ARIC Biospecimen Approval and Distribution Policy

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.

ARIC Laboratory Contacts

ARIC Laboratory Committee Chair & ARIC Genetics Lab Director Eric Boerwinkle, PhD Email: Eric.Boerwinkle@uth.tmc.edu University of Texas HSC at Houston 1200 Pressler St., RAS W114A Houston, TX 77030 Phone: 713-500-9050	**Boerwinkle Project Manager** Camille Breaux Email: Camille.J.Breaux @uth.tmc.edu University of Texas HSC at Houston 1200 Pressler St., RAS W126 Houston, TX 77030 Phone: 713-500-9914	**ARIC Genetics Lab** Megan Grove, MS Email: Megan.L.Grove@uth.tmc.edu University of Texas HSC at Houston 1200 Pressler St., RAS W406A Houston, TX 77030 Phone: 713-500-9833
ARIC Lipid Lab Director Christie Ballantyne, MD Email: cmb@bcm.edu Baylor College of Medicine 6565 Fannin Street, Room A-656A Houston, TX 77030 Phone: (713) 798-5034	**ARIC Lipid Lab Co-Director** Ron Hoogeveen, PhD Email: ronh@bcm.edu Baylor College of Medicine 6565 Fannin Street Houston, TX 77030 Phone: 713-798-3407	**ARIC Chemistry Lab** Amy Saenger, PhD Email: saen0006@umn.edu Department of Laboratory Medicine and Pathology Mayo Building, D214 425 Delaware St. SE Minneapolis, MN 55455 Phone: 507-250-2205

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 µL. Larger volumes would require a vote of approval by the ARIC Steering Committee.
- All sample requests that would result in exhausting the last unthawed 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 unthawed 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 disproportionally.

Discussions regarding the AS request may be held via email or presented on the ARIC Laboratory Committee call which is held on the 3rd Thursday of every other month at 3 pm (CST). Decisions will be reported back to the Ancillary Study Committee Chair (Aaron Folsom).

The table below 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.)

ARIC Biospecimen Availability

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

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

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. Ancillary study investigators are responsible for the associated costs of sample aliquoting and shipping. Frequently, the amount of biospecimen needed to complete 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 Committee reserves 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 unthawed serum or plasma may require 2 aliquots in some cases.