



OCT 12, 2023

Human Adipose Sample Collection Protocol -- University of Minnesota TMCs

Laura J Niedernhofer¹, David A Bernlohr¹

¹University of Minnesota, Minneapolis, MN USA

Cellular Senescence Network (SenNet) Method Development Community

UMN SenNet



Allie Pybas

OPEN ACCESS



ABSTRACT

Collection protocol obtained from the attached BioNet Specimen Procurement Agreement provided by the UMN CTSI Biorepository and Laboratory Services (BLS).

Tissue Procurement Agreement - 06.2023.pdf

DOI:

dx.doi.org/10.17504/protocols.io.e6nvwdz3dlmk/v1

Protocol Citation: Laura J Niedernhofer, David A Bernlohr 2023. Human Adipose Sample Collection Protocol -- University of Minnesota TMCs.

protocols.io

<https://dx.doi.org/10.17504/protocols.io.e6nvwdz3dlmk/v1>

License: This is an open access protocol distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

Protocol status: Working
We use this protocol and it's working

Created: Oct 12, 2023

Last Modified: Oct 12, 2023

PROTOCOL integer ID:
89214

Funders
Acknowledgement:

NIH
Grant ID: 5U54AG079754-02
NIH
Grant ID: 5U54AG076041-03

Preparation

- 1 **Patient Identification:** As soon as a patient is scheduled, the research team will email bionet@umn.edu a completed Specimen Procurement Request Form.
- 2 **Patient Consent:** Researcher consents. The original signed consent form will be placed in the patient chart and scanned into Epic. BioNet will verify consent in Epic. If the consent is not scanned in EPIC before the procedure, the researcher will provide BioNet a copy direct (e-mail or hard copy).
- 3 **Collection Supplies:** All supplies will be delivered to the BioNet office at least one day before the procedure and appropriately labeled with researcher name and CTSI Project #.

Collection Kit Components:

PBS (Study team)
Media: DMEM + antibiotics (Study team)
Media tubes (x3 per collection) (Study team)
10% Formalin (Bionet)
FFPE cassette x 5 (Bionet)
Specimen container (Bionet)
OCT compound (Bionet)
OCT mold x 4 (Bionet)
OCT quick freeze box (Bionet)
Liquid nitrogen vapor (Bionet)
Cryovials x 3 (Bionet)
Collection kit containing 10 ml EDTA blood tubes x 2 (Bionet)

Procurement and Processing of Visceral Adipose Samples

- 4
 1. BLS will drop off PBS in specimen container at the start of the procedure.
 2. Surgeon will excise 5-10 g visceral fat and place in specimen container with PBS. OR staff will page BLS for specimen pickup.
 3. The location of the tissue collection will be recorded by the surgeon.
 4. BLS will pick up specimen immediately and request Bionet Research Specimen Order. Short transit/processing time is critical.
 5. See table below for processing priorities.
 6. OCT and FF samples will be stored at -BOC until pick up.
 7. Fresh in media samples will be stored at 4C until pick up.
 8. BLS procurement will submit formalin specimens to BLS Histology for FFPE processing. Standard

fixation period of 24-72 hours. H&E requested.

Sample 1: FFPE, 1g

Sample 2: OCT, 1g

Sample 3: Flash Frozen, 1g

Sample 4: Fresh in Media, 2g

Sample 5: FFPE, 1g

Sample 6: OCT, 1g

Sample 7: Flash Frozen, 1g

Sample 8: Fresh in Media, Remainder

Procurement and Processing of Subcutaneous Adipose Samples

- 5
 1. BLS will drop off PBS in specimen container prior to procedure.
 2. Surgeon will excise 5 g subcutaneous fat and place in specimen container with PBS. OR staff will page BLS for specimen pickup.
 3. The location of the tissue collection will be recorded by the surgeon.
 4. BLS will pick up specimen immediately and request Bionet Research Specimen Order. Short transit/processing time is critical.
 5. See table below for processing priorities.
 6. OCT and FF samples will be stored at -BOC until pick up.
 7. Fresh in media samples will be stored at 4C until pick up.
 8. BLS procurement will submit formalin specimens to BLS Histology for FFPE processing. Standard fixation period of 24-72 hours. H&E requested.

Sample 1: FFPE, 1g

Sample 2: OCT, 1g

Sample 3: Flash Frozen, 1g

Sample 4: Fresh in Media, 2g

Sample 5: FFPE, Remainder