SOP Number:	**LAB-6001-02**
Title:	IMPAACT Stored Specimen and Repository Policy
Version:	**2.0**
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Approved By:	Brooks Jackson, M.D.
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Reviewed By:	Policies & Procedures Resource Committee/Network Executive Committee

I. Purpose

To outline the general IMPAACT policy on the tracking, storage, and use of IMPAACT clinical specimens to be consistent with the guidelines of the Office of Human Research Protection (OHRP) and the Division of AIDS (DAIDS).

II. Introduction

The goal of the IMPAACT Stored Specimen Repositories (both the Central Repository at BRI and the virtual repositories at sites) is to allow specimens and limited specimen-associated clinical data to be stored for predetermined purposes, specified in Institutional Review Board (IRB)-approved IMPAACT prospective research protocols and consent forms, while protecting the identity of human subjects from whom such specimens were obtained. In addition, subject to informed consent, surplus/extra specimens from these studies may be made available for use by laboratories for unspecified HIV-related research after the protocol-mandated research questions have been addressed.

III. Sources of the Specimens and Clinical Data

- **The specimens and data will be obtained from subjects at IMPAACT-associated clinical enrolling sites, located in the United States and at international sites. Prior to enrolling subjects for IMPAACT protocols, the enrolling site must have authorization to participate by the IMPAACT Operations Center and DAIDS. Each site must have obtained local IRB or Independent Ethics Committee (IEC) approval.**

- **To enroll in an IMPAACT protocol, subjects must consent, using IRB- or IEC-approved consent forms, to collection and use of specimens required to perform protocol-mandated assays. Subjects may also consent to long-term storage and future use of leftover specimens (after protocol mandated testing has been completed) for future HIV-related research.**

- **The Data Management Center (DMC) will track the specimen consent through an automated system. The IMPAACT Stored Specimen Repositories will be directed by the IMPAACT Operations Center through the DMC as to the disposition of specimens, including residual specimens after all protocol-mandated testing is completed.**

IV. Security of Protected Health Information

- To enroll in an ACTG or IMPAACT protocol, study subjects must consent to collection and use of specimens required to perform protocol-mandated assays. Study subjects may also have one or more of the following additional consent options stated in a given protocol and associated consents:

- Collection, storage, and use of extra specimens for future HIV-related research.
- Collection, storage, and use of specimens for studies of human genetics including the development of cell lines and DNA sequences.

- Specimens that are collected, tested, shipped and stored as part of DAIDS-sponsored, IMPAACT protocols will be tracked through **the linkage of local** Laboratory Data Management System (LDMS) units provided by Frontier Science & Technology Foundation (FSTRF). **The databases will be password protected with access restricted to defined study personnel (principal investigators, co-investigators, study coordinators).**

- **Each enrolling site will assign each subject a unique IMPAACT Participant Identification Number (PID). The master key to this code linking subject identity and the IMPAACT PID code, as well as any PHI such as name, address, date of birth, etc. will be kept in a secure location under lock and key at the enrolling site. (See Appendix A for all HIPAA personal identifiers). This personal identifying information may only be accessed by the site Principal Investigator (PI) and his/her designated personnel. It may not be sent to anyone outside of the clinical site or be released to anyone on-site who does not have permission to view it. Clinical information that is not coded will not be released without written permission of the subject, except as necessary for monitoring by the IRB, NIH, FDA, or any other applicable regulatory agency.**

- **Minimal demographic data (gender, age and racial/ethnic data) as well as clinical data that may include, but are not limited to, CD4 levels, viral load, antiretroviral therapy, or resistance testing results will be abstracted from the Case Report Form (CRF) for each subject in the study and entered into the DMC database. All data/specimens will be stored by reference to the PID rather than to the patient name.**

- Site laboratories will process and aliquot all stored specimens identified by PID. Using the LDMS, the site laboratories will assign unique specimen identification (ID) numbers to aliquots from all specimens collected from each subject and will apply IMPAACT bar-coded specimen labels. Refer to the LDMS User Manual for further details. These patient and specimen ID numbers will be retained in the central database at the DMC and in the LDMS. The assigned identifiers remain associated with the specimens throughout testing, shipping and storage.

- Study subjects may withdraw their consent for the use of any specimens at any time. The Data Management Center (DMC) at Frontier Science & Technology Foundation (FSTRF), Amherst, New York assists in the tracking of study subjects who refuse or withdraw consent for use of stored specimens. See [SOP # IMPAACT LAB-6003-01] for the procedure on tracking and management of these specimens.

- Any specimen arriving at a Repository or testing laboratory with personally identifiable information on it, such as subject name, initials or date of birth will be returned immediately to the IMPAACT clinical site that sent the specimen, or the specimen will be destroyed by autoclaving. Notification of this infraction will be sent to the IMPAACT Laboratory Steering Committee (impaact.ilsc@fstrf.org).

- **Subject to informed consent, once all the testing for a IMPAACT study has been completed**, **any specimens remaining at the Repositories will be held for long-term storage for future, unplanned research. Specimens will remain coded.** Specimens/data will be stored for an indefinite period, until the IMPAACT Laboratory steering Committee and Scientific Oversight Committee (SOC) deems that they are no longer of scientific value.

V. Specimen Storage

- The DMC will provide the necessary tools and training to IMPAACT laboratories, domestic and international, and the Specimen Repository at Biomedical Research Institute (BRI) to ensure that specimens are properly labeled and logged into the LDMS.

- Specimens will be stored at sites, testing laboratories, and BRI with unique identifiers. To ensure complete confidentiality for research subjects, personal identifying information, when it exists, will not be provided by IMPAACT to investigators under any circumstances. Specimens that are released to collaborators for approved research will remain coded.

- The DMC will coordinate the transfer of specimens and/or residual samples from IMPAACT sites and testing laboratories to BRI, using information provided by sites and laboratories to the DMC through the LDMS and tracking forms.

- The IMPAACT Operations Centers at Social & Scientific Systems, as the repository contract manager, ensures that all specimens at BRI are stored under optimal conditions; safeguards against freezer malfunctions are in place; and quality assurance of specimen identification and integrity is maintained. To this end, representatives from the Operations Centers and the IMPAACT laboratory leadership will conduct a site visit to BRI at least once a year.

- Specimens will be stored for an indefinite period of time, until the IMPAACT leadership deems that they are no longer of scientific value. See SOP # IMPAACT LAB-6007-01 for additional information.

- **Local IRBs and Ethics Committees can place a time limit on storage for specimens from their site, but is cannot be less than 5 years after completion of all planned study analyses including, but not limited to: primary and secondary objectives and approved NWCS and DACS.**

VI. Specimen Allocation and Use

- All specimens that are released to collaborating investigators are collected under the auspices of an IRB-approved protocol and in compliance with 45CFR46. In addition, study subjects have authorized the collection and storage of these specimens as part of the informed consent process, i.e.; they have been made fully aware that these specimens are being collected for future research.

- Because these specimens are a valuable resource, collaborating investigators are encouraged to request the smallest amount (both type and number) needed to perform scientifically meaningful experiments. New research techniques or new areas of investigation should be proposed as a pilot study in order to minimize the use of specimens for risky, unproven approaches. When specimens are especially scarce particular scrutiny will be placed on requests to use these limited resources. It may be necessary to modify study designs or utilize different material to address the question where availability is limited.

- All requests for archived specimens will be presented in the format of the New Work Concept Sheet (NWCS). A NWCS is used to propose new work on existing single or multiple protocol-mandated laboratory samples to address a specific scientific question. In many cases, specimens are collected for predetermined purposes, as described in the research protocol(s). Surplus specimens from these studies will be made available for use by investigators through the NWCS process after the protocol-mandated research questions have been addressed if appropriate consent was obtained for the proposed study.

- Prior to submission of a NWCS, an investigator may request information about the availability of specific specimens at the specimen repository and/or at ACTG or IMPAACT sites and laboratories. This information can be requested through the password protected DMC Web-based form: http://www.fstrf.org. Select the "Specimen Request Utility" link **under the Laboratory Data Programs heading**.

- The DMC will generate a report of specimens matching the selection criteria for the investigator to use in preparing the NWCS.

- See IMPAACT SOP# CLN-3043-02 for additional information about NWCS development, submission, and review.

- See IMPAACT SOP# LAB-6007-02 for additional information about Specimen Access and Use

- Once the NWCS is reviewed and approved by the respective Scientific Committee and the SOC, the proposing investigator's local IRB must give written approval before the specimens can be released for testing. The IRB must review the proposed use of specimens from single or multiple protocols in the context of the informed consent(s) and that the research will be conducted in compliance with applicable federal regulations or an explanation in writing why the research is not subject to those regulations.
  - The NWCS and IRB approval or waiver must be submitted to the IMPAACT Laboratory Steering Committee (ILSC) for review and approval before specimens are released.
  - **Some international IRBs may require review of the NWCS for approval of the use of specimens from their sites.**
  - **When the DMC receives a specimen request that includes specimens from international labs (either to be shipped from BRI or directly the international processing lab), the Lab Data Coordinator assigned to the request will prepare an Excel sheet with the list of labs that have**

specimens to be included in the request. The list will be forwarded to the study assigned CTS or other designated Ops contact to facilitate site queries regarding the consent at the local site level. The Excel tracking file will be updated with the site query responses and forwarded back to the LDC. The responses will be loaded into a Central Database tracking table at the DMC that will be referenced at the time a final specimen request listing is generated. Specimens from sites that have not received proper consent will be flagged as unavailable on the request listing.

- Specimens will be provided to investigators for *in vitro* investigational research purposes and not to be used in humans. Specimens and/or products resulting from this research will not be sold or used for commercial purposes, nor will specimens be further distributed to third parties, without prior written approval by the IMPAACT leadership.

- Specimens will not be used for studies of human genetics unless subjects have given written consent for such as part of the informed consent. For specimens for which express written consent for genetic studies was not obtained at the time that they were collected, an additional written consent or an IRB letter of approval or waiver is required before the specimens are released.

- All requests for stored specimens will be made through the DMC using the Specimen Request Form on the password protected DMC Web page: http://www.fstrf.org. Select the "Specimen Request Utility" link under the Laboratory Data Programs heading. All stored specimens being sent from an IMPAACT site lab or specimen repository to an investigator or laboratory for additional testing or storage will be tracked through the LDMS.

- **International site IRBs may want the opportunity to approve or deny use of their site specimens for any NWCS. They may also waive this right.**

VI. Confidentiality

- **It is IMPAACT policy to treat all human subject information with the utmost discretion and confidentiality, and to prohibit improper release in accordance with the confidentiality requirements of state and federal laws and regulations.**
- **Protected subject information is information that, on its own, is not personally identifiable to the subject; however, it may be related or linked to personally identifiable information. Protected subject information includes, but is not limited to, PID, study identifiers, specimen date and laboratory codes.**
- **PHI is information that personally identifies the subject. (See Appendix A for all HIPAA personal identifiers.) This personal identifying information may only be accessed by the clinical site Principal Investigator and his/her designee. It may not be sent to anyone outside of the clinical site or be released to anyone on-site who does not have permission to view it.**

- **PHI will never leave the enrolling clinical site, unless it is requested by personnel of the United States Government for auditing or evaluation of federally funded projects or unless it is information that must be disclosed in order to meet the requirements of the Federal Food and Drug Administration (FDA).**
- **Employees of all IMPAACT laboratories, repositories and recipient laboratories are prohibited from obtaining any information from the clinical sites, which may be traceable or linkable to the identity of the human subject. (See Appendix B, Assurance of Confidentiality). In the event that such information is inadvertently transmitted to the repositories or laboratories, the repositories or laboratories will contact the IMPAACT Laboratory Steering Committee to receive instructions as to the disposition of any such information.**
- **To help protect the subject's privacy, IMPAACT has obtained a Certificate of Confidentiality from the National Institutes of Health.**

VII. Liabilities and Disclaimers

- Investigators are responsible for preventing accidental exposure to infectious agents by research personnel who work with HIV-infected specimens. Each collaborating investigator must agree to assume full responsibility for informing and training all personnel in the dangers and procedures for safe handling and shipping of these and other specimens. Additionally, investigators must ensure compliance with all applicable institution and government health and safety regulations and guidelines detailed in: Centers for Disease Control, 1988 Agent Summary Statement for Human (MMWR 37, S-4: 1-22, 1988).

- The party receiving specimens (the recipient and the recipient institution) must agree to indemnify and hold harmless the United States, agents for IMPAACT, the DMC, the specimen repository, the repository contractor, and their suppliers and contributors of specimens, from any claims, costs, damages, or expenses resulting from injury (including death), damage, or loss that may arise from the possession and use of IMPAACT specimens.

- All subject specimens collected through an IMPAACT study remain the property of the network and any remaining material after testing will be returned to an IMPAACT-designated laboratory or the specimen repository or destroyed as per IMPAACT leadership instructions.

- Collaborating investigators must agree to follow the IMPAACT publications policy (see IMPAACT SOP # NET-1004-01). Collaborating investigators must agree to acknowledge the support of IMPAACT and NIH in all publications and presentations of studies using IMPAACT specimens as outlined in those SOPs.

- For further information or questions about the IMPAACT Specimen Storage and Repository Policy, contact:

VIII.. References

1. LDMS User Manual
2. IMPAACT-LAB-6001, ACTG/IMPAACT Stored Specimen and Repository Policy
3. IMPAACT-LAB-6002, Shipment of Clinical Specimens to IMPAACT Specimen Repository
4. IMPAACT-LAB-6003, Study Subject Withdrawal of Consent for Specimen Storage and Use
5. IMPAACT-Lab-6004, Request for Long-Term Storage at the IMPAACT Specimen Repository
6. IMPAACT-Lab-6007, Stored Specimen Ownership, Access, and Use

IX. Attachments

1. Appendix A: HIPAA Personal Identifiers
2. **Appendix B: Assurance of Confidentiality**

Appendix A
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HIPAA Personal Identifiers

(A) Names;

(B) All geographic subdivisions smaller than a State, including street address, city, county, precinct, zip code, and their equivalent geocodes, except for the initial three digits of a zip code if, according to the current publicly available data from the Bureau of the Census:

(1) The geographic unit formed by combining all zip codes with the same three initial digits contains more than 20,000 people; and

(2) The initial three digits of a zip code for all such geographic units containing 20,000 or fewer people is changed to 000.

(C) All elements of dates (except year) for dates directly related to an individual, including birth date, admission date, discharge date, date of death; and all ages over 89 and all elements of dates (including year) indicative of such age, except that such ages and elements may be aggregated into a single category of age 90 or older;

(D) Telephone numbers;

(E) Fax numbers;

(F) Electronic mail addresses;

(G) Social security numbers;

(H) Medical record numbers;

(I) Health plan beneficiary numbers;

(J) Account numbers;

(K) Certificate/license numbers;

(L) Vehicle identifiers and serial numbers, including license plate numbers;

(M) Device identifiers and serial numbers;

(N) Web Universal Resource Locators (URLs);

(O) Internet Protocol (IP) address numbers;

(P) Biometric identifiers, including finger and voice prints;

(Q) Full face photographic images and any comparable images; and

(R) Any other unique identifying number, characteristic, or code; and

(1) The covered entity does not have actual knowledge that the information could be used alone or in combination with other information to identify an individual who is a subject of the information.

Assurance of Confidentiality

I, the undersigned, do hereby certify that all regulations and procedures for maintaining subject confidentiality and privacy will be adhered with the utmost discretion and confidentiality.

_____ .

Director – Printed Name

_____

Signature

_____

Date (dd/mmm/year)