IMPORTANT CONSIDERATIONS FOR BLOOD COLLECTION AND BANKING

GENOMICS RESEARCH CORE BLOOD SAMPLE COLLECTION AND HANDLING AND BIOBANKING GUIDELINES

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genetics.pitt.edu
GENOMICS RESEARCH CORE BLOOD SAMPLE COLLECTION AND HANDLING AND BIOBANKING GUIDELINES

- Project Consultation and Development
- Blood Collection and Stabilization
- Sample Transport and Storage
- Sample Banking
BLOOD COLLECTION AND STABILIZATION - I

DNA COLLECTION TUBES

- EDTA (purple-top) tubes
- Serum Separator Tubes, SST (red-gray top) tubes
- BD Vacutainer blood collection tubes  www.bd.com

RNA COLLECTION TUBES

- Paxgene (Qiagen) or Tempus (ThermoFisher) tubes
BLOOD COLLECTION AND STABILIZATION - II

- Follow the manufacturer instructions for collection
- Fill collection tubes to fill mark
- Invert EDTA (purple top) and Serum Separator (SST) tubes 10X
- Allow Serum Separator Tubes (SST) to clot for 30 min at room temp
- Paxgene RNA tubes - invert gently 10 times
- Tempus RNA Tubes - shake vigorously or vortex 10s
- Label tubes clearly - include Study Name, PI name, Study Ref ID, Date collected and Timepoint (if applicable)
- No personal information
TRANSPORT AND STORAGE - Sample Submission

- New User Information – genetics.pitt.edu/new-users
  Register with Health Science Core Research Facility admin
  Request iLab account

- Submit sample and service request
  Frozen Blood – deliver to 3343 Forbes Ave on dry ice
  Plasma, Serum, Buffy Coat samples – deliver on ice or 4C
  Store Blood – freeze at -20°C to -80°C

Sample drop off locations
- 3343 Forbes Ave Rm 303
- Scaife Hall A916 (A-Stem)
- 2.15 Hillman Cancer Center Research Pavilion
- Rm 238 300 Technology Drive
- Children’s Hospital Loading dock
BIOBANKING

SAMPLE SUBMISSION

- Whole Blood
- Serum, Plasma, Buffy Coat
- DNA / RNA
- Saliva

PROCEDURE

- Follow manufacturer instructions for collection
- Label tubes clearly - include Study Name, PI name, Study Ref ID, Date collected and Timepoint (if applicable)
- Deliver samples at 4°C or on dry ice (saliva-deliver at RT)
- Include written and electronic sample list
- Request Master Log for sample submissions
Whole Blood

Collect whole blood in EDTA (purple-top) tubes
Invert 10X to mix well
Label tube – include study name, PI name, study Ref ID, date collected and timepoint (if applicable) – no personal information
Submit service request through iLabs
Deliver samples to drop off location
Deliver serum, plasma, buffy coat samples at 4°C
Deliver frozen samples to 3343 Forbes Ave on dry ice
Genomics Research Core – genetics.pitt.edu/new-users
Plasma / Buffy Coat

Collect whole blood in EDTA (purple-top) tubes
Invert 10X to mix well
Centrifuge 1000-2000 g, for 10 min at 4°C
On ice, transfer 1.5 ml aliquots of plasma (top layer) to storage tubes
On ice, transfer 1.5 ml aliquots of buffy coat
Label tube – include study name, PI name, study Ref ID, date collected and timepoint (if applicable) – no personal information
Freeze at -20°C to -80°C
Submit service request through iLabs
Deliver frozen samples to 3343 Forbes Ave on dry ice
Serum

Collect whole blood in serum separator tube (SST)
Invert 10X to mix well
Allow the blood to clot for 30 min at room temp
Centrifuge 1000-2000 g for 10 min at 4°C
On ice, transfer 1.5 ml aliquots of serum (top layer) to storage tubes
Label tube – include study name, PI name, study Ref ID, date collected and timepoint (if applicable) – no personal information
Freeze at -20°C to -80°C
Submit service request through iLabs
Deliver frozen samples to 3343 Forbes Ave on dry ice
Saliva

Follow manufacturer instructions for collection

Shake 5 sec to mix

Label tube – include study name, PI name, study Ref ID, date collected and timepoint (if applicable) – no personal information

Submit service request through iLabs

Deliver samples to drop off location
Questions?

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