Guidance on Policy Related to the Collection, Use and Storage of Human Tissue

Contents

Overview

The availability of high quality human tissue for research purposes requires the development of standardized methods for collection, long-term storage, retrieval and distribution of specimens that will enable their future use. These standardized methods are established in UNMHSC Policy # RC.05.002.PP, *Oversight of Human Tissue in Research.*

UNM HSC considers the protection of the rights and welfare of human tissue donors to be of utmost importance. The following guidance is presented to ensure the protection of human tissue donors, ensure the availability of human tissue for future research, and ensure investigator compliance with UNMHSC Policy # RC.05.002.PP, *Oversight of Human Tissue in Research*. The purpose of this guidance document is to inform investigators and staff about how to follow the requirements of the human tissue policy in using the central Human Tissue Repository (HTR) or establishing a Satellite Repository (sHTR). If anything in this guidance appears to conflict with policy RC.05.002.PP, the policy shall govern.

Before submitting to the HTOC-SRC, the HTOC or the HRRC, PIs must ensure that the scientific merit of the project has been properly vetted by the Department Chair utilizing the "Departmental Scientific Review Form." This completed form is required, as an attachment, for all submissions sent to the HRRC (including those projects desiring to utilize human tissue).

Definitions

Coded Tissue: Coded, as it pertains to human biological specimens:

- Having identifying information (such as name or social security number) that would enable the investigator to readily ascertain the identity of the individual to whom the specimens pertain, and includes replacing identifying information with a number, letter, symbol, or combination thereof (i.e. the code) and
- A key to decipher the code exists, enabling linkage of the identifying information to the specimens.

Collaboration: An equal partnership between two researchers who are pursuing mutually interesting and beneficial research.

Collaborative Agreement: An agreement between two or more researchers that sets forth the nature of their working relationship in a research project. The agreement may include provisions concerning the intent of the parties to share data, research materials and facilities, and to publish research findings. Since collaboration agreements are usually executed between researchers, they are typically not documents that legally bind the researchers' institutions to a commitment of any resources.

Collaborative Research: Researchers working together, often under the auspices of a Collaborative Agreement, to achieve the common goal of producing new scientific knowledge.

Donate: Giving away of something of value where the donor expects nothing in return. In the context of Research, neither the donor nor donee are actively involved in Collaborative Research.

External Collaborative Entity: An external party with whom a UNMHSC investigator enters into a collaboration, a collaborative agreement, or collaborative research activities.

Human Tissue: Body fluids, solid tissues, bone, and cellular constituents including, but not limited to, DNA, RNA, proteins and human embryonic stem cells (hESCs).There are four categories of human tissue defined as follows:

a. **Type A.** Tissue collected for possible future diagnostic purposes. Thus HRRC oversight or informed consent is not required, because the tissue was collected for medically necessary diagnostic study.
b. **Type B.** Tissue obtained for known HRRC- approved active research project with HRRC-approved consent status.
c. **Type C.** Excess tissue alternatively prepared for tissue banking for unknown future research project with consent of patient for such storage.
d. **Type D.** Excess tissue alternatively prepared for tissue banking for unknown future research project with waiver of informed consent, waiver of HIPAA authorization, HTR as Honest Broker for identifiers, and dispensed as de-identified samples.

Identifiable Tissue: Tissue that include identifiers such as names, social security numbers, medical record numbers, or pathology accession numbers, or any other “code” that permits specimens to be linked to individually identifiable living individuals and perhaps also to associated medical information.

Limited Data Set: Protected health information (PHI) that excludes 16 categories of direct identifiers and may be used or disclosed, for purposes of research, public health, or health care operations, without obtaining either an individual’s authorization or a waiver or an alteration of authorization for its use and disclosure, with a data use agreement.

Research: A systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge.

Oversight Committees

Human Research Review Committee (HRRC)

It is the responsibility of the HRRC to review and approve research that involves the collection, use, storage and re-use of all tissue collected from a human subject. As such, any and all storage of human tissue for use in future studies or for

any reason outside the scope of the project for which it was originally provided, granted or procured, must be reviewed and approved by the HRRC and the Human Tissue Oversight Committee (HTOC).

Human Tissue Oversight Committee (HTOC)

The HTOC is established to serve in a governing and advisory role to the Human Tissue Repository (HTR) and any satellite Research Tissue repositories (sHTRs). The HTOC has the authority to oversee the collection, reporting, distribution and transfer of the Research Tissues held in those repositories, whether intra-institutionally or with the researchers or entities outside of the UNM HSC, and ensure compliance with Policy RC.05.002.PP – Oversight of Human Tissue in Research.

Scientific Review Committee of the HTOC (SRC)

The SRC is a subcommittee of the HTOC and reviews the scientific merit of proposals requesting use of archived human specimens in the Human Tissue Repository (HTR) or other UNM HSC Satellite Human Tissue Repository (sHTR), as well as specimens from UNMH Surgical Pathology.

Guidance Regarding Collecting and Storing Tissue

Any and all projects involving the collection and storage of human tissue for research purposes, whether or not it is identifiable, must be submitted to the HRRC for review and approval. HRRC approved informed consent and HIPAA authorization must be obtained from participants. The HRRC approved informed consent document must identify the tissue to be collected and its anticipated future use.

Any and all projects involving the storage of identifiable human tissue that was originally used for diagnostic purposes or clinical care but is being stored for use in future studies must be submitted to the HRRC for review and approval. HRRC approved informed consent and HIPAA authorization must be obtained from participants. The HRRC approved informed consent document must identify the tissue to be collected and its anticipated future use.

HRRC review and approval is required for the storage of human tissue for human research purposes as defined by 45 CFR 46. The storage of human tissue for future use in human research studies is considered a separate human research activity from any current or future human research study involving the use of the stored tissue, and requires separate HRRC review and approval.

HRRC approval and informed consent is required to store the following categories of human tissue for future use in human research:

- Identifiable human tissue originally collected for use in human research.
- Identifiable human tissue originally collected for clinical purposes.
- De-identified or coded human tissue originally collected for use in human research.
- HRRC approval and informed consent is not required to store the following types of human tissue for future use in human research.
- Tissue collected from non-human subjects as defined by 45 CFR 46.
- De-identified tissue originally collected for clinical purposes.

In some cases, as in FDA regulated research involving in-vitro diagnostic devices, human tissue specimens are considered to be human subjects. As such, HRRC review and approval is required, but obtaining informed consent may not be possible. Please consult with the HRPO if you plan to engage in this kind of research.

Human tissue can only be stored at the HSC in the Human Tissue Repository (HTR) or an HRRC approved satellite repository (sHTR). See below for associated processes.

Tissue Collection and Use Approval Requirements

I want to collect and use tissue for a specific, individual research project

Tissue that is collected by an investigator for use in a specific research project requires only HRRC approval.

Human tissue cannot be collected from a subject without first obtaining HRRC approved informed consent and HIPAA authorization. The HRRC approved informed consent document must identify the tissue to be collected and its anticipated future use, and must be signed by the subject or their legal representative.

Approval(s) Required: HRRC

I want to collect tissue for use in an HRRC-Approved Project and store that tissue for future unrelated research

Tissue that is collected by an investigator for use in a specific research project requires HRRC approval.
Human tissue cannot be collected from a subject without first obtaining HRRC approved informed consent and HIPAA authorization. The HRRC approved informed consent document must identify the tissue to be collected and its anticipated future use, and must be signed by the subject or their legal representative.

If you are storing human tissue for future projects or for any reason outside the scope of the project for which it was provided, granted or procured, you are storing tissue as a satellite Human Tissue Repository (sHTR). The establishment of a sHTR requires separate and distinct approval by both the HTOC and the HRRC (see instructions below).

Alternatively, you may transfer the tissue (not used in the original HRRC-Approved project) to the Human Tissue Repository (HTR).

The future use of the tissue will require approval from the HTOC SRC (for use of the tissue) and approval by the HRRC (for the new research project). ***IMPORTANT:*** *HTOC SRC approval is required even if the tissue resides in an established sHTR set up by you.*

Approval(s) Required: HRRC HTOC SRC

I want to access tissue stored in the Human Tissue Repository (HTR) or Satellite Human Tissue Repository (sHTR)

The HTR releases human tissue for intramural research purposes only. All requests to obtain human tissue from the HTR or a sHTR must be reviewed and approved by the Scientific Review Committee (SRC). Human tissue cannot be sold, donated, or traded outside of the UNMHSC. Tissue can be transferred to outside collaborators in order to secure testing or other services within the scope of an HRRC approved research protocol and SRC approved tissue use. If a collaborator's contributions to the research warrant professional recognition or publication privileges, and the collaborator is acting as an agent of an institution that routinely receives federal research funds, then the collaborator's institution is considered engaged in the research and an Institutional Authorization Agreement must be executed. In most cases a Material Transfer Agreement (MTA) will need to be executed before tissues are transferred into or out of the HSC HTR in collaboration with another institution. Exceptions may be defined by collaborative research or consortium agreements which establish the conditions of tissue transfer, use and intellectual property as done with an MTA.

I want to use tissue banked in the HTR or a sHTR

Use of banked human tissue requires the following approvals in addition to those necessary when collecting and banking the tissue:

- **Identifiable Tissue** – Requires SRC and HRRC approval. Consent and authorization must be obtained **UNLESS** consent was obtained at the time of collection for this specific research study or for future unspecified research.
  SRC HRRC
- **Coded Tissue** – Requires SRC approval and a letter of agreement. A Material Transfer Agreement is also be required for projects involving collaboration with external entities. HRRC review to determine if exemption applies is necessary.
  SRC HRRC
- **Limited Data Set** – Requires SRC approval. A Data Use Agreement is also be required for projects involving collaboration with external entities. HRRC review to determine if exemption applies is necessary.
  SRC HRRC

- **Anonymous/Anonymized Tissue** – SRC Approval is required. HRRC review to determine the project as "Not Human Research" is necessary.

  SRC HRRC

Satellite Human Tissue Repositories (sHTR)

Research Tissues for which volunteers have given informed consent (HRRC-approved) are generally the only types of Research Tissues that may be stored in satellite Research Tissue repositories (tissue types B and C as defined above). However, exceptions may be made if the satellite Research Tissue Repository has sought and received specific HTOC and HRRC approval for the specific type of collection.

If you are storing human tissue for future projects or for any reason outside the scope of the project for which it was provided, granted, or procured, you are storing tissue as a satellite HTR. This activity must be reviewed and approval by the HRRC (for the sHTR) and the SRC (to approve use of tissue) **separate** from any approvals provided for research for which the tissue is being stored. It is important to understand that the storage of human tissue in a satellite repository requires does not necessarily depend on HRRC approval. Tissue stored outside of the HTR, even if its use in research is determined to be exempt or "not human research" by the HRRC, is still considered a satellite repository and must be declared and approved.

When to Consider Establishing a sHTR

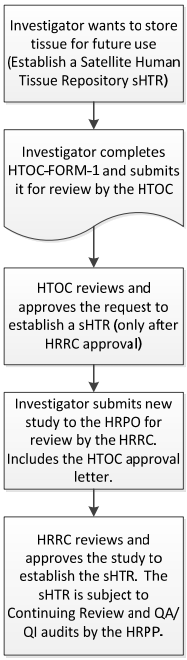
Several issues related to tissue storage, processing, convenience and collaborative research protocols can influence the choice to establish a satellite tissue repository. The preferred method for storing human tissue at the UNMHSC is to use the central Human Tissue Repository (HTR). If the specific circumstances of the research are clearly best served by storing tissue in a sHTR, the investigator must obtain approval first from the HTOC and then the HRRC for the establishment of the sHTR. The approved sHTR will be subject to Continuing Review and QA/QI audits performed by the Human Research Protections Office.

Use of tissue from an established sHTR is subject to approval from the HTOC SRC.

The UNM HSC endeavors to meet the standards enunciated by the National Cancer Institute's *NCI Best Practices for Biospecimen Resources* (the "NCI Best Practices"), which incorporates key aspects of the *Best Practices for Repositories: Collection, Storage, Retrieval and Distribution of Biological Materials for Research,* published by the International Society for Biological and Environmental Repositories (Third Ed. 2012) (the "ISBER Best Practices"), relative to organizing, managing, storing, securing, accessing, shipping, and receiving Research Tissues, whether in the central HTR or in satellite Research Tissue repositories. QA/QI audits, conducted the HRPO, will ensure that sHTRs have processes in place to address the following:

- Equipment monitoring, calibration, maintenance, and repair
- Control of Research Tissue collection supplies
- Research Tissue identification and labeling conventions
- Research Tissue collection, handling, processing, and preservation methods
- Procedures for storage and retrieval of Research Tissue
- Packaging, shipping, and receiving
- Laboratory tests performed in-house including Research Tissue quality control
- Research Tissue data collection and maintenance (Informatics)
- Biosafety
- Training of employees
- Administrative, technical, and physical safeguards

How to Establish a Satellite Human Tissue Repository (sHTR)



Requests to establish a sHTR will be reviewed by the HTOC. If approved, a determination letter will be provided to be included with the initial application (for the sHTR) to the HRRC. Approved sHTRs will be tracked by the HTOC and the HRRC for required approvals and tissue utilization oversight.

sHTRs are subject to Continuing Review by the HRRC and QA/QI audits performed by the HRPO. Faculty members who do not wish to maintain sHTR status must transfer the Research Tissues to the central HTR or destroy them.

Once the UNM HTR software is operational, all Research Tissues in the sHTRs will be entered into the central database.

Considerations for Collaborative Research

To promulgate participation by UNMHSC investigators in collaborative research, human tissue can be transferred, within the scope of HRRC approval, directly to external collaborative entities as appropriate. The HTR will provide administrative support for the shipping and handling of the tissue, but responsibility for storage, quality control, and distribution are the sole responsibility of the external collaborative entity.

The HTR is not involved with the receipt or storage of tissue provided to a UNMHSC investigator as part of their participation in collaborative research. UNMHSC investigators are responsible for managing and storing tissue owned and supplied to the UNMHSC investigator by an external collaborative entity.

Tracking Human Tissue and the Human Tissue Database

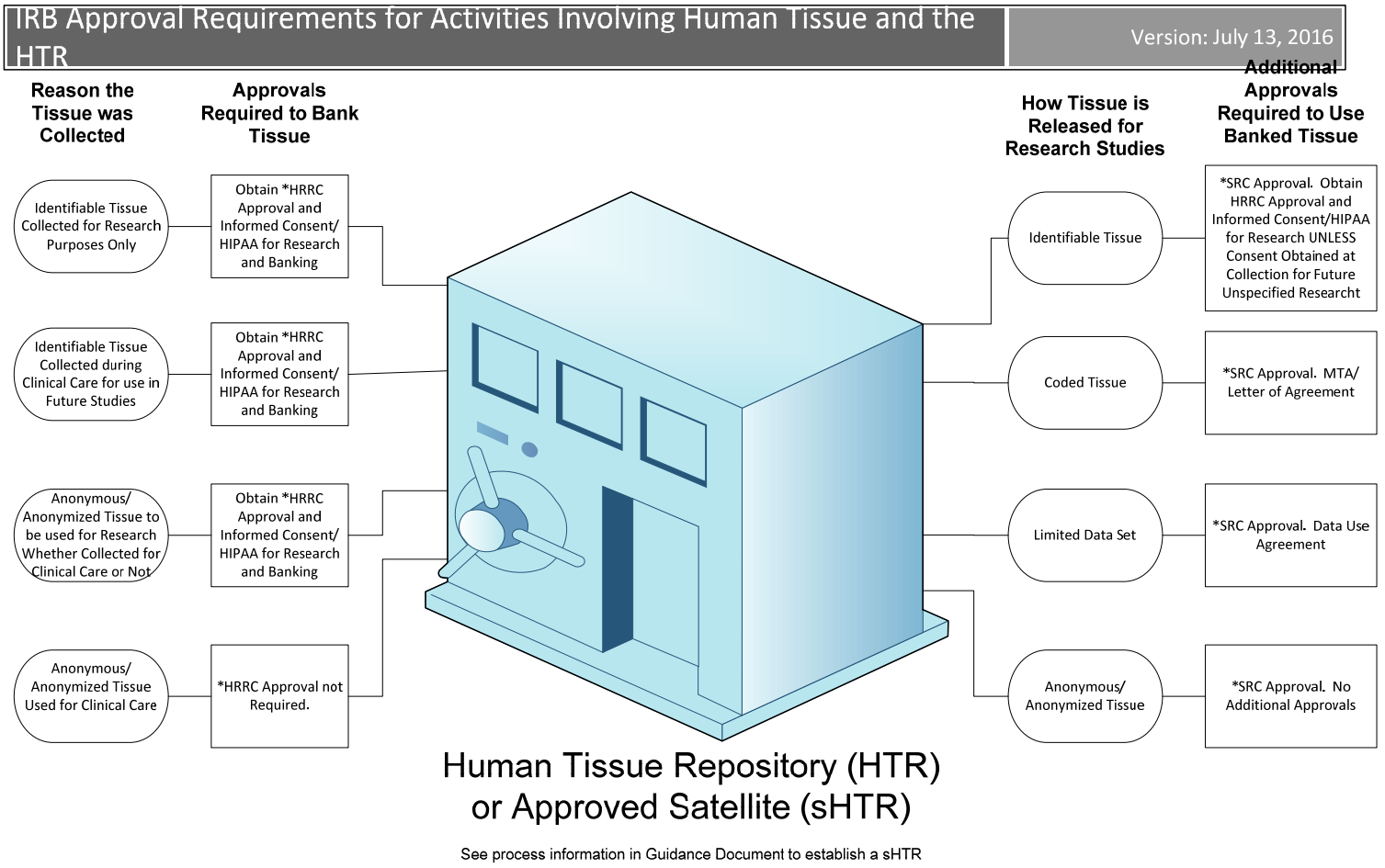
A computer-based mechanism will be developed to capture the data that correlates with each sample collected, listing where the sample is to be stored and whether appropriate permission or waiver of permission has been obtained before dissemination. The database system shall capture the essential elements of the permission, including categorizing the type of permission as Type A, B, C or D (see definition under Human Tissue in the “Definitions“ section of this guidance document), whether permission has been granted for future contact of the volunteer and/or permission to do future, undescribed research, including DNA studies. Compliance with applicable HIPAA privacy regulations is required. **Tissue categories** are defined in the “Definitions” section of this guidance document under “Human Tissue.”

Storage of Tissue Obtained from Non-Living Donors

Tissue can only be obtained from non-living donors or provided to investigators by the Office of the Medical Investigator for storage or use in future research if documented consent is provided by the decedent before death, or by the next of kin or a legally authorized person after death. Decedent tissue cannot be sold, donated, or traded to external entities. Research involving decedent tissue, or requests to collect or store decent tissue, must be reviewed and approved by the SRC. Research involving decedent tissue is not human research as defined by 45 CFR 46. HRRC review and approval is not required.

Activities for which fetal material is obtained without the collection of identifiable information about a living individual and without intervention by the investigator with a living individual are generally not considered to represent research with human subjects. Specimens collected as described above shall be stored in accordance with UNMHSC Policy # RC.05.002.PP, Oversight of Human Tissue in Research, specifically Sections IV.2 and 3. It is understood that this guidance is not intended to apply to such fetal tissue.

Appendix A – IRB Approval Requirements for Activities Involving Human Tissue and the HTR



*SRC - Human Tissue Oversight Committee Scientific Review Committee
*HRRC - Human Research Review Committee