Bernese Mountain Dog DNA and Tissue Repository
Berner-Garde Foundation and Michigan State University
Dr. Vilma Yuzbasiyan-Gurkan
Berners@cvm.msu.edu
http://old.cvm.msu.edu/research/berner/

Fresh-Frozen Tumor Sample Instructions: Submission for Repository

If your pet has a tumor and you will be having it either surgically removed for biopsy or obtained at the time of euthanasia, please be sure to inform your veterinarian of the specific requests that we have for this project contained in this document. If there is sufficient tumor sample, we also encourage the submission of a formalin-fixed tumor sample to a diagnostic lab for pathology.

- If you are interested in also submitting a formalin-fixed tumor sample, we recommend that the diagnostic pathology service be performed here at MSU's Diagnostic Center for Population and Animal Health (DCPAH). The instruction link for the fixed tissue sample submission is found at: http://old.cvm.msu.edu/RESEARCH/berner/formalind.pdf.

Please carefully follow sample collection and shipping instructions for frozen tumor samples. Frozen tissue samples should be immediately "snap" frozen in dry ice or liquid nitrogen. If dry ice or liquid nitrogen is not readily available, it is acceptable to immediately place the specimen into a regular freezer as a temporary storage.

- Submission kits for frozen samples are available for purchase from MSU. Submit your request for a kit by sending an e-mail to berners@cvm.msu.edu. Also please notify us for assistance with locating a source of dry ice, shipping information or for clarification about this protocol.

SAMPLE COLLECTION

- Have two zipper storage bags available and pre-labeled.
  - Label the bags (use a sharpie pen if possible) with:
    - Name of dog
    - Name of owner
    - Berner Garde ID number if available
    - Date of collection
    - Location of tumor
  - **Please wear gloves** when handling the specimen and storage bag!
    - Do not touch the inside of the bag

- Have the surgeon drop the specimen directly onto the plastic storage bag as shown in picture

- Double bag the specimen (place the ziplock bag containing the specimen inside another ziplock bag), close the seal, then **IMMEDIATELY FREEZE,** using one of the methods below:

- **Liquid Nitrogen**: Instead of zip bags, please place specimen in a sterile cryo-vial (pre-labeled with patient /owner identification), then drop into the liquid nitrogen.

- **Dry Ice**: Bury the specimen into the middle of a container of dry ice

- **Temporarily store in freezer**: Place bags immediately into a regular freezer as temporary storage if dry ice or liquid nitrogen is not immediately available.

- Keep specimen frozen at all times.

SUBMISSION FORM

- Complete the project submission form located at: http://old.cvm.msu.edu/research/berner/submissionform.pdf.

- An online version of this form is found at: http://www.bernergarde.org/dbaccess/DTR_OnlineSubmission.aspx. Please only complete this online form when your samples are in the process of being shipped to us.

- Print a completed copy of the submission form and enclose it with the sample.

SAMPLE SHIPPING PREPARATION AND SUGGESTIONS

Supplies required for shipment:

1. Thick walled Styrofoam (insulated) shipping container
2. Outer cardboard shipping box
3. Dry Ice
4. "Dry Ice" and "Class 9 Misc Goods" shipping labels

IMPORTANT!!!

- **The frozen tissue** must be shipped to us on DRY ICE ONLY**.** Dry Ice is required for shipping *FROZEN* goods as dry ice will freeze everything in the shipping box. "Gel packs" or "blue ice" are only used for goods to be *REFRIGERATED,* such as blood samples.

  For dry ice, plan on using 5 to 10 pounds for each 24-hour period, depending on the quality of the insulated shipping container. This will keep everything frozen in a container up to 15 quarts. For larger containers, or greater shipping times, multiply dry ice quantities by this rate. If you are having difficulty locating a source of dry ice, please see our frequently asked questions section or contact us for assistance.

- There are many regulations pertaining to dry ice shipments and biological specimens. To make this process as easy as possible for you, we have prepared a shipping kit that you can order directly from us by sending a request to berners@cvm.msu.edu. We would urge you to take advantage of this helpful service as it will have everything you need for shipping the sample back to us (dry ice is not included).
  - The shipping kits and prices are listed here: http://old.cvm.msu.edu/RESEARCH/berner/supplies.pdf

  - Allow 7-10 days for us to process your request for the shipping kit and to ship to you. Please make checks payable to Michigan State University.

- If you would like to obtain the shipping supplies yourself, you can contact a local shipping agent such as Federal Express or UPS for advice on labeling requirements, so that it meets current regulations and is in compliance for shipping specimens on dry ice.

    - FED-EX: 1-800-GO-FEDEX or online at www.fedex.com
    - UPS: 1-800-742-5877 or online at www.ups.com

SHIPPING TO REPOSITORY

FROZEN SAMPLES MUST SHIPPED BE ON DRY ICE ONLY, OVERNIGHT DELIVERY, and shipped on **Monday-Wednesday only** (to prevent packages being held up over the weekend)

Ship sample to:

Dr. Vilma Yuzbasiyan-Gurkan
2209 Biomedical Physical Sciences
Michigan State University
East Lansing, MI 48824

CORRESPONDENCE

- **Please immediately e-mail us at** berners@cvm.msu.edu to notify us of your frozen tissue shipment, so that we can expect the sample and get it into our freezer immediately upon arrival.

We realize that this is a lot of information and that it is complex in nature. We also realize you are also dealing with concerns about your pet's illness at the same time, so we are here to help.

Email: Berners@cvm.msu.edu

Phone: 517-432-9902 or 517.432-2808

Thank you very much for your participation!