, support, or manage DoD supported research involving human participants are required to complete initial and continuing research ethics education appropriate to each individual's level of involvement, duties, and responsibilities.

IRB Members and Staff

Per *Section VI. Management of the IRB* of the policies and procedures, all IRB members are required to complete the IRB Members Basic Course through the CITI Program.

- The training must be completed prior to the first convened meeting that the new appointee is scheduled to attend.
- The IRB office staff maintain records to ensure that committee members stay up-to-date on all ethical training.
- Additional opportunities for training are provided through online and on-site seminars or workshops, attendance at regional and national meetings (i.e. PRIM&R), and continuing education materials distributed prior to or at each IRB meeting.

All new federal regulations, policies, procedural revisions, and other departmental news that require immediate notification of the University research community are accomplished through the IRB listserv and IRB website.

Research Personnel

The Binghamton University IRB requires a basic level of training in protection of human subjects for all study team members, including investigators from other institutions, listed on active IRB

protocols regardless of the funding source. Research personnel must successfully complete the basic human subject protection CITI training modules (Group 1: Biomedical Research or Group 2: Social and Behavioral Researchers).

- Protocol submissions (initial, continuing reviews, and modifications) are checked by the IRB office to ensure all research staff listed on the study protocol have completed CITI training.

Researchers are made aware of additional DoD requirements for the conduct of human subjects research through the IRB website and monthly newsletters.

Researchers who conduct human subject research must complete training before the IRB will approve any new or continuing reviews for projects, or make any other protocol determinations.

Please reference the complete IRB Policies and Procedures, or the Educational Requirements page of the IRB website for the current Binghamton University training requirements.

Continuing Education

Continuing education must be completed by the expiration date of 4 years from the last certification date.

Oversight by DoD Components

The DoD component involved in the research may evaluate the educational policies to ensure personnel are qualified to perform the research, based on the complexity and risk of the research. If research involving a DoD component requires more frequent or other training requirements in addition to those that Binghamton University requires, the investigator will be responsible for ensuring that the training is completed for those involved in the conduct of the research. Researchers should contact the human research protection officer of the DoD component for their education requirements and obtain documentation confirming the requirements.

H. Issues Related to Consent

Informed Consent

- If the research involves DoD-affiliated personnel as participants, in addition to the basic and required consent disclosures, consent documents must include (Table II.3.F.1.):
- If the research involves risks to their fitness for duty (e.g., health, availability to perform job, data breach), the informed consent document (ICD) must inform DoD-affiliated personnel about these risks and that they should seek command or Component guidance before participating.
- If applicable, a statement of potential risks for the revocation of clearance, credentials, or other privileged access or duty.
- A statement that the DoD or a DoD organization is funding the study.
- A statement that representatives of the DoD are authorized to review research records.
- For greater than minimal risk research, the disclosure that participants may, for the duration of the study, be eligible for health care services for research-related injuries at a military treatment facility, and this eligibility for health care services extends beyond participants' participation in the study to such time after the study has ended.
- Disclosure of Research-Related Injury - Any requirements for disclosure of research-

related injury from a DoD component must be included in the informed consent process. See SOP 701 (2.3).

Consent from a Legally Authorized Representative

If consent is to be obtained from the legally authorized representative of an experimental subject, the research must be intended to provide direct benefit to the individual participant. The determination that the research is beneficial to the individual experimental subject must first be made by the IRB.

Waiver of Consent

In general, no DoD component may conduct or use appropriated funds to support research involving a human being as an experimental subject without the prior informed consent of the subject.

If the research participant meets the definition of "experimental subject," a waiver of the consent process is prohibited unless a waiver is obtained from the Assistant Secretary of Defense for Research and Engineering.

The Assistant Secretary of Defense for Research and Engineering may waive the requirements for consent when all of the following are met:

- The research is necessary to advance the development of a medical product for the Military Services.
- The research might directly benefit the individual experimental subject.
- The research is conducted in compliance with all other applicable laws and regulations.

If the research participant does not meet the definition of "experimental subject," the IRB is allowed to waive the consent process.

For classified research, waivers of consent are prohibited.

I. Studies Involving Military Personnel

If the research involves DoD-affiliated personnel, the key investigator must receive command or Component approval to execute the research.

Undue Influence

DoD-affiliated personnel, military and civilian supervisors, officers, and others in the chain of command:

- Are prohibited from influencing their subordinates to participate in research involving human participants.
- Must not be present during any human participant recruitment sessions or during the consent process for DoD-affiliated personnel.
- May participate in separate human participant research recruitment sessions.
- For greater than minimal risk research involving recruitment of DoD-personnel, when occurs in a group setting, the IRB must appoint an ombudsperson. The ombudsperson:
    - Must not have a conflict of interest with the research or be a part of the research team.
    - Must be present during the HSR recruitment, monitoring that the

recruitment and informed consent explain that participation is voluntary and that the information provided about the research is consistent with the IRB-approved script and materials, including digitally provided materials.
    - Should be available to address DoD-affiliated personnel's concerns about participation.

Compensation

When research involves U.S. military personnel, limitations on dual compensation:

- Prohibit an individual from receiving pay of compensation for research during duty hours.
- U.S. military personnel may be compensated for research if the participant is involved in the research when not on duty.
- Federal employees while on duty and non-federal persons may be compensated for blood draws for research up to $50 for each blood draw.

- Non-federal persons may be compensated for research participation other than blood draws in a reasonable amount as approved by the IRB according to local prevailing rates and the nature of the research.

J. Vulnerable Populations

Research supported or conducted by the Department of Defense that affects vulnerable classes of subjects (i.e. pregnant women, prisoners, and children) must meet the additional protections of 45 CFR Part 46, Subparts B, C, and D, except where modified by DoD I3216.02.

Pregnant Women

For purposes of applying Subpart B, the phrase "biomedical knowledge" is replaced with "generalizable knowledge."

The applicability of Subpart B is limited to research involving pregnant women as participants in research that is that is greater than minimal risk and includes interventions or invasive procedures involving the woman or the fetus as participants.

Fetal Research

Fetal research must comply with the US Code Title 42, Chapter 6A, Subchapter III, Part H, 289g:

- Research or experimentation may not be conducted, in the United States or in any other country, on a nonviable living human fetus ex utero or a living human fetus ex utero for whom viability has not been ascertained unless the research or experimentation:
    - May enhance the well-being or meet the health needs of the fetus or enhance the probability of its survival to viability; or
    - Will pose no added risk of suffering, injury, or death to the fetus and the purpose of the research or experimentation is the development of important biomedical knowledge which cannot be obtained by other means.
- The risk standard must be the same for fetuses which are intended to be aborted and fetuses which are intended to be carried to term.

For human participant research that would not otherwise be approved but presents an opportunity to understand, prevent, or alleviate a serious problem affecting the health or welfare of pregnant women, fetuses, or neonates, DoD organizations must demonstrate to the senior designated official that the IRB has fulfilled its duties in accordance with Subpart B.

Before human participant research activities may begin, the senior designated official must receive explicit written approval from the DoD Office for Human Research Protections.

Research With Prisoners

In addition to activities permissible under Subpart C, two additional categories of research involving prisoners are permissible:

1. Epidemiological research is permitted under the following conditions:
    a. Where the sole purpose of the research is to describe the prevalence or incidence of a disease by identifying all cases, or study potential risk factor associations for a disease.
    b. The research presents no more than minimal risk.
    c. The research involves no more than inconvenience to the prisoner-participants.
    d. Prisoners are not a particular focus of the research.
2. Human participant research involving prisoners that would otherwise meet exemption criteria may be conducted, but must first be approved by an IRB.

DoD organizations conducting research involving prisoners must demonstrate to the senior designated official that the IRB has fulfilled its duties in accordance with Subpart C.

When Previously Enrolled Participants Become Prisoners

When a previously enrolled human participant becomes a prisoner, and the protocol has not been reviewed and approved by the IRB in accordance with Subpart C, the key investigator must promptly notify the IRB.

- For DoD-conducted research, the human protections director must notify the component office of human research protections.
- For DoD-supported research, the non-DoD organization must notify the DoD human research protection official and other federal agencies.
- The DODHRPP must concur with the IRB before the participant can continue to participate while a prisoner.

DoD organizations must demonstrate to the senior designated official that the IRB has fulfilled its duties in accordance with DHHS Subpart D, 45 CFR 46. 407 and 21 CFR 50.54.

Research with Service Members Who Are Minors

Service members and all Reserve Component and National Guard members in a federal duty status are considered to be adults. If a Service member, Reserve Component or National Guard member in federal duty status, student at a Service Academy, or trainee is under 18 years of age, the IRB must carefully consider the HSR recruitment process and the necessity of including such member as a human participant.

K. Research With Genomic Data

Research involving large-scale genomic data from DoD-affiliated personal requires additional protections:

- The disclosure of DoD-affiliated personnel's genomic data may pose a risk to national security; accordingly, written materials must describe administrative, technical, and physical safeguards commensurate with risk, including the secondary use or sharing of de-identified data or specimens.
    - All research involving large-scale genomic data collected from DoD-affiliated personnel must have a certificate of confidentiality.
    - Research involving large-scale genomic data collected from DoD-affiliated

personnel is subject to DoD Component security review to ensure the adequacy of the proposed administrative, technical, and physical safeguards, including the secondary use or sharing of de-identified data or specimens.

L. Clinical Research

In conducting or supporting clinical research, the Secretary of Defense shall ensure that:

- Women who are members of the Armed Forces are included as participants in each project of such research; and
- Members of minority groups who are members of the Armed Forces are included as participants of such research.
- The Secretary of Defense may waive these requirements regarding women and members of minority groups with respect to a project of clinical research if the Secretary determines that the inclusion, as participants in the project, of women and members of minority groups, respectively:
    - Is inappropriate with respect to the health of the participants,
    - Is inappropriate with respect to the purpose of the research, or
    - Is inappropriate under such other circumstances as the Secretary of Defense may designate.

M. Confidentiality

Data or information acquired by the DoD Component under a pledge of confidentiality for exclusively statistical purposes must be used exclusively for statistical purposes and may not be disclosed in identifiable form for any other purpose, except with the informed consent of the respondent.

N. Multi-Centered Research

If an investigator is the lead investigator/site for a multi-centered study, they have additional responsibilities for overseeing the activities at Binghamton University as well as the other participating sites. When conducting multi-site research, a formal agreement between organizations is required to specify the roles and responsibilities of each party. The formal agreement document should include the following elements:

- A brief description of the research
- Specific roles and responsibilities of each site, including scientific and IRB review; recruitment of participants; and informed consent procedures
- Plan for ongoing data and safety monitoring, reporting requirements, documentation retention, and compliance for the entire research project

If the investigator is not the lead investigator for a multi-centered DoD study, the investigator should be sure to request a copy and sign the study's agreement/statement of work prior to initiating study procedures at Binghamton University.

O. International Research

If the DoD research is conducted in a foreign country, the investigators must submit verification of the local ethics review (i.e. approval to conduct research). The investigator must abide by the local laws, regulations and customs as applicable. For additional guidance on the necessary safeguards for research with international populations, please see *Section XVI. Transnational Research* of the IRB Policies and Procedures.

P. Reporting Requirements

For any DoD-supported research, the following will be reported within 30 days to the DoD Human Research Protection Official (HRPO) designated for a specific study:

- When significant changes to the research protocol are approved by the IRB.
- Decreased benefit or increased risk to participants in greater than minimal risk research.
- Addition of vulnerable populations as participants.
- Addition of DoD-affiliated personnel as participants.
- The results of the IRB continuing review.
- Change of reviewing IRB.
- When a previously enrolled human participant becomes pregnant, or when the researcher learns that a previously enrolled human participant is pregnant, and the protocol was not reviewed and approved by the IRB in accordance with Subpart B.
- When a previously enrolled human participant becomes incarcerated and the protocol was not reviewed and approved by the IRB in accordance with Subpart C.
- A DoD-supported study's closure.
- When Binghamton University is notified by any federal department, agency, or national organization that any part of an HRPP is under investigation for cause involving a DoD-supported research protocol.

For any DoD-supported research, the following will be reported within five days to the DoD HRPO designated for a specific study:

- Any unanticipated problems involving risks to participants or others.
- Any suspension or termination of DoD-supported research.

Where instances of serious or continuing non-compliance are being reviewed by the convened IRB, the following will be reported to the DoD HRPO within five days of completion of the IRB's report:

- Results of for-cause audits, reviews, or assessments.
- Allegations of serious or continuing noncompliance related to HSR that are substantiated by investigation, and subsequent actions taken based on the findings.

Substantiated allegations related to classified HSR will be reported immediately to the DOHRP.

Records maintained that document compliance or non-compliance with DoD requirements and are made accessible for inspection and copying by representatives of the DoD at reasonable times and in a reasonable manner as determined by the supporting DoD component. Records must be maintained for at least three years.