Access to Biospecimens and Data

Decisions regarding access to the data and specimens maintained by the National Biological Sample and Data Repository for PAH (PAH Biobank) will be guided by the following general principles as outlined in 2010 Revised NCI Best Practices (http://biospecimens.cancer.gov/practices/2010bp.asp), as appropriate:

- Timely, equitable, and appropriate access to human specimens without undue administrative burden.
- Scientific merit and institutional research qualifications, proven investigator experience with the proposed method, and a research plan appropriate to answer the study question.
- Community attitudes and ethical/legal considerations as primary factors.
- Fair, transparent, and clearly communicated access procedures.
- Appropriate allocation of specimens based on the nature of the scientific investigation (e.g., discovery, prevalence, initial validation, and hypothesis testing) and the need for annotation. The level of identifiability of the biospecimen and related transfer documents should be appropriate for the proposed research.
- A mechanism for addressing disputes over allocation decisions.
- An investigator agreement covering confidentiality, use, disposition, and security of biospecimens and associated data.

An agreement (e.g., MTA or contract) with terms consistent, as applicable, with the NIH Research Tools Policy, the NIH Data Sharing Policy, and other applicable NIH sharing policies will be used for the transfer of materials among academic, nonprofit, and/or industrial organizations. Desirable terms in an MTA for the transfer of biospecimens include the following:

- Clear descriptions of the biospecimens and/or unmodified functional derivatives thereof (e.g., DNA and RNA) and identification of the institutions involved;
- Clear identification of the human subjects status of the biospecimens and associated obligations;
- Agreement to abide by appropriate laws, rules, and regulations associated with human subjects research and private information;
- Acknowledgement of the recipient's right, or lack thereof, to further distribute the biospecimens;
- Assurances of the end user's academic freedom and the right to publish research results will not be hindered by the biospecimen resource; IP terms consistent with, as applicable and permissible, the basic principles of the NIH Research Tools Policy and other applicable NIH sharing policies, such as no reach-through by the biospecimen resource to end users' IP and the sharing of research resources and data by the end-user with the research community;
- Description of any expectations regarding the dissemination of research data; and
- Conditions, or limitations, on commercial use, if any.

A scientifically sound and appropriate research plan will be required in access requests. The following specific issues are among those that will be considered by the National Biological Sample and Data Repository for PAH (PAH Biobank) in access decisions:

- Use of standardized, validated research biomarker assay methodology.

Statistical evaluation that shows that the study question can be addressed with the samples available and, if applicable, a negotiated arrangement with a clinical protocol coordinating group to provide timely statistical analysis of study results.

Compliance with protocol-specific requirements needed to achieve study goals before other access is considered.

Confirmation that an investigator has defined funding and IRB approval for the project, if applicable (for information on application for and exemption from IRB approval, see OHRP guidance at http://www.hhs.gov/ohrp/policy/index.html#human).

Agreement that the investigator will publish or provide public information about the project outcome according to applicable NIH policies, which may include the Research Tools Policy, and the Revised Policy on Enhancing Public Access to Archived Publications Resulting from NIH-Funded Research. Of note, the NIH Research Tools Policy permits reasonable short-term publication delays; e.g., to file a patent or allow a collaborator to review a manuscript.

Appropriate policies will be developed to ensure that researchers' access to the biospecimens and associated clinical data is appropriate and in compliance with all applicable Federal and State privacy and human subjects regulations and statutes as well as the human research participant's informed consent. The following issues will be considered when developing access policies:

Inclusion of appropriate provisions for the security of biospecimens and confidentiality of associated data in the usage agreement between the biospecimen resource and the researcher.

Consistency of the MTA or other appropriate document, as applicable, with the NIH Research Tools Policy and other applicable NIH sharing policies.

Development of an informatics system to facilitate use or disclosure of biospecimens consistent with the research participant's permission for the use of his/her biospecimens, including procedures to identify if and when that research participant has revoked consent for future research use.

The existence of biospecimens will be made public through the National Biological Sample and Data Repository for PAH Web site itself (www.pahbiobank.org) and/or through well-known resources such as the NCI Specimen Resource Locator or the Biologic Specimen and Data Repository Information Coordinating Center (BioLINCC), which serves as directories of biospecimen resources. Restrictions on accessibility to stored biospecimens will be indicated in these tools.

Procedure for requesting samples from the National Biological Sample and Data Repository for PAH

Requests for all clinical and/or biological data and biologic samples will be submitted in the form of an online written proposal, outlining the intended use of the samples. Proposals should include the following:

1. *Contact/Proposal Information:* Please include the following:
    a. Your name (as Principal Investigator)
    b. Affiliated institution
    c. Email address
    d. Title of your chosen topic
    e. If applicable, please include the number of the grant or contract which supports the research and the names of any other investigators who will be using the samples.
    f. NIH Biosketch for the Principal Investigator and any other relevant investigators.

2. Specific Aims/Research Question/Hypotheses: (~1/3 page) Please describe the aims of the study.
For example:
Specific Aim 1: Targeted genotyping to replicate significant findings for candidate genes. *(Note: you do not need to reveal the name of these genes)*
Specific Aim 2: Targeted sequencing for candidate genes.
Specific Aim 3: Whole genome sequencing of X cases and X controls.

3. Background/Significance/Rationale: (~2/3 page) Provide a brief description of why the specific aims are of interest and overall significance. Throughout this description, provide references as needed.

4. Methods: (~1-1.5 pages) Indicate the following:
    a. Biospecimen type (DNA, plasma, serum, etc)
    b. Data type (genetic, clinical)
    c. Population qualifiers (IPAH, APAH, variant specific, etc)
    d. Number of samples being requested. (*Please note: the Repository reserves the right to limit the number of samples provided per request.*)
    e. Describe the laboratory techniques to be used, whether you have experience using these methods and if appropriate, the publications on your (or a collaborators)
    f. NIH biosketch that have utilized these methods. *Provide enough detail to allow the advisory panel to assess whether there is sufficient expertise to perform the experiments.*

5. Preliminary Analysis Plan: (~1/2 page) For each specific aim, a brief analysis plan should be described. The amount of detail varies with the research question(s) of interest, but it is helpful to mention key analytic methods. The format may be in paragraph form or follow the same design as the Specific Aims section of this outline. *Provide enough detail to allow the advisory panel to assess whether there is likely to be sufficient power to test the specific aims.*

Also please remember, the National Biological Sample and Data Repository for PAH has required language to include in publications using these samples. The language is as

follows: “Samples and/or Data from the National Biological Sample and Data Repository for PAH, which receives government support under an investigator-initiated grant (R24 HL105333) awarded by the National Heart Lung and Blood Institute (NHLBI), were used in this study. We thank contributors, including the Pulmonary Hypertension Centers who collected samples used in this study, as well as patients and their families, whose help and participation made this work possible.”

Finally, as a reminder, in the Material Transfer Agreement between the investigator and the National Biological Sample and Data Repository for PAH you have agreed to share any data generated from these National Biological Sample and Data Repository for PAH (PAH Biobank) samples. As noted within the MTA, the "National Biological Sample and Data Repository for PAH at Cincinnati Children’s Hospital Medical Center, along with other NHLBI approved sites including but not exclusive to the database of Genotype and Phenotype (dbGaP) which was developed through NIH to archive and distribute the results of studies that have performed genome wide Association Studies (GWAS) http://www.ncbi.nlm.nih.gov/sites/entrez?db=gap, have been designated by NHLBI for the deposit of all genetic data developed by Recipient using the materials and/or data provided by the National Biological Sample and Data Repository for PAH."