

ARIC Biospecimen Approval and Distribution Policy

ARIC Laboratory Contacts – See table on page 3

Note: Ancillary study investigators are responsible for any costs associated with sample aliquoting and shipping. They should contact the relevant lab early in the process of developing the ancillary study proposal to ensure that the costs are compatible with their budget.

Review of Biospecimen Requests

When an ancillary study (AS) request is submitted the ARIC AS Committee, those proposals requiring biospecimens will be sent the ARIC Laboratory Committee Chair (Eric Boerwinkle, cc Camille Breaux) for review. Dr. Boerwinkle will triage the proposals based on the biospecimen request and forward to the appropriate ARIC laboratory contact listed below for review and comments.

An assigned reviewer will consider the following aspects of the proposal and provide feedback to the ARIC Laboratory Committee Chair:

- Amount of volume requested and actually needed to test the ancillary investigators' hypotheses.
- Limiting sample volume requests of plasma and serum to 300 μ L. Larger volumes would require a vote of approval by the ARIC Steering Committee.
- All sample requests that would result in exhausting the last unfrozen aliquot for a particular ARIC visit would require a vote of approval by the ARIC Steering Committee.
- Specific sample requests for a smaller subset of unfrozen samples need additional supporting data and justification at the time of AS proposal review. Approval of these small sample requests may receive a low priority and be contingent on combination with other AS to provide for more efficient sample usage.
- Sample requests for an entire visit cohort may have higher priority than smaller case/control studies since the latter study design will deplete cases disproportionately.

Discussions regarding the AS request may be held via email or presented on the ARIC Laboratory Committee call which is held on the first Thursday of each month at 10 AM (Central) / 11 AM (Eastern). Decisions will be reported back to the Ancillary Study Committee Chair (Liz Selvin).

The table on page 4 of this document provides an overview of the specimens generally available to ancillary study investigators and their storage locations. (The ARIC Laboratory Committee has access to more detailed biospecimen inventory reports when reviewing AS sample requests.)

Distribution of Biospecimens

Once an ancillary study is approved and funded, the appropriate ARIC Laboratory will retrieve the biospecimens and prepare aliquots (if needed) as approved for the study. Pull lists of IDs should be prepared by the ancillary study investigator in cooperation with the ARIC CSCC as needed. Frequently, the amount of biospecimen needed to complete an ancillary study is less than the amount currently stored in frozen aliquots. When the ancillary study requires thawing and re-aliquoting of a portion of the stored biospecimen ARIC Lab and Steering Committees reserve the right to negotiate an optimal timing for the release.

Use of Precious Biospecimens

Since most of the biospecimens in the ARIC study are a non-renewable resource, the following guidelines are used when considering requests for precious samples.

1. The ARIC lab committee recommends that a minimal amount of each type of biospecimen be set aside for reserve. Volumes are provided in the table below.
2. Requests for access to precious biospecimens will only be considered for meritorious research projects that are central to the mission of the ARIC study.
3. Requests will be evaluated on a case-by-case basis. Applicants are advised to request the minimal amount required for completion of the project. Applicants are also strongly encouraged to utilize state of art technology and provide the resulting data to dbGaP where it will be available to the general public to ensure broad use of this precious resource consistent with the informed consent of the study participant.

ARIC Biospecimen Reserve Volumes

Biospecimen Type	Reserve Volume
Buffy Coat	1 mL (1 aliquot)
DNA	30 µg
Plasma	1 mL (1 or 2 aliquots)*
Serum	1 mL (1 or 2 aliquots)*
PAXGene for RNA	Only 1 aliquot available
PBMC	1 mL (1 aliquot)
Urine	2-3 mL (1 aliquot; pH unadjusted) 2-3 mL (1 aliquot; pH adjusted)

*Aliquot volumes for visits 5, 6, and 7, and citrated plasma are generally 0.5 mL, thus the minimum reserve volume of 1 mL unfrozen serum or plasma may require 2 aliquots in some cases.

ARIC Laboratory Contacts

ARIC Genetics Lab University of Texas Health Science Center at Houston	ARIC Lipid Lab Atherosclerosis Laboratory at Baylor College of Medicine	ARIC Chemistry Lab Clinical Chemistry Laboratory at the University of Minnesota
Director and Laboratory Committee Chair: Eric Boerwinkle, PhD Email: Eric.Boerwinkle@uth.tmc.edu Phone: 713-500-9816 Address: UT School of Public Health Human Genetics Center 1200 Pressler Street; E447 Houston, TX 77030	Director: Christie Ballantyne, MD Email: cmb@bcm.edu Phone: 713-798-5034 Address: Baylor College of Medicine - BCM 285 One Baylor Plaza Houston, TX 77030	Director: Jesse Seegmiller, PhD Email: jseegmil@umn.edu Phone: 612-625-6198 Address: Laboratory Medicine 420 Delaware Street SE Minneapolis, MN 55455
Project Manager: Camille Breaux Email: Camille.J.Breaux@uth.tmc.edu Phone: 713-500-9914 Address: UT School of Public Health Human Genetics Center 1200 Pressler Street; W130G Houston, TX 77030	Co-Director: Ron Hoogeveen, PhD Email: ronh@bcm.edu Phone: 713- 798-3407 Address: Baylor College of Medicine 6565 Fannin Street, F701 Houston, TX 77030	Lab Manager: Jaime Lavallee, MS Email: fale0014@umn.edu Phone: 612-626-0118 Address: Advanced Research and Diagnostic Lab. 1200 Washington Ave S; Suite 340 Minneapolis, MN 55415
Lab Manager: Megan Grove, MS Email: Megan.L.Grove@uth.tmc.edu Phone: 713-500-9833 Address: UT School of Public Health Human Genetics Center 1200 Pressler StreetW406A Houston, TX 77030	Lab Manager: Caroline Sun, MS Email: wsun@bcm.edu Phone: 713-798-1503 Address: Baylor College of Medicine 6565 Fannin Street, F701 Houston, TX 77030	

ARIC Biospecimen Availability

Biospecimen Type	Storage Location	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Visit 6	Visit 7	Visit 9	Visit 10	Visit 11	Visit 12
Buffy Coat	UTHealth	X*LA	X*LA	X	X	X	X	X	X	X	X	IP
DNA	UTHealth	X*LA	X	NA	NA	IP	NA	NA	NA	NA	NA	NA
Plasma (EDTA)	BCM	X*LA	X	X	D	X	X	X	X	X	X	IP
Serum	BCM	X*LA	NA	X	X	X	X	X	X	X	X	IP
Plasma (EDTA)	MN	NA	NA	NA	NA	X	X	X	X	X	X	IP
Serum	MN	X	X	X	X	X	X	X	X	X	X	IP
PAXGene for RNA	UTHealth	NA	NA	NA	NA	X*LA	X*LA	NA	X	X	X	IP
PBMC	UTHealth	NA	NA	NA	NA	X	NA	NA	NA	NA	NA	NA
Urine	MN	NA	NA	NA	X*LA	X	X	X	X	X	X	IP
Urine	BCM	NA	NA	NA	X	X	X	X	X	X	X	IP

Notes: X – available; D – depleted; NA – not available; IP – in progress; *LA – limited availability