RETENTION, STORAGE AND USE OF BLOOD DERIVATIES IN A BIOBANK

INSTRUCTIONS FOR THIS REPOSITORY SOP TEMPLATE:

1. **Instructions** are indicated in ***red italics.*** Any **blue text (with or without greater and less than symbols, </>)** should be replaced/customized to include the repository-specific information and the symbols removed from the final SOP. All text in the final document should be **black.**
2. **Required items -** All items in the template must be included unless the instructions indicate otherwise. Please do not change the order of the items in the template.
3. **Entering text -** In the body of the SOP you may either: 1.) type directly; 2.) copy and paste text from another document; or 3.) insert an existing text file. As new text is entered, new form pages will be created automatically to accommodate the added text.
4. **Remove Instructions/Notes in *red italics* *and/or* blue text** prior to submission to the IRB.
5. **Page numbering -** Page numbering is automatic.
6. **Header and Footer** - To complete the header and footer, select "View" in the toolbar at the top of your screen, then "Header and Footer."

Purpose:

This research repository will be comprised of biological specimens and fully annotated clinical and genomic dataset from Caribbean/ Hispanic patients residing in Puerto Rico, that will be used prospectively for research in an interdisciplinary Hispanic-based resource for future basic and clinical studies in this target population.

Receiving Clopidrogel –treated Caribbean Hispanics samples from <PR Cardiovascular Hospital>:

In order to request permission to contribute <with Plasma, PBMCs and genomic DNA> to the repository, a potential contributing investigator must have an appropriately approved protocol for this purpose. If the specimens and/or data are to be identifiable in some manner, the contributing investigator will provide documentation of IRB approval and a copy of the signed informed consent form (ICF) and HIPAA authorization from each participant whose Biological samples are to be contributed. The signed ICF and HIPAA authorization must indicate the participant's permission for their biological samples to be used for future research and may include restrictions placed on future research that may be conducted without further consulting with the participant. These signed ICFs and HIPAA authorizations will be stored at the 2ND Floor of the Guillermo Arbona Building of the Medical Sciences Campus. The biological samples; plasma, PBMCs, and genomic DNA will be stored in a ultrafreezer (-80ºC) and liquid nitrogen tank in the RCMI CORE Facilities (Guillermo Arbona Building, 6th Fl Room A639). The process for requesting to contribute to the repository is as follows: Any request has to be submitted to the attention of the study PI by using a request form (including the name of the petitioner and affiliation, purpose of the requested use, type of project, proposed data analyses, expected outcomes/deliverables, whether or not the results will be published, and who will sponsor the study). Investigators with projects funded by NIH or other federal agencies will be given priority. An IRB approval is required. The petitioner should also identify a collaborator/sponsor in advance of filing the request among those currently enrolled in our study project, including collaborators and consultants. Once an approval is granted, the petitioner should still abide by our guidelines for biobank operation and samples use that includes applicable ethical, legal and social implications (ELSI). The petitioner will inform the study PI about any major outcome or deliverable from the proposed use of this resource, including but not limited to publications and presentations of results. We will maintain an updated and fully populated record of requests and approved projects for use of data and specimens from this repository.

When <the blood derivates> are received, information regarding the <biological specimen> will be tracked and maintained by coded using a seven-digit unique number printed on each container label so

that the samples will not directly identify the subject. Containers will then be stored frozen until retrieval. Storage of isolated and properly quantified reference DNA specimens, cryopreserved PBMC and plasma of patients. PBMC isolation and cryopreservation will be performed by standard methods. Storing 10^7 PBMC per vial is expected to yield sufficient viable cells (≥ *85% recovery) for future analysis. Viability of frozen samples will be tested after thawing by cell counts and standard procedures. An upright ultralow freezer, with 25 cu ft. storage capacity and capable of maintaining -80ºC, and two liquid nitrogen containers will comprise the storage facility for the collected specimens. They will be maintained in a locked, highly secure site. The freezer will be fitted with alarms and a backup battery to power the freezer in the event of an electricity outage. The freezer will be located in the Room A639. [describe methods and storage location]*. The following information will be tracked for each individual's biological specimens from a study: 1) source of cells and plasma deposited in the repository (e.g., medical record, data warehouse, study title); 2) type of genotypes and phenotypes database (e.g., labs, x-rays, diagnostic codes, medications, blood samples); 3) date of deposit into the research repository; 4) copies of the protocols under which samples were collected; and 5) if the specimen is identifiable, the approved, signed ICF and HIPAA authorization under which they were collected. The signed ICF and HIPAA authorization for each participant will be reviewed by *the repository committee comprised by 1) Dr. Jorge Duconge(PI/Project lead), 2); Dr. Kyle Melin (co-investigator), 3) Dr. Carmen L. Cadilla (RCMI Service lead, Biobank/Genomics and Collaborator)* , 4) Dr. Stuart Scott (External Consultant) in order to ensure appropriate permission for storage in a repository and to determine and track the type(s) of permitted future uses.

The repository has a process to track the data when they are used in future studies and to then disclose the findings to participants. So, the research repository will accept <specimens and/or data> from participants who have requested to be notified of <research data and/or findings> from future studies. Participants may be notified of information learned from their <specimens and/or data> if they have previously stated that they want to know the results of the analysis in the IRB-approved ICF (Appendix A2). The process for tracking and communicating this information to participants will involve *[describe process]*

<Specimens and/or data> for which there is no corresponding signed, IRB-approved ICF and HIPAA authorization will not be accepted, unless the <specimens and/or data> have been de-identified (e.g. coded, and the repository does not receive a key to the code).

To help ensure that the Research Repository Director will never accept <specimens and/or data> unless they were collected under an appropriately approved protocol, the contributing investigator will be required to log the contribution of the <coded specimen and/or individual's data set>, along with the IRB ID#, into a tracking log. For specimens, contributing investigators will additionally be asked to submit updated versions of their <specimen and/or data> log to the Research Repository Director on a quarterly basis. This log will be reviewed by the Research Repository Director, alongside their records and/or copies of the signed ICFs.

Storing Specimens: *[if applicable]*
Research repository specimens will be comprised of *[indicate type, e.g., blood and gastrointestinal tumor]* samples. The samples will be [*describe any required processing that will occur and indicate whether this will be performed prior to receipt by the repository and by whom it will be performed.]*
Example: Research repository specimens will be comprised of biological specimens derived from blood samples, specifically; DNA, plasma and PBMCs (monocytes). A total of 15 ml of complete blood will be drawn from patients by a qualified and properly trained nurse. The plasma and PBMC will be isolated by a density gradient separation using the lymphoprep agent (a reagent similar to Ficoll), performed by qualified personnel of the investigator's team. After the isolation of the plasma, it will be stored in cryogenic tubes in -80ºC ultra low-freezers, located in the Room A639 of the Sixth Floor at Guillermo

Arbona Building of the Medical Sciences Campus. Entry to this laboratory is restricted by access code and only authorized personnel have access to these facilities.

Storing Data: *[if applicable]*
Data in the research repository will consist of *[genotypes and phenotypes]*. The data will be stored electronically in a folder located in the PC of the Principal Investigator, protected by a password. The PC of the principal investigator is also protected from external access by a firewall. In addition, any physical document will be stored in a file cabinet with an access key that only qualified personnel have access to it. The data will be protected. The samples/ or biological specimens will be stored in a repository with controlled access and they will be shared in an anonymous-form. This process requires a permission request and authorization from the Principal Investigator. In order to assure the confidentiality of the samples or biological specimens, any identifiable information will be removed from the sample prior to its deposit in the repository. The privacy of the samples or biological specimens will be guarantee by the current laws and safety measurements will be taken as established by the federal regulations.

Individually Identifiable Health Information (IIHI):
The research repository <specimens and/or data> will be *[indicate how identifiable the specimens and/or data will be and, if coded, how the linking documentation will be stored; if any identifiable information will be stored, indicate how it will be kept secure].* ***Example:*** *The files containing the HIPAA identifiers from the patients will be stored in a file cabinet that is secured by a key access. The key to this file cabinet is stored in a locked office belonging to the Dr. Jorge Duconge, located in the second floor of the Guillermo Arbona Building at the Medical Sciences Campus. Only qualified and authorized personnel have access to this office and identifiable information. The principal investigator Dr. Jorge Duconge, Dr. Dagmar F. Hernandez, Dr. Kyle Melin, Dr. Angel Lopez, Dr. Hector Nunez, Dr. Ednalise Santiago and Mrs. Frances Marin have access to these files that could have information regarding the patient's medical record. The privacy of any identifiable information will be guarantee by the current laws and safety measurements will be taken as established by the federal regulations.*

Labeling of <*Specimens and/or Data*>:
Specimens and data will be labeled with a 7-digit code. The coding for the data file that have identifiable information will be made up of 7 digits, starting with the letters PPR (initials for *Plavix Puerto Rico*) and a number. For example; PPR0339. The labeling of the biological specimens or blood derivates will have a different code; samples containing plasma will be labeled as PC___Plasma (Example; PC0339plasma). The samples containing monocytes will be labed as PC ___LF (Example; PC0339LC). The samples containing DNA will be labeled as PC____DNA (Example; PC0339DNA). It will be necessary to anonymize the bag containing the blood samples obtained from the patients. The process of removing labels with identifiable information will be performed by the qualified personnel that collected the samples or the personnel that have permission to obtain the IRB- approved ICF. The staff authorized to perform this procedure are Dr. Jorge Duconge (Principal Investigator/ Project Lead), Dr. Dagmar Fernandez, Dr. Kyle Melin, Dr. Angel Lopez, Dr. Ednalise Santiago, and Mrs. Frances Marin. The label identifying the bag of the blood samples will be removed and it will be destroyed and discarded in an appropriate container.

Releasing <Specimens and/or Data> to Recipient Investigators:
This repository may be accessed for the purpose of testing various hypotheses regarding genetic studies from cardiovascular patients. Since there is a lack of relevant information from Hispanic patients from the Caribbean- geographic area, in studies regarding the genetic component of cardiovascular patients, this information could be useful for other researchers. Therefore, researchers interested in obtaining these specimens and/or data may request to become recipient investigators by requiring a permission request

and authorization granted by the Principal Investigator of the Research Study. The repository will serve as an interdisciplinary Hispanic-based resource for future basic and clinical studies in this target population. It will help advance knowledge about optimal and safe use of drugs for conditions that disproportionately affect Hispanics and will provide a valuable resource for integrated collaborations among institutions that serve this population in both continental United States (US) and the Island of Puerto Rico.

For all identifiable < biologicaspecimens and/or data> distributed from the repository, the recipient investigator must present documentation of a VAPORHCS IRB-approved protocol allowing the use of directly identifiable <specimens and/or data> or, coded <specimens and/or data>, if the recipient will have access to linking documentation. In cases where the recipient investigator would like only <specimens and/or data> that are de-identified (i.e., not linkable by the recipient investigator), the recipient investigator and the Research Repository Director should work with the VAPORHCS Research Administration Office to determine which committee approvals are required for the recipient project to meet the applicable requirements.

The adequacy of a recipient investigator's request for release of <specimens and/or data> will be determined by the Research Repository Director. That process will involve [*describe process]*. Prior to release of identifiable <data and/or specimens> for use under a recipient investigator's approved protocol, the following process will occur in order to help ensure that all parameters set by the participant in their signed ICF will be honored: *[describe process]*

Prior to releasing data from the research repository to a recipient, the Research Repository Director will initiate and ensure completion of a **Data Use Agreement (DUA)** with the recipient (as per current requirements). ***NOTE:*** *A Data Use Agreement between the Repository Director and Data Recipient(s), regardless if they are the same person, is required* ***prior*** *to releasing any repository data. Links to the following DUA templates provided below:*

- *DUA to Share Data within VAPORHCS*
- *DUA to Share Data between VA Facilities*
- *DUA to Share Data with a Non-VA Entity*

The Research Repository Director will keep a log, which may be maintained by repository staff, to track the release of <specimens and/or data>. The log will contain a method for verifying that each <specimen and/or individual's data set> was released only in a manner that meets the parameters of the approved protocol and/or signed ICF under which it was collected. This method will involve [*describe method]*

Identifiable information will not be transmitted to recipient investigators unless the signed ICF and HIPAA authorization from the participant (reviewed on a case–by-case basis) gave permission for this to occur. Any identifiable information will be transmitted to recipient investigators electronically, using *[describe method].*

OR

Recipient investigators will only receive <data and/or specimens> that is coded as described above.

Identifiable or de-identified <specimens and/or data> may be released to VA investigators (paid employees or those having without compensation (WOC) appointments) or to non-VA personnel or non-VA entities, in accordance with VA requirements; in the latter case, the Research Administration Office will consulted for current requirements.

1. If the Research Repository Director approves a potential recipient investigator to access or use information from the repository for purposes preparatory to research, the Research Repository Director will receive and maintain a copy of the Research Preparation Application, approved by the VAPORHCS Research Administration Office. The application should document that the

access to the information in the research repository will only be used to prepare a protocol, that no IIHI will be removed from the PVAMC or recorded, and that the IIHI accessed is necessary for the preparation of the research proposed. *NOTE: A Human Research Preparation Application is only needed with IIHI will be accessed.*

Prior to releasing data from the research repository to a recipient, the Research Repository Director will initiate and ensure completion of a DUA with the recipient (as per current requirements).

The Research Repository Director will track the following information for all <specimens and/or data> released to a recipient investigator:

1. Information regarding new use of the <specimens and/or data> (including a copy of the recipient protocol, the name of that protocol's PI, and the committee approvals of the recipient protocol).
2. Information regarding <specimen and/or data> distribution, including where they will be stored and the name(s) and location(s) of the recipient investigator(s).
3. Data disposition, after the recipient study has completed, per DUA requirements.
4. All communication with investigators requesting and receiving permission to use the <specimens and/or data>.
5. Data disclosure to a participant, their family, their physician, or a third where legally permitted.

Departure of Research Repository Director or Termination of the Repository:
If the Research Repository Director plans to leave the VAPORHCS, an application for a replacement director will be submitted to the IRB within an appropriate time frame to obtain approval before the current Director leaves. If a suitable replacement is not identified prior to the departure of the current Director, or if the repository is to be terminated, all <specimens and/or hard copy records> will be destroyed and electronic records will be deleted *(if allowable at that time by VA regulations).* If VA policy mandating retention of research data indefinitely is still in effect at that time, upon consultation with the Research Administration Office, all repository records will be transferred to the Research Administration Office where they will then be stored per Research Service policy; any identifiable electronic records will be sent using appropriate, secured methods (e.g. via an encrypted email),. The Research Repository Director will then delete the electronic files from the drive where they were previously stored. Specimens will be destroyed per guidelines for disposal of biohazardous material (i.e., placed in a red burn bag for incineration).

Biosafety Issues: *[for repositories containing human biological specimens]*
The location of the specimen storage for this repository is within a lab that has been reviewed and approved by the Subcommittee on Research Safety (SRS). All biosafety issues have been disclosed to the SRS, and this repository project, as well as any new procedures or uses for the specimens, will be submitted to the SRS for review and approval before being initiated.

Conflict of Interest:
All applications to the IRB (for Research Repository Director, contributing investigator and recipient investigator) are reviewed by the Research Administration Office for conflict of interest. If a (potential) conflict exists, the R&D Committee will create and approve a management plan to be approved by the appropriate sub-committee(s).

Repository Staffing:
This application does not include any additional employees besides the Research Repository Director. For any new employees needed in the future, a Research Personnel Change Form will be submitted, along with a Scope of Work (SOW) form, for IRB review and approval prior to them beginning any work with this repository. Any new employee will meet all VA training requirements and will be trained by [*indicate appropriate personnel*] in the specifics of this SOP.
OR

This repository will be managed by [Dr. Jorge Duconge, Dr.Kyle Melin and Dr. Dagmar F. Hernandez*]* employees, trained by *[indicate appropriate personnel]*. Supervision will be close and ongoing, including *[describe methods, e.g., periodically (indicate time frame, i.e., daily, weekly, etc.) checking log entries, comparing to labels, ICFs, etc.]* associated with individual <data sets and/or specimens>.

The responsibility for the security and oversight of the repository rests with the Research Repository Director.

NOTE: *The following must be addressed (if they have not already been by one of the items above):*

1. *How all records will be maintained. [NOTE: In addition to the records referenced above, records of all committee actions relevant to the repository must also be kept.]*
2. *Whether the specimens and/or data received, kept and released will be identifiable or de-identified. (Note: If the research repository includes de-identified specimens and/or data that may be re-identified, VHA Handbook 1200.12, section 6.c, must be followed.)*
3. *Policies and procedures for receiving and releasing specimens and/or data from the repository.*
4. *Mechanisms for verifying required approval(s) of research for recipient investigators.*
5. *Administrative activities, such as hiring, training and supervising employees.*
6. *Conflict of interest.*
7. *Tracking of data.*
8. *Whether there will be any research data disclosure to participants and conditions under which disclosure may or may not be allowed.*
9. *Plans for destruction or transfer of all specimens and/or data due to the research repository's termination or departure of Research Repository Director with no replacement.*
10. *Access agreements (i.e., data use agreements).*
11. *Requiring and maintaining all required committee approvals.*
12. *Security and oversight*