# Pathways Study

# Biospecimen Repository Access Policy

**Last Updated: April 25, 2016**

## I. Description of Biospecimens

a. Blood:

A total of 30 ml of blood (1-10 ml purple top, 1-10 ml green top, and 1-10 ml red top) is collected from all participants who consent to blood draw at baseline (enrollment into the study). The blood is shipped overnight to Roswell Park Cancer Institute and processed and stored in the following aliquots:

| Pathways Study Biospecimen Storage at Roswell Park Cancer Institute, per Participant | | | | | |
|---|---|---|---|---|---|
| **Biospecimen Component** | **Storage container** | **Volume per container (ml)** | **No. of aliquots** | **Total volume (ml)** | **Storage temperature (°C)** |
| **Blood** | | | | | |
| Whole blood | Cryovials | 0.5 | 2 | 1.0 | -80 |
| Clot | Cryovials | 0.5 | 4 | 2.0 | -80 |
| Red cells | Cryovials | 0.5 | 6 | 3.0 | -80 |
| | CBS™ straws | 0.5 | 2 | 1.0 | -150 |
| Plasma | CBS™ straws | 0.5 | 8 | 4.0 | -150 |
| Serum | CBS™ straws | 0.5 | 8 | 4.0 | -150 |
| Buffy coat | CBS™ straws | 0.5 | 8 | 4.0 | -150 |
| | Cryovials | 0.5 | *as available* | | -80 |
| **Saliva** | Oragene™ kit | 4 | 1 | 4.0 | Room |

b. Saliva:

A total of 2 ml of saliva is collected using the DNA Genotek Oragene™ saliva self-collection kit. The saliva is shipped to Roswell Park Cancer Institute and stored at room temperature, as indicated above.

c. Tumor Tissue:

Formalin-fixed, paraffin-embedded tumor blocks from diagnostic biopsy specimens or definitive surgery are available. These will be placed in a study-specific biorepository for more ready access to tumor tissue.

In a small subset of samples, DNA and RNA extracted from FFPE tissue is stored at UCSF in the laboratory of Dr. John Wiencke. Not all tumor samples have recoverable DNA, and RNA is extracted only from those samples with abundant tissue available (a subset of those with recoverable DNA).

d. DNA from blood/saliva:

When DNA is extracted from blood or saliva samples, these will become part of the biospecimen repository.

## II. General Principles on Use of Specimens from Biospecimen Repository

a. As biospecimens are a finite resource, it is important that their use is shepherded with care to maximize the knowledge that can be gained from use of this resource.

b. Use of biospecimens will thus consider scientific merit and impact, as well as availability of samples, appropriateness of use of these samples for the reasons proposed, lack of availability of other suitable samples, ability of use to support or integrate with other research interests, and the complementary or overlap nature of the request with other research efforts.

c. Any assay results will become part of the Pathways Study database, and made available to other investigators. The investigator(s) requesting biospecimens and conducting assays will have the opportunity to publish manuscripts using these assay results prior to use by other investigators. The investigator(s) conducting the assays will also have the opportunity to be co-authors on subsequent papers that result from use of these results.

d. Biospecimens can be used only for the purposes that are approved through this process. If other uses are desired, request for that use must be approved by the Pathways Biospecimen Committee.

e. Appropriate Pathways PIs or co-investigators will be included as co-investigators on studies using biospecimens from the Pathways Study, and sub-contracts will be initiated to include effort from said investigators, as well as appropriate support for data programming and biospecimen access.

f. Barring compelling reasons otherwise, all genotyping will be conducted centrally at Roswell Park Cancer Institute, so that sample depletion can be minimized through inclusion of proposed SNPs within panels of other genotyping projects. Costs for genotyping will be covered appropriately.

g. Any samples that are not used will be returned to the originating biospecimen repository (Roswell Park Cancer Institute, UCSF, or KPNC).

h. A statement will be signed by the requesting Investigator agreeing to these general principles prior to distribution of biospecimens.

## III. Biospecimen Use Application

a. The requesting Investigator first submits a brief **Letter of Intent** to the Pathways Biospecimen Committee, Attention: Janise M. Roh, Biospecimens Liaison (Janise.M.Roh@kp.org). This Letter of Intent protects investigators from preparing a complete application if the proposed research could not go forward due to lack of specimen or data availability, or due to overlap with ongoing or approved projects. The contents required in this Letter of Intent are given below.

**Section Headings for Letter of Intent**

The letter of intent should be no more than 1-2 pages, and use the following section headings:

- **Name(s) of investigators.**
- **Location(s) and institution(s) where research will take place.** This should include a description of where biospecimens are to be shipped for assay.
- **Specific aim(s) or primary hypotheses to be tested.**
- **Requirements for biological specimens.** Blood, saliva, DNA from these sources, tumor DNA or RNA. Frozen vs. previously thawed samples.
- **Numbers of samples and per sample volume requested.** If blood, indicate which aliquots are requested for use: Straws – plasma, serum, buffy coat, red blood cells; Cryovials – whole blood, clot, buffy coat, red blood cells.
- **Statement on conserving samples.** Efforts to integrate sample needs with those of other studies to conserve sample and/or limit freeze-thaw cycles.

b. The letter will be reviewed by the Biospecimen Committee for feasibility only. Within 30 days, investigators will be notified about the outcome of this initial review. Investigators submitting letters of intent that are not approved will receive a letter specifying the reason(s) for the disapproval.

c. Once feasibility is established, investigators will submit a complete application. Applicants who plan to submit their research for funding, based on critical and independent peer review, will complete a brief, 3-5 page application. Applicants who have already submitted their research for review must submit **both** their proposal and a brief, 3-5 page application. If the proposed research does not require *external and independent* peer review, applicants will be required to submit a more comprehensive application, similar to an R03 proposal that would go to an NIH study section. This is necessary to assure that Pathways specimens are used to support only research of the highest quality. The topics that must be addressed in these applications are given below.

**Section Headings for Full Application**

- **Project title**
- **Name(s) of investigators**, including all contact information.

- **Location(s) and institution(s) where research will take place.**
- **Planned funding agency**, including type of funding application and schedule for grant submission and earliest possible funding, or source of funds.
- **Research proposal.** For research that will be subject to independent and competitive peer review, limit this section to 3 pages, including tables and figures. For applicants who have already submitted a proposal for external peer review, include that proposal along with this application. For all others, this section must conform to NIH guidelines but be no longer than **5** pages, including Specific Aims, tables and figures. Appendices may include only key publications, questionnaires and similar materials.
  - **Specific aims**
  - **Significance**
  - **Innovation**
  - **Approach:** include information on:
    - Characteristics of laboratory assays
    - Analysis plan
    - Statistical power
- **Detailed description of and justification for use and analysis of requested biologic samples**. Include amounts needed and whether samples that have been subjected to freeze-thaw cycles will be satisfactory.
- **Statement regarding unique need for Pathways specimens,** and why samples from other biorepositories cannot be used to answer study aims.
- **Statement regarding collaborations with current Pathways investigators or other scientists using Pathways samples** (see below).
- **Proposed timeline for study.**
- **Plan for submitting assay results to the Pathways Coordinating Center to become part of the Pathways study database immediately upon verification of the integrity of such assay results.** Note that these data will generally not be made available to other projects or investigators until the Investigator(s) requesting biospecimens has(have) had an opportunity to publish results from these assays. In addition, any analyses for manuscripts or presentations that may use these data will acknowledge the contribution of the requesting Investigator(s). In general, the requesting Investigator(s) will also have the opportunity to be included as co-authors on such manuscripts or presentations.

This application should be sent to the Pathways Study Coordinating Center, Attention: Janise M. Roh, Biospecimens Liaison (Janise.M.Roh@kp.org). The application will be forwarded to the Biospecimen Committee.

## IV. Application for Use of Biospecimens Logistics

a. **Letters of Intent** will be accepted at anytime. It is encouraged strongly that potential applicants discuss their ideas with Pathways Study investigators prior to submission of a letter of intent.

b. As noted in Section III.b., responses to Letters of Intent will be provided within 30 days. Any timelines that are more urgent should be noted in the Letter of Intent, and review will be expedited when possible.

c. **Full Applications** will be accepted at anytime after approval of a Letter of Intent. Reviews of full applications and decisions will be provided within 30 days. Any timelines that are more urgent should be noted with the Application submission, and review will be expedited when possible.

d. Applicants will be notified that (a) the application is approved and proposal may be submitted for external funding; (b) additional information is requested and a revised application may be submitted; or (c) the application is denied. If an application is not approved, investigators will receive a letter specifying the reason(s) along with unedited comments from reviewers.

e. If the application is approved, the investigator may request a formal letter of commitment to be included in his/her application for external funding.

f. Once the application is approved, the requested biological specimens will be 'set aside' for the study for one year.

g. If the applicants do not obtain funding approval within one year, they must inform the Pathways Study Coordinating Center about the status of further funding applications. This includes: status of the application, score and peer-review summary statement if available, and revised application if submitted. The Pathways Study may prioritize applications for which specimens have not yet been released, and the status of grant applications may be considered as one factor in this prioritization.

## V. Biospecimen Committee:

a. Membership: The Pathways Biospecimen Committee consisting of the *1)* Principal Investigators (currently Lawrence Kushi, Kaiser Permanente Northern California and Christine Ambrosone, Roswell Park Cancer Institute), *2)* Subcontract Principal Investigators (currently Dr. Scarlett Lin Gomez, Cancer Prevention Institute of California, and Catherine Thomsen, Zero Breast Cancer), and *3)* one additional investigator at each of KPNC and RPCI, or their designees, will constitute the Biospecimen Committee. The Pathways Biospecimen liaison (if not already a member) will serve as an *ex officio,* non-voting member of this Committee.

b. Ad hoc members: For any given biospecimen use topic proposed, if expertise in the topic under consideration is not represented on the Biospecimen Committee, at least one other person from among Pathways Study investigators with substantive knowledge of the topic will be an ad hoc member of the Committee. If the topic involves areas under investigation in one or more Ancillary Studies with separate grant funding, the Ancillary Study Principal Investigator(s) will also be an ad hoc member of the Biospecimen Committee. Ad hoc members will be voting members of the Committee for review of the application for which they are participating.

c. Logistics: The Chair of the Biospecimen Committee will be selected from among the Biospecimen Committee members at their discretion, using methods of selection of their own choosing.
d. Documentation: Biospecimen letters of intent, full applications, approvals, and other related materials will be kept by the Pathways Biospecimen Liaison or that person's designee (in consultation with the Pathways Principal Investigator).