

Policy Number: 15

Title: Research with Human Specimens and Data; Establishment of Specimen/Data Repositories

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Policy:

It is the policy of the UC Irvine (UCI) Institutional Review Board (IRB) to review and approve the prospective collection of human specimens/data, the use of existing identifiable specimens/data and the establishment of specimen/data repositories for research purposes.

I. IRB Oversight

- A. The UCI IRB is responsible for overseeing the prospective collection and subsequent use, storage, and re-use of all identifiable human specimens/data that are generated within, transferred to, or transferred from UCI for research purposes.
 - 1. The IRB must review and approve all collection, use, storage, and re-use of identifiable human specimens/data for research purposes.
 - 2. The IRB does not oversee the storage or management of specimens/data that are collected and stored as part of routine clinical care or hospital procedures.
 - 3. The IRB does not oversee the use or management of specimens/data sent to a UCI Investigator/employee for specialized analysis as part of a contractual agreement.
 - 4. The IRB does not oversee the storage or management of de-identified (stripped of all 18 HIPAA identifiers) specimens/data.
- B. The use of human participants' specimens/data for research can be classified into the following categories:
 - 1. Specimens/data to be collected prospectively for pre-defined research purposes only in connection with a single IRB approved proposal. In most cases, this type of collection would not be appropriate for a "research repository."
 - 2. Specimens/data to be collected prospectively or retrospectively (previously stored), for undefined future research purposes that will be shared, used again, or stored for research purposes beyond the scope of the Researcher's originally approved IRB application. IRB approval to establish a research specimen/data repository is required.
 - 3. Specimens/data to be collected prospectively to add additional samples to an existing specimen/data repository that is approved by the IRB must seek IRB approval to do so.
- C. Extraction of identifiable or coded specimens/data from a repository will require IRB approval under a specific study protocol.
- D. When specimens/data are included in a repository then extracted as de-identified (stripped of all 18 HIPAA identifiers) for research purposes, the research may meet the definition of "non-human subjects research." (See Policy 16)
- E. When specimens/data are included in a repository then extracted as coded specimens, if the recipient of the specimens does not have access to the key code, the research may meet the definition of "non-human subjects research." (See Policy 16)
- F. Examples of Human Participant Specimens for Research:
 - 1. Bodily human materials such as: cells, mucosal and skin; blood; urine; amniotic fluid; excreta and external secretions (including sweat); saliva; sputum; placenta tissue;

- organs; hair; nail clippings; teeth; dental plaque and calculus; if obtained through “intervention or interaction with an individual” or if “identifiable”; and/or
- 2. Residual diagnostic human specimens, including specimens obtained for clinical patient care that would have been discarded if not used for research.
- G. Examples of Human Participant Data for Research:
 - 1. Private information such as clinical notes and medical information that can be identified with a specific individual, whether or not the information was specifically collected for the research study in question. This also includes private information provided for specific purposes by an individual, which the individual can reasonably expect will not be made public;
 - 2. Data obtained from voice, video, digital or image recordings; and/or
 - 3. Data obtained from surveys, interviews, oral histories, focus groups, program evaluations, quality assurance methodologies, etc.

II. Establishment of Repositories

- A. A repository may be established within or outside UCI. There is no single “repository” site or mechanism within UCI.
- B. Repositories may be proposed, built, and maintained by individuals (e.g., Investigators), groups, programs, departments, or institutes. A single Investigator or a group of Investigators may wish to pool research specimens/data from multiple research studies into a single specimen bank or database that could be accessed by the group and others for further use.
- C. Examples of outside repositories that a UCI Investigator may wish to utilize include the National Institutes of Health (NIH), Center for Disease Control (CDC), and National Surgical Adjuvant Breast and Bowel Project (NSABP) laboratories, as well as laboratories managed by colleagues at other academic institutions.

III. Other Conditions in which an Investigator Should Consider the Establishment of a Repository

- A. When a clinical database is expressly designed for eventual research purposes, and particularly if that database incorporates research measures, or plans for group comparisons, the Investigator should establish a repository prior to the collection of data for the purpose of research.
- B. Databases maintained by physicians/Investigators for record-keeping of individual patients that will be accessed for research purposes for a single project, must have IRB approval to do so. If it is expected that the data contained in the database will be accessed for multiple projects or by multiple Investigators, IRB approval should be obtained to establish a repository.

IV. Informed Consent Requirements for the Establishment and Use of a Repository

- A. Informed consent is required from the participant or his/her legally authorized representative prior to the collection of specimens/data to be deposited and stored in a repository, unless a waiver of informed consent has been granted by the IRB.
- B. The Investigator is required to obtain written informed consent from each participant prior to accessing the repository for his/her proposed research activity when the extracted data will contain personal identifiers. However, the Investigator may in some situations be able to demonstrate that it is truly not practicable to obtain informed consent from individuals who provided the data in years past and request that the IRB grant a waiver of the informed consent.
- C. The Office for Human Research Protections (OHRP) recommends that a Certificate of Confidentiality be sought for repositories, especially for the banking of genetic

samples/information (See IRB Policy 24). OHRP also recommends inclusion of language in the informed consent document that explains the protections provided by the Genetic Information Nondiscrimination Act of 2008 (GINA).

- D. The Investigator may withdraw data from a repository without any identifiers; in which case, the study may qualify as “non-human research” or meet criteria for exemption from IRB approval and informed consent requirements. However, only the IRB may determine which activities qualify for exempt review.

V. **Medical Center and IRB Policies for Control of All Human Tissue** - UCIMC Anatomical Pathology/Surgical Pathology - Procedure Number: S-23 requires that all specimens removed from clinic or the operating room must be sent to pathology for review and documentation by a pathologist, with the exception of specimens specifically listed as exempt (see V.D.).

- A. Of non-exempt specimens, only remnants are to be used for research. A remnant is defined as tissue not needed for diagnosis. Only a faculty pathologist may make the determination of whether or not a specimen is to be released for research.
- B. Under no circumstances will tissue bypass pathology from the clinics or the operating room to a research lab.
- C. A pathologist is the only physician authorized to release tissue for research. The determination cannot be made by surgeons or other physicians. The pathologist may determine in some cases that no tissue may be released for research.
- D. Exempt categories are defined as:
 1. Specimen that by nature or condition do not permit meaningful examination, such as a cataract, orthopedic appliance, newborn foreskin, bone from degenerative joints, bunions, spinal procedures, or portion of and removed only to enhance operative exposure; menisci, articular cartilage and blood clots.
 2. Therapeutic radioactive sources, the removal of which shall be guided by radiation safety monitoring requirements.
 3. Traumatically injured members that have been amputated and for which examination for either medical or legal reasons is not deemed necessary.
 4. Foreign bodies (for example, bullets) that for legal reasons are given directly in the chain of custody to law enforcement representatives.
 5. Placentas that are grossly normal as determined by the delivering gynecologist and have been removed in the course of operative and nonoperative obstetrics.
 6. Tonsil and adenoids of patients under age 17.
 7. Stones of visceral organs.
- E. Categories 1 and 5 may be exempted from the requirement to be examined by a Pathologist, if special requests are made by surgeon or patient. These specimens require gross examination only. Gross examination includes gross description only. No tissue is submitted for processing. UCI IRB requires documentation from a pathologist granting the special request.
- F. All Investigators who propose to perform research with human tissue must comply with this UCIMC procedure.
- G. IRB policy requires IRB review of all research utilizing participant identifiable specimens or private data, regardless of whether the research is retrospective or prospective (See IRB Policy 2)

References:

45 CFR 46

OHRP: Issues to Consider in the Research Use of Stored Data or Tissues, November 1997.

OHRP Guidance on Research Involving Coded Private Information or Biological Specimens,
August 10, 2004.

Genetic Information Nondiscrimination Act of 2008 (GINA)

UCI Department of Pathology and Laboratory Medicine: Anatomical Pathology/Surgical Pathology -
Procedure Number: S-23

Procedure Number 15.A

Title: Procedure for Establishment of Specimen/Data Repositories and Extraction of Specimens/Data for Research

Procedure:

This procedure outlines the process for establishing a research specimen/data repository and extracting specimens/data for use in research.

I. Lead Researcher (LR) Responsibilities

- A. LRs who plan to collect specimens/data prospectively for pre-defined research purposes only in connection with a single IRB approved project should submit the "IRB Application for Human Research" to the IRB.
- B. LRs who plan to collect specimens/data prospectively or retrospectively (previously stored), for undefined future research purposes that will be shared, used again, or stored for research purposes beyond the scope of the Investigator's originally approved IRB application should submit the "IRB Application for Human Research" along with Appendix M, "Storage of Data and/or Specimens for Future Research."
- C. LRs who plan to prospectively add to existing specimen/data collections, that have not been established as IRB approved "research repositories", should submit the "IRB Application for Human Research," Appendix M, "Storage of Data and/or Specimens for Future Research, and corresponding Informed Consent documents (ICD). Consent template documents are located on the HRPP website at <http://www.research.uci.edu/ora/forms/> under the heading "IRB Consent Forms."
- D. ICDs must be submitted for prospective collection of specimens/data or Appendix O, "Request for a Waiver of Informed Consent" should be completed according to IRB policies and procedures.
- E. When an Investigator wishes to establish research limited to DNA/Genotyping sampling collection and storage, he or she will submit the "IRB Application for Human Research" along with Appendix N, "Collection of Genetic Specimens and Genetic Testing Studies."
- F. Investigators that wish to share samples with other Investigators within or outside UCIMC must set up an IRB-approved Specimen/Data Repository as above (i.e., complete Appendix M).
- G. The Investigator should apply for a Certificate of Confidentiality, when applicable.
- H. The repository should not release specimens/data to an Investigator without receiving written documentation of IRB determination/approval for research using the specimens/data.
- I. The Investigator will comply with all IRB policies and procedures applicable to the collection, use, storage, and re-use of all human specimens/data that are generated within, transferred to, or transferred from UCI for research purposes.

II. IRB Committee Responsibilities

- A. The IRB will determine whether or not the specimens/data can be identified with the participant and whether specimens/data were collected retrospectively or will be collected prospectively.
- B. The IRB will assess the repository to assure that adequate measures have been taken to protect the confidentiality of participants. This review will include:
 1. The type of specimens or data to be banked;
 2. Whether the specimens/data are identified or coded;
 3. Who will have access to the codes that link patient identifying information to the

sources of the tissue specimens and what physical and/or IT encryption procedures will be employed to minimize the chance of identifying information being released

4. What procedures are in place to “de-identify” the specimens/data;
 5. Will the collection of specimens/data require interaction with human subjects;
 6. Are the specimens/data “on the shelf” at the time the proposal is initiated;
 7. Will informed consent be required;
 8. Who will manage the repository;
 9. How and where the specimens/data will be stored and released; and
 10. What will happen to the specimens/data should the subject withdraw informed consent or the Investigator should leave UCI.
- B. If a UCI Investigator plans to send any specimens/data to an outside repository for storage that can be traced back to a participant, the UCI IRB may:
1. Request the identification of the Repository as well as a copy of its IRB approval;
 2. Request an external “Data Use Agreement” between the outside Repository and the UCI Investigator; and/or
 3. Request a Certificate of Confidentiality be obtained by the Investigator to assure participant confidentiality if there is not an IRB overseeing an outside repository, or when genetic information or tissue samples are involved.
- C. The IRB will review the informed consent documents to verify the inclusion of the essential elements of consent. In addition, the IRB will review the informed consent document(s) for a description of the storage, use, and release of the specimens/data that will be submitted to the repository.
1. When the repository contains genetic specimens/data, the IRB will verify that the UCI IRB specimen template language has been included within the informed consent documents along with inclusion of language that explains the protections provided by the GINA.
 2. It is recommended that the investigator use a tiered consent process that allows individuals to choose the type of specimen(s), if any, they want to donate (e.g., tissue, blood, or urine), the type of research the specimen can be used for (e.g., a specific research project, general research, or genetic research), and whether their medical records and outcomes data can be accessed.
 3. Subjects should be provided the right to withdraw their consent and have their tissue removed from the repository if the specimens are identifiable.
 4. If a Certificate of Confidentiality is applicable, the IRB will recommend that the Investigator apply for a Certificate of Confidentiality. In addition, the IRB will verify receipt of a Certificate of Confidentiality and that a description of this protection is included in the informed consent documents, as well as any Investigator plans for voluntary disclosure.
- D. The IRB may review requests for repositories through expedited review procedures when identifiers are used in the storage and/or release of the specimens/data for research purposes and the research meets a specific review category as outlined in 45 CFR 46.110 (f). If the request for a repository does not meet a specific category as outlined in 45 CFR 46.110 (f), the IRB must review the request by the full Committee.
- E. The IRB may determine that the use of de-identified specimens in storage that will be released for use in research does not qualify as human subjects research.
- F. All reviews will be conducted under the appropriate UCI IRB policies and procedures applicable to the level of review.

III. IRB Analyst or Higher Responsibilities

- G. The Analyst will pre-review the IRB Application and Appendices to assure that it meets the requirements under IRB policies and procedures.

- H. The Analyst will verify that a description of the conditions under which the specimens/data will be stored, utilized and released are adequate, or request clarification from the Investigator.
- I. The Analyst will prepare the "IRB Reviewer Checklist" and any Supplemental Checklists for the Reviewer(s) during the administrative review process.
- J. E-mails requesting pre-review changes may be sent to the LR by the Analyst.
- K. The "IRB Reviewer Checklist" and any Supplemental Checklists are signed by the Reviewer(s).
- L. Letters requesting revisions from the Reviewer, and approval letters are to be drafted using the appropriate template.
- M. The Analyst will process the approved documents and make the appropriate HPS database entries.