

SAMPLE HANDLING

For Canine DNA Research at the University of Missouri

Blood Sample - The ideal sample for DNA extraction is 5 to 10cc's of whole blood, in **purple-topped (EDTA)** tubes (one or several, depending on tube size). For very small dogs, 3ccs should be sufficient. More volume will yield more DNA, so in this situation, a larger sample is appreciated. 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 - If there is frozen semen stored from sires or affected dogs, DNA can be extracted from it. Please send 1 straw or 5-7 pellets. They do not need to be shipped frozen, but do pack them in a crush-proof & leak-proof container.

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 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).

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. If no pedigree information is available, please indicate this on the survey page. ***PLEASE take the time*** to complete the survey form – this information is very important for the ongoing research.

Shipping - Ideally the sample should be shipped immediately (with a tissue sample make certain it is completely frozen first). If samples are held for a day or over a weekend, blood must be refrigerated, and tissue samples must be kept frozen. Ship via overnight 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 (most vets have these for shipping samples to labs), 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 - GLX Research
320 Connaway Hall
University of Missouri
Columbia, MO 65211

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).

Thank you for your cooperation and participation!

UMC CANINE Glacoma/Lens Luxation DNA TESTING & RESEARCH

Blood – Tissue – FTA-swab – semen - other _____ Breed: _____

Registered Name _____ Call name _____

Reg# _____ Birth Date _____ Male / Female - - Intact / Neutered

Microchip or Tattoo: _____ Color _____

Test Being Requested: PLL – Primary Lens Luxation

Owner: name _____ Veterinarian _____

address _____ address _____

city-st-zip _____ city-st-zip _____

phone (day) _____ phone _____

phone (eve) _____

cell _____ Fax _____

e-mail _____ e-mail _____

******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):

Other 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 _____

IMPORTANT!! PLEASE COMPLETE THE QUESTIONNAIRE ON THE NEXT PAGE !!

Please circle your answer to the questions below, and fill in blanks as appropriate.

When did you first notice that your dog had an eye problem? (month, year) _____

What problems did you observe: Squinting – one eye both eyes
Tearing - one eye both eyes
Rubbing the eye
Color change to the eye
Globe appeared larger than normal
Globe appeared smaller than normal
Other _____

How long after you noticed these problems were your able to see a veterinarian? _____

Was the dog examined by a veterinary ophthalmologist (eye specialist)? Y N

What was the diagnosis? Lens Luxation Glaucoma Other _____

When was the diagnosis made? (month, year) _____

How did the problem occur: Both eyes at the same time
One eye only - left - right
One eye first, then the other
Time between first & second eye becoming affected? _____

How was the problem treated? Medically: Topical drops Y N
Oral tablets or capsules Y N
Name & frequency of medications given _____

Surgically: glaucoma valve Y N
Intracapsular lens extraction Y N
Laser cyclophotocoagulation Y N
Cryocyclophotocoagulation Y N
Enucleation Y N
One or both eyes removed Y N

Did this dog go blind? Y N If YES, how long after diagnosis? _____

Do you know of relatives of this dog who are diagnosed with Lens Luxation? Y N

If yes, please circle: sire dam sibling grandparent other _____

Do you know of relatives of this dog who are diagnosed with Glaucoma? Y N

If yes, please circle: sire dam sibling grandparent other _____

*****NOTE!***** Please enclose a copy of the veterinarian or ophthalmologist's diagnostic report with this form and sample. Include name and contact information (address, phone, email if available) for the veterinarian or ophthalmologist who diagnosed and treated this dog.

Pedigree (family tree) information is very helpful for this research, and is held in complete confidence by the researchers. Please enclose a pedigree or registration copy with this survey.

Pedigree enclosed Pedigree will be mailed/emailed separately Pedigree unknown/not available

Any other information you feel would be useful for the researchers, please list on reverse side.

Thank you for submitting this sample and completing this information.