

## **SAMPLE HANDLING**

### **For Canine DNA testing at the University of Missouri**

**Blood Sample** - The ideal sample for DNA extraction is 3 to 7cc's of whole blood, in **purple-topped (EDTA)** tubes (one or several, depending on tube size). For very small dogs, 1 to 2 ccs should be sufficient. Please do not send less than 1 cc. The blood sample needs only to be put in the tubes and rocked gently a few times to distribute the anticoagulant - do **not** spin, extract serum, or do anything further. Refrigerate if the sample is being held for any time before shipping, but do not hold the sample longer than 1 week before shipping or it may become unusable.

**Frozen Semen** - Frozen semen stored from deceased sires or affected dogs can be a source of DNA for testing. Please send about 1 breeding unit. The straws or pellets do not need to be shipped frozen, but do pack them in a crush-proof & leak-proof container. Special handling fee is \$40 for this sample, in addition to the regular testing fee.

**Tissue Sample** - DNA can be extracted from any cell-rich tissue. If a dog is to be tested post-mortem, a 1" cube (or equivalent) of tongue, other major muscle, spleen, kidney, or liver will provide a large amount of DNA (one tissue is sufficient – do not send multiple tissues). Tissue samples should be placed in a clearly labeled freezer bag or other sterile container and frozen. **DO NOT place in formalin!** Place the bagged tissue inside another bag, freeze, and ship with a frozen cool pack (do not use dry ice, or ice cubes placed in a ziplock bag). If this is the only sample (no blood sample available), add special handling fee of \$40 to testing fee.

**Label sample** with the following:

call name - owner's last name

(If samples from several dogs are sent together, number samples and forms)

The ***Individual Dog Information Form & Survey*** that follow this instruction sheet should be completed, and a ***pedigree copy***, if available, should be included with the sample.

**Include TESTING FEE of \$65** for all dogs. Fee payable via check or money order payable to "University of Missouri", or major credit cards (Visa, MC, AmEx, Discover).

**Shipping** – Ideally, blood samples should be shipped immediately, tissues should be frozen first. If samples are held for a couple days or over a weekend, blood must be refrigerated, and tissue samples must be kept frozen. Ship for **next day** delivery (FedEx, US Mail-Express service, or UPS). **Do not send on a Friday** - there will not be anyone to accept the delivery on a weekend, and the sample could be unusable by Monday. Pack in a small insulated container (Styrofoam box, small cooler or insulated lunch bag), with one or more cool packs - it is important that blood samples be kept cool but not frozen, and tissue samples be kept as frozen as possible.

**The delivery address is;**

Dr. Gary Johnson - SLEM Testing  
320 Connaway Hall-UMC  
1500 Bouchelle Ave  
University of Missouri  
Columbia, MO 65211

(NOTE: if UPS does not recognize 320 Connaway as a valid address, use 201 Connaway)

**If you need clarification**, or have any questions about any of these procedures, please contact Liz Hansen by phone (573-884-3712), email (HansenL@missouri.edu), or regular mail (321 Connaway Hall, University of Missouri, Columbia, MO 65211).

# UMC BT-SLEM DNA TESTING & RESEARCH

Blood – Tissue – FTA-swab – semen - other \_\_\_\_\_

Breed: **Border Terrier**

Registered Name \_\_\_\_\_

Call name \_\_\_\_\_

Reg# \_\_\_\_\_ Birth Date \_\_\_\_\_

Male / Female - - Intact / Neutered

Microchip or Tattoo: \_\_\_\_\_

Color \_\_\_\_\_

## Test Being Requested: **SLEM – Spongiform LeukoEncephaloMyelopathy**

Owner: name \_\_\_\_\_

Veterinarian \_\_\_\_\_

address \_\_\_\_\_

address \_\_\_\_\_

city-st-zip \_\_\_\_\_

city-st-zip \_\_\_\_\_

phone (day) \_\_\_\_\_

phone \_\_\_\_\_

phone (eve) \_\_\_\_\_

\_\_\_\_\_

cell \_\_\_\_\_

\_\_\_\_\_

**EMAIL** \_\_\_\_\_

**EMAIL** \_\_\_\_\_

**\*\*\*\*Results are reported via email – please provide complete, legible email address!\*\*\*\***

Report test results to (please circle): Owner Veterinarian Both

Does this dog exhibit any of the following conditions? (Please attach history for any Yes answer)

Y - N Allergies

Y - N Digestive difficulties

Y - N Arthritis

Y - N Heart Problems

Y - N Autoimmune Disorders

Y - N Hernia (where? \_\_\_\_\_ )

Y - N Bite or Tooth Abnormalities

Y - N Reproductive Problems

Y - N Cancer / Tumors

Y - N Seizures

Y - N Cataracts / Vision Problems

Y - N Skin / Coat Problems

Y - N Deafness / Hearing Impaired

Y - N Skeletal Abnormalities (Hip Dysplasia, etc.)

Y - N Hindlimb weakness/paralysis

Y - N Temperament Problems (shy, aggressive, etc.)

other (please list):

**If this is a dog with clinical signs of SLEM, please include description of observed signs**

Comments / Questions / Concerns? \_\_\_\_\_

I submit this sample and pedigree for the purpose of DNA testing; I understand that DNA left over following the test may be stored for potential future research; I understand that the results of this test will be reported only to the owner listed on this form and to the veterinarian (if requested) listed here, via email or FAX; and I have supplied complete and accurate information, to the best of my knowledge.

Signed: \_\_\_\_\_ date \_\_\_\_\_

**PAYMENT INFORMATION:**  Check or money order payable to “University of Missouri” enclosed

OR  Charge to VISA-MC-AmEx-Discover Card# \_\_\_\_\_

Cardholder name: \_\_\_\_\_ Exp Date: \_\_\_\_\_

**FEE:** = \$65; frozen semen or tissue, + \$40