

MASS GENERAL BRIGHAM HUMAN RESEARCH OFFICE

Human Tissues: Brief Primer on Research Use and Requirement for Mass General Brigham IRB Review

For the purposes of this Primer, **tissue** is defined as any biological specimen obtained from patients or human research subjects. This includes, for example, fixed, frozen or fresh pathology or autopsy specimens, blood, urine, saliva, CSF, semen, breast milk or other biological material, and any purified DNA, RNA, proteins, cell lines or clones.

1. Research on human tissue that **DOES NOT** require IRB review

A. Laboratory research on human cells or cell lines from specified established external repositories and tissue banks

Mass General Brigham IRB review is not required for laboratory research on human cells obtained from tissue repositories/banks listed below:

- ATCC American Type Culture Collection: <http://www.atcc.org/Home.cfm>
- NDRI National Disease Research Interchange <http://www.ndriresource.org/>
- Coriell Repository <http://coriell.umdnj.edu/>
- Cambrex <http://www.cambrex.com/content/Bioscience/humananimalcells.asp>

The Mass General Brigham IRB has reviewed the operating policies and procedures of these commercial entities and determined that the release of these samples to investigators does not meet the regulatory definition of *human subjects research*. When human cells are obtained from one of these commercial repositories, investigators are reminded to review the vendor's contract carefully to ensure that the planned use of the tissue will be in accordance with the terms and conditions outlined in the contract.

If you know of other large established repositories you wish to be considered for inclusion in this list, please contact the Mass General Brigham IRB mailbox at IRB@partners.org

B. Research on tissue obtained from certain Research Tissue Banks within Mass General Brigham

Mass General Brigham IRB review is not required for research on (1) non-identifiable tissue or (2) coded tissue that is provided without linked identifiable information, when the tissue is obtained from IRB-approved Research Tissue Banks within Mass General Brigham. In such cases, the Mass General Brigham IRB has approved the Bank's policies and procedures for distribution of non-identifiable tissue or coded tissue without linked identifiable information to investigators. The

Research Tissue Bank is responsible for complying with the IRB-approved Research Tissue Bank operating policies and procedures.

C. Analyses on tissue obtained from outside Mass General Brigham when the analysis is performed as a commercial service for other investigators (or as other genuinely non-collaborative services meriting neither professional recognition nor publication privileges)

Mass General Brigham IRB review is not required for research limited to the performance of analyses on tissue as a commercial or genuinely non-collaborative service. For example, appropriately qualified laboratory staff performs analyses of blood samples for investigators outside Mass General Brigham solely on a commercial (non-collaborative) basis. In such situations, Mass General Brigham-affiliated staff performing the analyses are not considered to be “engaged in the research,” but still must adhere to the commonly recognized professional standards for maintaining privacy and confidentiality.

2. Research on human tissue that DOES require IRB review

A. Research on samples obtained prospectively, explicitly, and solely for research

Mass General Brigham IRB approval is required for the collection and research use of human tissue samples obtained from individuals explicitly for research purposes, for example, blood samples drawn or extra blood taken at the time of a clinical blood draw specifically for a research project, or additional tissue biopsies performed solely for research purposes during a clinically indicated endoscopic procedure. The IRB will require written consent/authorization of each research participant.

B. Research on excess clinical samples obtained from clinical departments/services within Mass General Brigham

Mass General Brigham IRB review is required for any proposed research use of excess clinical samples obtained from clinical department/services within Mass General Brigham, for example, the clinical laboratories (including pathology) or clinical care areas, such as the operating suites. The IRB Chairperson will determine whether the proposed research is:

- *human subjects research*, as defined by federal research regulations
- human subjects research exempt from the requirements in 45 CFR 46;
- research that presents no more than minimal risk to human subjects and involves procedures in one or more of the categories of research that may be reviewed by an IRB through an expedited review procedure; or
- research that requires review by the IRB at a convened meeting (full board review).

These determinations are based upon the nature of the research, the source of the tissue, use and/or disclosure of identifiable health information, privacy and confidentiality protections, and whether informed consent/authorization of subjects should be required, among other factors. **Note: IRB approval does not guarantee** that samples can or will be provided by the relevant clinical laboratory or pathology department.

For review of proposals involving use of excess human materials, investigators should complete and submit the Excess Human Materials Form http://partnershealthcare.sharepoint.com/sites/phrmApply/aieipa/irb/Pages/Excess_Human_Material.aspx.

C. **Research on autopsy specimens and donated cadavers**

New Massachusetts Department of Public Health Regulations require that the next of kin providing consent for an autopsy give separate consent for the use of autopsy specimens for research. New autopsy consent forms will incorporate language that specifically addresses research (being finalized June 2005). For the use of autopsy specimens, IRB review is required, and MGH or BWH autopsy services will be responsible for review of requests for autopsy specimens to determine whether the request is permitted by the consent provided by next-of-kin.

There are also willed body programs under which generous individuals donate their bodies for scientific research. Investigators may contact the Anatomy Department at Harvard Medical School for additional information. The IRB will review requests for research use of cadaveric materials at Mass General Brigham and provide investigators with written documentation of IRB review for their research files. Usually these projects are found to be research, but not *human subjects research*, because the materials are not derived from living individuals and the materials cannot be linked to the donor.

D. **Tissue or specimens obtained from collaborators outside Mass General Brigham**

Mass General Brigham IRB review is required for any research limited to laboratory investigation on human materials provided to investigators by collaborators outside of Mass General Brigham. The IRB Chairperson will determine whether the proposed research is:

- *human subjects research*, as defined by federal research regulations;
- human subjects research exempt from the requirements in 45 CFR 46;
- research that presents no more than minimal risk to human subjects and involves procedures in one or more of the categories of research that may be reviewed by an IRB through an expedited review procedure; or
- research that requires review by the IRB at a convened meeting (full board review).

These determinations are based upon the nature of the research, the source of the

tissue, use and/or disclosure of identifiable health information, privacy and confidentiality protections, and whether informed consent/authorization of subjects should be required, among other factors.

For review of proposals involving use of excess human materials, investigators should complete and submit the Excess Human Materials Form http://partnershealthcare.sharepoint.com/sites/phrmApply/aieipa/irb/Pages/Excess_Human_Material.aspx.

E. Secondary use of previously collected research samples

Mass General Brigham IRB review is required for any proposed secondary use of existing samples collected previously for research. The IRB Chairperson will determine whether the proposed research is:

- *human subjects research*, as defined by federal research regulations;
- human subjects research exempt from the requirements in 45 CFR 46;
- research that presents no more than minimal risk to human subjects and involves procedures in one or more of the categories of research that may be reviewed by an IRB through an expedited review procedure; or
- research that requires review by the IRB at a convened meeting (full board review).

These determinations are based upon the nature of the research, the source of the tissue, use and/or disclosure of identifiable health information, privacy and confidentiality protections, and whether informed consent/authorization of subjects should be required, among other factors. The IRB will take into consideration the scope/intent of the original research project, as well as a copy of the consent form subjects signed when the sample was originally provided for the initial research use.

For review of proposals involving secondary use of human materials, investigators should complete and submit the Secondary Use Research Samples/Data Form http://partnershealthcare.sharepoint.com/sites/phrmApply/aieipa/irb/Pages/Secondary_Use.aspx.

3. Special Samples

A. Human embryonic stem cells (hESC)

Mass General Brigham IRB approval is required for research on existing hESC lines and for the derivation of new hESC lines. In addition, there are other special ethical, legal, financial, and institutional issues related to the research use of hESC. Investigators are asked to contact the Mass General Brigham IRB at IRB@partners.org For more information, refer to: http://healthcare.partners.org/phsirb/investigatorletter_june23.pdf

B. Fetal Tissues

Mass General Brigham IRB review is required for research on fetal tissue. The sole exception is the research use of cell lines derived from fetal tissue that were obtained from one of the commercial repositories/banks listed above. Other possible sources of fetal tissue include the BWH/MGH Pathology Department, outside providers of pregnancy termination services, and non-profit repositories. **Note:** For the purpose of this policy, cord blood or materials derived from a placenta are not considered fetal tissue.

There are state and federal laws that govern research use of fetal tissue. Federal law prohibits the sale of fetal tissue for profit. Massachusetts state law requires that the written consent of the woman be obtained before materials from her fetus, that has expired, are used for research purposes. Investigators must indicate in their submission to the IRB why the fetal material is required for the research and why other materials cannot be substituted for the fetal material, as well as specify the source of materials. Generally, the Mass General Brigham IRB will not approve the retention of any code or link to the identity of the woman from whom the fetal tissue originated.

4. Labeling of human samples

Tissue retained in research laboratories should be labeled with an alphanumeric code rather than the subject's name, initials, medical record number, date of birth, or Social Security numbers in order to protect the subject's privacy and confidentiality. When the IRB approves the retention of a link, such as a code key, that could be used to identify the subject from whom the tissue was derived, the link/code key should be kept in another secure location. Specific measures taken to protect the privacy and confidentiality of the tissue/data must be described in the submission to the IRB and, whenever relevant, addressed in the research consent/authorization document. Generally, tissue samples/data sent outside Mass General Brigham should not be labeled with names, birth dates, or medical record or social security numbers.

5. Transfer of samples to research collaborators outside Mass General Brigham HealthCare System

The Mass General Brigham IRB must review any plan to transfer tissue to outside collaborators (academic or commercial) for research. **Exception:** The transfer of **non-identifiable** tissue from an IRB-approved Mass General Brigham Research Tissue Bank to another investigator, as specified by policies and procedures of the tissue bank, does NOT require separate IRB review and approval (See also 1B, above). Separate approval is not needed, because the IRB will have already reviewed and approved the operating policies

and procedures of the bank, which describes such transfers. For more information, refer to the [Partners Research Tissue Bank Policy](#), Page 4, point D.

Investigators are asked to address in submissions to the IRB whether or not there are plans to transfer tissue outside Mass General Brigham. Whenever plans to transfer tissue outside Mass General Brigham arise after initial IRB approval, an amendment to the protocol should be submitted to the IRB for approval. **Exception: When the IRB determines that the research is not human subjects research or is exempt from the requirements of 45 CFR 46, an amendment does not need to be submitted to the IRB for approval. However, the investigator must follow all other requirements outlined below.**

A. Materials Transfer Agreements (MTAs)

1. Transfer of tissue to **for-profit or commercial** entities or collaborators

Investigators are reminded that, in addition to IRB approval, Mass General Brigham Corporate Sponsored Research and Licensing must negotiate a Materials Transfer Agreement (MTA), on behalf of the Mass General Brigham investigator/institution, with the recipient entity. For more information: see <http://techtransfer.massgeneral.org> (MGH) or <http://csrl.bwh.harvard.edu> (BWH).

When tissue is being transferred for purposes other than genuine research collaborations, the proposed tissue transfer will require additional institutional review in accordance with institutional policy. The Mass General Brigham IRB at IRB@partners.org when additional institutional review is required.

2. Transfer of tissue to an **academic or non-profit** entity or collaborator

A Materials Transfer Agreement (MTA) is seldom required to transfer tissue to an academic or non-profit entity or collaborator because in most circumstances the intended use is consistent with the research or teaching mission of Mass General Brigham and most other non-profit/academic institutions. The tissue transfer may proceed once the IRB has reviewed the proposal and a simple letter of agreement between the Mass General Brigham hospital and/or its investigator and the recipient investigator is signed. (See references immediately below.) **Exception: Tissue samples that are in any way “encumbered” by past, existing, or planned collaborations with corporate entities may not be transferable** – these first require CSRL review. The CSRL Checklist below assists investigators in determining if CSRL review is required.

For Research Tissue Transfer Agreement templates and more information, see:

[Template agreement letter for coded samples](#)

[Template agreement letter for non-identifiable samples](#)

[Partners Innovation Checklist](#) to determine whether academic transfers require an MTA

To contact Corporate Sponsored Research and Licensing,
at MGH: <http://techtransfer.massgeneral.org>
at BWH: <http://csrl.bwh.harvard.edu>