

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 otherwise unavailable 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 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 & Survey*** that follow this instruction sheet should be completed, and a ***pedigree copy***, if available, should be included with the sample..

TESTING FEE is \$65; check or money order payable to "University of Missouri", or include credit card information in payment section of form.

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;

Canine Genetics Lab – Dancing Doberman 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 us via email at MUCVMK9genetics@missouri.edu, or call 573-884-3712

UMC CANINE Dancing Doberman DNA TESTING & RESEARCH

Blood – Tissue – FTA-swab – semen - other _____ Breed: Doberman Pinscher
Registered Name _____ Call name _____
Reg#/PID _____ Birth Date _____ Male / Female - - Intact / Neutered
Microchip or Tattoo: _____ Color _____

Test Being Requested: **DDD – Dancing Doberman Disease**

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

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

OR ☐ Charge to VISA-MC-AmEx-Discover via payment portal

Send payment portal link & instructions to this email: _____

FEE: = \$65; if frozen semen or tissue, add special handling fee + \$40

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):

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; 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.

Has this dog been diagnosed with Dancing Doberman Disease? **Y N Suspected**

Was this diagnosis made by a veterinarian? **Y N**

When did this dog begin showing signs of DDD (month & year)? _____

Is this dog still alive? **Y N** If NO, when did this dog die? _____

What was the cause of death? _____

How long has this dog been showing signs of DDD?

1-3 mos 4-8 mos 9-12 mos 13-18 mos 19-24 mos 25-36 mos over 36 mos

Which of the following tests were done to make the diagnosis of DDD?

No diagnostic tests, clinical symptoms only ...	Y N		
Spinal radiographs (x-rays)	Y N	result was:	normal abnormal
Myelogram (contrast x-rays)	Y N	result was:	normal abnormal
CT (CAT) scan	Y N	result was:	normal abnormal
MRI	Y N	result was:	normal abnormal
Electrodiagnostics	Y N	result was:	normal abnormal
Muscle biopsy	Y N	result was:	normal abnormal

For any abnormal result, please list findings: _____

Describe the FIRST symptoms of DDD in this dog:

Uncoordinated gait	Y N	Dragging toes	Y N
Weight shifting side to side in rear	Y N	Falling in rear legs	Y N
Exercise fatigue	Y N	Tremors in rear legs	Y N
Reluctant to stand still	Y N	Pain in back	Y N
One rear leg weaker than other:	Y N		

Describe CURRENT symptoms of DDD in this dog (if deceased, symptoms at time of death):

Uncoordinated gait	Y N	Unable to support weight in all limbs	Y N
Weight shifting in rear legs	Y N	Unable to move all limbs	Y N
Exercise fatigue	Y N	Loss of muscle mass in rear legs	Y N
Reluctant to stand still	Y N	Loss of muscle mass over entire body ...	Y N
Weakness in 1 or both rear legs	Y N	Urinary incontinence	Y N
Unable to support weight in rear legs	Y N	Fecal incontinence	Y N
Unable to move rear legs	Y N	Difficulty swallowing	Y N
Weakness in front legs	Y N	Pain in back	Y N

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

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

Pedigree (family tree) information is very helpful for continuing research, and is held in strict confidence by the researchers. Please enclose a pedigree copy or registration certificate copy if available.

Pedigree attached Pedigree will be mailed or emailed separately Pedigree unknown/unavailable

Any other information you feel would be useful for the researchers, please list below or attach. Thank you for submitting this sample and providing complete information.