ABBREVIATIONS

ACD	**Advanced Cell Diagnostics**
AMP	**Adolescent Master Protocol**
CS	**Concept Sheet**
DASH	**Data and Specimen Hub**
DMC	**PHACS Data Management Center**
DRC	**Data Resources Core**
DUA	**Data Use Agreement**
EDTA	**Ethylenediaminetetraacetic Acid**
ESC	**Epidemiological and Statistical Methods Core**
GDS	**Genomic Data Sharing**
GWAS	**Genome-wide Association Studies**
HSPH	**Harvard T.H. Chan School of Public Health**
LG	**Leadership Group**
MNPP	**Manual of Network Policies and Procedures**
MTA	**Material Transfer Agreement**
NICHD	**National Institute of Child Health and Human Development**
NIH	**National Institutes of Health**
OC	**Operations Committee**
PBMC	**Peripheral Blood Mononuclear Cell**
PC	**Publications Committee**
PHACS	**Pediatric HIV/AIDS Cohort Study**
SAC	**Scientific Administrative Core**
SLC	**Scientific Leadership Committee**
SMARTT	**Surveillance Monitoring for ART Toxicities**
SNP	**Single Nucleotide Polymorphisms**
TF	**Task Force**
WG	**Working Groups**

I. PURPOSE

The purpose of the Pediatric HIV AIDS Cohort Study (PHACS) Data Sharing and Repository policy is to outline the governance of the overarching process as well as provide guidance for the use and sharing of data and biological specimens collected by PHACS-affiliated studies and substudies. It also sets forth the responsibilities of each entity involved in requesting, reviewing, and approving any data sharing activities. The procedures and related information for requesting data (with or without analysis support) and requesting specimens are outlined below.

II. SCOPE

This policy will apply to investigators, both internal and external to the PHACS network, seeking PHACS data and or biological specimens for the purposes of conducting approved research.

III. RESPONSIBILITIES AND PROCEDURES FOR DATA SHARING

A. Responsibilities of Investigators Proposing Clinical/Substantive Research

1. To begin the process, an investigator must complete the Capsule and Concept Sheet process outlined in the Research Development Policy and obtain approval of their Concept[1].
2. The investigator will then work with the Data Resources Core (DRC) to determine if all analyses can be performed by the DRC, as outlined in Section E. below. The DRC is based at the Harvard T.H. Chan School of Public Health (HSPH) and includes Frontier Science as the PHACS Data Management Center (DMC).
3. If the investigator is to perform data analysis, they must complete a Data Use Agreement (DUA) as outlined in E.4 below.
4. Publications arising from use of PHACS specimens or data must cite support from the PHACS network grant and/or other appropriate PHACS-affiliated studies.

B. Responsibilities of Investigators Proposing Development or Illustration of Statistical or Epidemiological Methods Using PHACS Data

1. To begin the process, an investigator must complete the “Data Request Form” available on the PHACS website. The Co-Directors of the PHACS DRC and Epidemiological and Statistical Methods Core (ESC) will review the proposal for appropriateness within this category and make a recommendation to the Publications Committee regarding approval. The investigator will be contacted by the DRC with any further questions.
2. In general, data may or may not be available from previously published manuscripts, and will require a completed Data Request Form that will be reviewed (see below); approval may depend on required resources for creating limited datasets or public use (completely de-identified) datasets and the team’s plan for further analyses based on approved PHACS concepts. As a guiding principle, datasets shared for the

purposes of developing or illustrating statistical or epidemiologic methods should not interfere with the ability to publish results from existing PHACS concepts or capsules.

3. If the data request is approved, the Scientific Leadership Committee (SLC) will be informed, and the investigator will work with a member of the DRC to establish the set of variables to be included in the shared dataset and may have to complete a DUA as outlined in E.4 below.

4. Publications arising from use of PHACS specimens or data must cite support from the PHACS network grant and/or other appropriate PHACS-affiliated studies.

C. Responsibilities of DRC and ESC in Reviewing Requests for Development or Illustration of Statistical or Epidemiological Methods Using PHACS Data

1. The Co-Directors of the DRC and ESC will review all proposals submitted for development or illustration of statistical or epidemiological methods for appropriateness within this category of data requests.

2. If the proposed research appropriately falls within this category, the proposal will be reviewed by the ESC team which includes the statistical and epidemiological co-chairs of all Working Groups (WGs) and Task Forces (TFs). If recommended by the ESC team review, the proposal may require further review by a relevant WG or TF.

3. If the data request is recommended for approval by the ESC, along with and any relevant WGs or TFs recommended by the ESC, the data request will be sent to the Publications Committee (PC) for final approval.

4. If the data request is approved by the PC, the Co-Directors of the DRC will inform the investigator and identify a DRC member to work with the investigator to establish the set of variables to be included in the shared dataset.

5. If the proposed research is more clinical/substantive in focus, the Co-Directors of the DRC will contact the investigator and recommend that they initiate the Capsule and Concept Sheet process outlined in the Research Development Policy instead.

D. Responsibilities of Scientific Leadership Committee (SLC)

The SLC provides centralized oversight of the resources of the PHACS network, and approval for access to PHACS data related to approved PHACS concepts. For data requests which are not part of an approved PHACS concept sheet but are instead related to development or illustration of statistical or epidemiological methods, the SLC defers decisions to the Publications Committee.

E. Responsibilities of the PHACS Cores

1. The DRC serves as the centralized data and resource management entity for the PHACS Network and will provide programming and analytical core services for integrated study design and data analysis. It also manages all data storage and access.

2. The DRC will work with the investigator to establish the set of variables to be included in the shared dataset based on the approved Concept Sheet (as described under III.A) or to be shared for development or illustration of statistical or epidemiologic methods (as described under III.B).

3. If all analyses proposed can be carried out by analysts from the DRC, possibly with additional support from the ESC, the investigator will generally not need to be provided direct access to the datasets. In these cases, the DRC will perform the analyses and will share the results with the proposing investigator in the form of statistical analysis reports, including the appropriate summary tables and figures.

4. If the analysis cannot be carried out by the DRC, or if the proposing investigator has the necessary expertise and wishes to conduct the analysis themselves or intends to merge PHACS data into a broader dataset for analysis (using laboratory results from PHACS biological specimens, for example) or if an early career investigator is receiving appropriate mentorship and conducting this analysis as part of an educational exercise, a DUA (refer to Figure 1) must typically be developed in coordination with the DRC prior to providing a limited dataset to the proposing investigator. If a de-identified public use dataset can be created for an investigator, a DUA may not be required. The DRC will negotiate any PHACS rights to data and authorship with the proposing investigator.

5. The dataset will be stripped of participant identifiers by the DRC, if any exist, prior to being securely transferred to the investigator. For investigators requiring biological specimens, see Section IV below for details.

6. Public use datasets from some PHACS research studies (SMARTT and AMP) and corresponding documentation (protocols, data collection forms) are also available on NICHD's Data and Specimen Hub (DASH)[2]. Investigators can request the use of DASH data directly at the DASH portal, where a separate Data Use Agreement must be completed. Additional data generated from PHACS-affiliated studies and substudies will continue to be added to DASH over time.

7. Note that in order to provide additional confidentiality protections to participants, DASH data are completely de-identified and cannot be linked back to PHACS participants. The participant ID that is used in DASH is different than that used by clinical research sites and consists of a randomly-generated public code assigned for the DASH public use datasets.

8. In addition, some analysis datasets are publicly available corresponding to a limited number of publications for which journals required availability of data as a condition for publication. To request these latter datasets, investigators must complete the Data Request Form found on the PHACS website[3].

Requests for data to support development or illustration of statistical or epidemiologic methods that are submitted through the Data Request Form found on the PHACS website will be forwarded for review by the ESC.

IV. RESPONSIBILTIES AND PROCEDURES FOR REPOSITORY BIOLOGICAL SPECIMEN REQUESTS AND TRANSFERS

A. Responsibilities of Proposing Investigator

1. All requests for repository samples from PHACS require review and approval of a Concept Sheet by the PHACS SLC. The Concept Sheet must include at least one DRC member as part of the team. Once a Concept Sheet (CS) and specimen request are approved by the SLC, the proposing investigator will work with the DRC to draft, negotiate and execute the required Material Transfer Agreement (MTA) for any specimens that will be assayed.

2. The investigator should complete the Specimen Request Form (Appendix I, a fillable PDF) and email it to the PHACS Data Management Center (DMC) at Frontier Science phacs.dms@fstrf.org. The DMC will then initiate the specimen transfer from the institution(s) where the specimens of interest reside ("repository") to the investigator. For most specimens, the repository will be the PHACS Central Repository (supported by the NICHD and located at Fisher BioServices), but could be other repositories, as indicated. Therefore, the general terminology of "repository" is utilized throughout this document to refer to the PHACS repository.

3. Once received, the investigator should communicate to the DMC that the transferred specimens have arrived and have been reconciled. If there are discrepancies discovered upon receipt of the transfer that cannot be resolved they will be documented accordingly at the DMC.

4. The investigator will work with the DMC to transfer the resultant data to the central database for PHACS-affiliated studies and substudies under the governance of the PHACS leadership.

5. Specimens remaining after completion of testing should be reported to the DMC, who will notify the PHACS leadership for further instructions.

6. Publications arising from use of PHACS specimens or data must cite support from the PHACS network grant and/or other appropriate PHACS-affiliated studies.

B. Responsibilities of the Scientific Leadership Committee (SLC)

1. The SLC will review and approve proposals to obtain specimens from the repository based on the scientific merit of the proposal. The SLC retains primary authority over all PHACS data and specimens and related to that, all discretion as to the approval of data sharing agreements or other such data sharing activities.

2. Any request to utilize specimens from an SLC approved CS which are generated by a PHACS-affiliated study protocol must be approved by the Operations Committee (OC), as described below (IV.D), unless the proposal concerns the use of the last remaining specimen of a particular type for a participant or requires additional funding, in which case the Leadership Group (LG) must also review and approve.

C. Responsibilities of the Scientific Administrative Core (SAC)

1. The Scientific Administrative Core (SAC) on behalf of the SLC will forward approved Concept Sheet proposals and the Specimen Request Form (and Data Request form, if applicable) to the LG for further review and approval if the request concerns the use of a last remaining specimen or requires additional funding.

D. Responsibilities of the Operations Committee (OC)

1. Confirm that the research is within the scope of the original consent.
2. Ensure that the necessary resources to complete the proposed work have been approved before operationalizing the proposal to access specimens stored in the repository.
3. Ensure that the specific protocol for which the samples were collected has the required specimens needed to carry out its primary objectives before releasing specimens.

E. Responsibilities of the Leadership Group (LG)

1. If the proposal concerns the use of the last remaining specimen of a particular type for a participant or requires additional funding, the LG must review and approve.
2. The LG will oversee that the necessary resources are available to conduct the project.

F. Responsibilities of the Data Resources Core (DRC)

1. If approved, the DRC will coordinate the initiation and execution of an MTA as required before the DMC initiates the specimen transfer.
2. The DRC will notify the DMC and instruct it to work with the repository to begin the specimen transfer.
3. The DMC will inform the repository contact of the upcoming transfer request.
4. The DMC will prepare and send a formal specimen request (based on the completed Specimen Request Form) to the repository that includes a shipping timeline, address of the receiving laboratory, and a detailed specimen list.
5. The DMC will notify the OC when the specimen transfer has been completed.
6. The DMC will coordinate the transfer of the resultant data to the central database for all PHACS-affiliated studies by providing instructions and guidance to the investigator/entity transferring the data.
7. The DRC will ensure that the relevant data sharing procedures have been followed.

G. Responsibilities of the Repository

1. Confirm receipt of the specimen request with the DMC.
2. Inform the proposing investigator that the requested specimens have been shipped

3. Provide the receiving entity with a copy of the bill of lading and shipper's name and a designated representative for the shipper who can be reached 24 hours a day, 7 days a week to determine the status of the shipment in the event of delays. Include relevant customs documents for an international shipment.
4. Work directly with the shipper in tracking shipment progress, and in the event of delays, ensure that the shipment is being properly maintained, including replenishment of dry ice or liquid nitrogen as applicable.
5. Communicate to the DMC and the proposing investigator when the specimen transfer has been completed.

V. GENOMICS DATA SHARING

PHACS-affiliated studies and substudies may also generate large-scale human genomic data. Large-scale data include genome-wide association studies (GWAS), single nucleotide polymorphisms (SNP) arrays, and genome sequence, transcriptomic, epigenomic, and gene expression data. The PHACS Network will make these available in accordance with the National Institutes of Health (NIH) Genomic Data Sharing (GDS) Policy[4].

VI. REFERENCES

[1] PHACS Research Development Policy After logging in, go to Documents, then select PHACS Manual of Network Policies and Procedures (MNPP). Scroll down to Section 1 of the table.

[2] NICHD's Data and Specimen Hub (DASH) https://dash.nichd.nih.gov/

[3] PHACS Website On the public side, go to Our Research/Resources for Researchers/Data and Specimen Sharing.

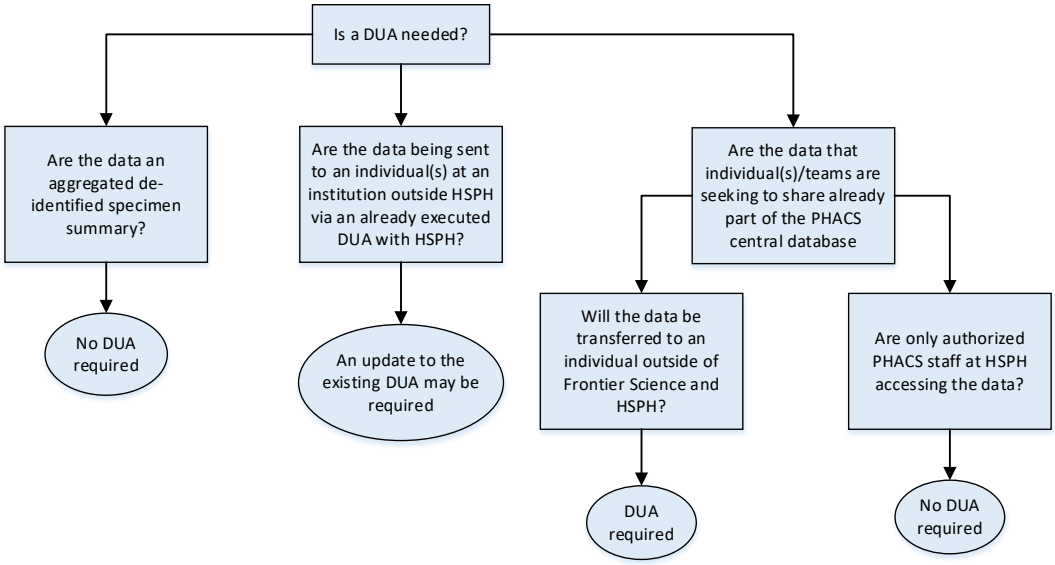
[4] National Institutes of Health (NIH) Genomic Data Sharing (GDS) Policy https://osp.od.nih.gov/scientific-sharing/genomic-data-sharing/

VII. INQUIRIES

For questions, please email phacs.pm@fstrf.org

FIGURE 1

DUA Requirement



Abbreviations:
DUA – Data Use Agreement
HSPH – Harvard T.H. Chan School of Public Health

APPENDIX I

SPECIMEN REQUEST FORM

Instructions:

- This fillable PDF form should be completed and emailed to phacs.dms@fstrf.org after the specimen request has been approved by the appropriate leadership.
- **An approved Concept Sheet (CS) and Material Transfer Agreement (MTA) must be in place before submitting this form to the DMC.**
- The DMC requires one to two weeks (depending on complexity) to compile the specimen inventory data and complete the documentation required by the repository.
- Once approval is received from the NICHD, the specimen request will be prepared by the repository for shipment to the testing lab.
- **If this specimen request has an associated participant list for specific specimens, please securely email this list to phacs.dms@fstrf.org.**

Request Information

Study number (where the specimens are coming from):	
CS name and number:	

Release Information

Has this CS been approved by the Scientific Leadership Committee (SLC)?	☐ Yes ☐ No
Has a Materials Transfer Agreement (MTA) been executed?	☐ Yes ☐ No

Person Requesting Specimens

Name:	
Institution:	
Phone number:	
Email address:	

Specimen Request Details

Date of request (mm-dd-yyyy):	
Date specimens are needed by	

(mm-dd-yyyy):	
Purpose of request:	
Specimen type needed: (Example, EDTA Plasma)	Primary type: Derivative: ☐ Plasma ☐ Serum ☐ PBMCs ☐ Other, specify: Additive: ☐ EDTA ☐ Heparin ☐ ACD ☐ No Additive ☐ Other, specify:
Volume requested per participant:	Minimum volume: Ideal volume:
Specific storage or shipping instructions:	
Is there a specific list of participants/patids? If yes, please provide the DMC with this list.	☐ Yes ☐ No ☐ Other, specify:
Is there a specific timepoint/date/week? If yes, please specify the time point.	☐ No ☐ Yes, specify:
Type of request:	☐ One-time data request ☐ Recurring request ☐ Other, specify:

Data Request Comments

Contact Information

Person to Receive Specimens

Name:		
Institution/Laboratory:		
Address:	Street	
	Department / building	
	City, state	
	Country	
	Zip code	
Phone number:		
Email address:		
Is this an international shipment?	☐ Yes ☐ No	
Are any special shipping permits required? If Yes, email phacs.dms@fstrf.org for further information.	☐ Yes ☐ No	

Approval Signature

Study Specimen Request-Approver
The Study Specimen Request Approver affirms that the specimen request is approved, and information has been reviewed for completeness and accuracy. This person can be one of the mPIs or the Director of the PHACS Data Management Center (DMC).