SAMPLE HANDLING

For Canine DNA Research & Testing at the University of Missouri

Blood Sample - The ideal sample for DNA extraction is 3 to 7 cc's of whole blood, in **purple-topped (EDTA)** tubes (one or several, depending on tube size). For very small dogs, 2-3ccs should be sufficient. 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 can be a source of DNA for testing. Please send 1 breeding unit (straws or pellets). They 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 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 regular 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*** that follows 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 form. For any suspected affected dogs please include a description of the clinical signs observed and age when first noted.

Include TESTING FEE of $65 for dogs with no clinical signs of MPS1, suspected affected dogs are no charge thru July 1, 2020. Check or money order should be payable to "University of Missouri". Credit cards (Visa, Mastercard, Discover, or American Express) can be accepted.

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 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 (most vets have these for shipping samples to labs), with one or more frozen cool packs – DO NOT use dry ice or a baggie full of ice cubes!!

The delivery address is;
University of Missouri Canine Genetics Lab
320 Connaway Hall
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).

Intervertebral Disc Disease Chondrodystrophy

Breed _____

Individual Dog Information

DCL # (we will complete):_____

Blood – Tissue – other _____

Registered Name _____ Call name _____

Registration # _____Birth Date _____ Sex? M – F Neutered/Spayed? Y – N

Sample Submission Date: _____ Color _____

Sample submitted for which research project? ____CDDY/IVDD_____

Owner: name _____ breeder's name _____

address _____ address _____

_____ _____

phone (day) _____ phone _____

phone (eve) _____ e-mail _____

fax _____

e-mail _____

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	Neurological Problems
Y - N	Cancer / Tumors	Y - N	Seizures
Y - N	Vision Problems	Y - N	Skin / Coat Problems
Y - N	Deafness / Hearing Impaired	Y - N	Skeletal Abnormalities (Hip Dysplasia, Brittle Bone, Spinal column, etc)
other (please list):		Y - N	Temperament Problems (shy, aggressive, etc.)

Testing done on this dog:

OFA/PennHip	Y - N	age at test: _____	result:_____	#_____
CERF	Y - N	age last tested:_____	result:_____	#_____
Thyroid	Y - N	age last tested:_____	result:_____	
Copper Toxicosis	Y – N	age last tested:_____	result:_____	
Patellar Luxation	Y – N	age last tested:_____	result:_____	

other (please list):

See following pages for questions on symptoms – please complete for ALL sampled dogs.

ATTACH PEDIGREE COPY TO THIS FORM

Please circle your response to the following;

- I am / am not willing to provide additional blood samples if needed for research.
- I will / will not consider donation of a tissue sample upon the death of this dog, and will discuss this decision with my veterinarian so that a notation is placed in my file.

I submit this sample and pedigree for the purpose of DNA research; I understand that the identity of dogs and owners participating in the research will not be revealed; and I have supplied complete and accurate information, to the best of my knowledge.

Signed: _____ date _____

Intervertebral Disc Disease-specific Questionnaire

Has this dog been diagnosed as likely to be affected with Intervertebral Disc Disease (IVDD)?

Yes No

Have any relatives of this dog been diagnosed with IVDD? Yes No Don't Know

If yes, which relatives? Sire Dam Sibling Offspring Other _____

Paternal Grandsire Paternal Grand-dam Maternal Grandsire Maternal Grand-dam

When is the best time to reach you by phone? _____

Veterinary Contact Information

Primary Care

Vet Name _____

Clinic Name _____

Address _____

City,St,Zip _____

Phone # _____

Email: _____

Specialist

Vet Name _____

Clinic Name _____

Address _____

City,St,Zip _____

Phone # _____

Email: _____

May we have your permission to contact your veterinarians to request records and discuss your dog's health history, diagnostic testing, and possible treatment options? Yes No

Signed: _____ date: _____

DISEASE SIGNS

Has you dog exhibited any of the following signs? Please circle the correct answer.
If you need additional space to describe changes, please use back of form or attach additional pages.

				Describe Changes and Indicate Age First Observed
1. Reluctance to jump or walk	none	moderate	severe	_____
2. Reluctance to be pet or lifted	none	moderate	severe	_____
3. Abnormally short stature	none	moderate	severe	_____
4. Postural abnormalities	none	moderate	severe	_____
5. Muscle spasms	none	moderate	severe	_____
6. Gait abnormalities/ataxia	none	moderate	severe	_____
7. Generalized weakness	none	moderate	severe	_____
8. Behavioral abnormalities	none	moderate	severe	_____
9. Paralysis	none	moderate	severe	_____
10. Incontinence	none	moderate	severe	_____
11. Loss of sensation	none	moderate	severe	_____
12. Hind limb weakness/paralysis	none	moderate	severe	_____
13. Knuckling/paw dragging	none	moderate	severe	_____

Please describe any other physical or behavioral abnormalities:

_____

_____