

**The University of Michigan Central Biorepository  
Pricelist for University of Michigan Users  
Effective 10/1/2018**

The University of Michigan Medical School Central Biorepository (CBR) offers a variety of services to U-M investigators for the safe and monitored management of biospecimens including temperature-controlled storage, preparation of derivatives from these specimens, aliquoting, distribution, and the production of specimen collection kits. The CBR also provides regulatory-compliant processes for biospecimen management and a National Institutes of Health Certificate of Confidentiality for all data associated with or derived from participating research subjects. The CBR is accredited by the College of American Pathologists for its quality management of biorepository services.

All CBR activity is traced and data recorded in the LabVantage Laboratory Information Management System (LV LIMS). Credentialed investigators are able to view biospecimen information and user-defined data directly in LV LIMS. Investigators not using the LV LIMS receive CBR-derived biospecimen data in Excel format.

Please note that these internal rates are currently subsidized by the Medical School Office of Research.

Storage

Storage rates are based on the size of the storage container and storage temperature (room temperature or frozen). Specimens are preferentially stored in liquid nitrogen vapor if appropriate.

1-2 mL tube	\$0.02/specimen/month
5 mL tube	\$0.04/specimen/month
6-10 mL tube	\$0.04/specimen/month
50 mL tube	\$0.20/specimen/month
Frozen cassette storage (new)	\$0.03/specimen/month
Room temperature FFPE block storage (new)	\$0.02/specimen/month
Room temperature glass slide storage (new)	\$0.02/specimen/month

DNA extraction from whole blood (PAXgene or EDTA vacutainer) or buffy coat \$20.00/specimen  
DNA is isolated using a QIASymphony robot, quantified by PicoGreen Assay for double-stranded DNA (dsDNA), and average size estimated with agarose gel electrophoresis as a quality control measure. Biospecimens and their derivatives are tracked by LV LIMS.

DNA extraction from Oragene saliva kit \$18.50/specimen  
DNA is isolated using a QIASymphony robot, quantified by PicoGreen Assay for dsDNA, and average size estimated with agarose gel electrophoresis as a quality control measure. Biospecimens and their derivatives are tracked by LV LIMS.

Manual DNA extraction from whole blood or buffy coat (new) \$31.20/specimen  
DNA is isolated using a Qiagen QIAamp DNA Blood Maxi Kit, quantified by PicoGreen Assay for dsDNA, and average size estimated with agarose gel electrophoresis as a quality control measure. Biospecimens and their derivatives are tracked by LV LIMS.

<u>PicoGreen Quantification of DNA</u>	\$3.80/specimen
This is a stand-alone service for quantification of dsDNA using the PicoGreen Assay. DNA concentrations are stored in the LV LIMS.	
<u>RNA extraction from whole blood (PAXgene preps)</u>	\$25.10/specimen
RNA is isolated using a QIASymphony robot; quantification and quality are determined by capillary electrophoresis with an Agilent 4200 TapeStation. Biospecimens and their derivatives are tracked by LV LIMS.	
<u>RNA extraction from whole blood (PAXgene preps); high sensitivity</u>	\$28.30/specimen
RNA is isolated using a QIASymphony robot; quantification and quality are determined by capillary electrophoresis with an Agilent 4200 TapeStation using a high sensitivity protocol. Biospecimens and their derivatives are tracked by LV LIMS.	
<u>Standard Automated Aliquoting</u>	\$1.50/specimen
Removal of a specific volume from a source biospecimen or derivative to a new, fully-labeled container. Most specimens are easily aliquoted; however, some can be viscous making it difficult to remove a representative aliquot. Pricing for viscous biospecimens (e.g. frozen plasma) is below.	
<u>Viscous biospecimen plating (96-well plates) (new)</u>	\$2.00/specimen
<u>Viscous biospecimen aliquoting to cryovials (new)</u>	\$3.00/specimen
<u>Isolation of plasma or serum (up to 3 aliquots) (new)</u>	\$3.00/specimen
Whole blood in appropriate vacutainers is centrifuged and plasma or serum is transferred to a new, pre-labeled container.	
<u>Ethanol precipitation and resuspension of DNA (new)</u>	\$3.00/specimen
DNA is precipitated by standard ethanol precipitation and resuspend in buffer or water depending on investigator requirements.	
<u>Accessioning specimens not tracked in LV LIMS</u>	\$0.80/specimen
Specimens not currently managed by the Biorepository, but processed by the CBR or received as part of a legacy collection, are labeled, and accessioned in the LV LIMS for tracking in the CBR. This charge is applied when the CBR receives retrospective samples (with Governance Committee approval) or when the CBR performs processing services only (e.g. DNA extraction on Principal Investigator-managed biospecimens). Biospecimens in the latter example are routinely returned the Investigator's laboratory when processing is complete.	
<u>Specimen or plate retrieval</u>	\$1.00/unit
Specimens or plates removed from storage for distribution to researchers, to secondary users, or for destruction.	
<u>Distribution</u>	\$49.60/event
This charge includes loading delivery boxes, prepping box for transport at appropriate temperature (e.g. refrigerated or frozen gel packs), arranging courier pickup or in person delivery, and tracking shipments in the LV LIMS. The charge is per distribution event, not per biospecimen.	

Relabeling

\$2.30/specimen

In the event the CBR receives a mislabeled biospecimen or if the label is damaged or unreadable, our technical staff will reprint and relabel the biospecimens as necessary.

Biospecimen Collection Kit Production

The CBR creates kits for study teams on a fee-for-service-basis. Kit requirements are developed with the study team at project initiation and reviewed on an as needed basis.

Based on experience, investigator-requested kits generally fall into one of five pricing categories below. Kit type and price is based on the number and kind of components (expensive or inexpensive) in the kit and the amount of labor required for production and quality control.

In the event that total cost of the kit does not fall into one of the defined kit types, a specific recharge rate for that kit will be developed.

Kit type 1:	\$3.20/kit
Kit type 2:	\$17.30/kit
Kit type 3:	\$23.30/kit
Kit type 4:	\$34.60/kit
Kit type 5:	\$46.40/kit

Prices quoted are for clients internal to the University of Michigan, and are billable via shortcode. For clients external to the University of Michigan, please contact us at 734 763 6423 or [CBR.Requests@umich.edu](mailto:CBR.Requests@umich.edu) for information.