SENDING INFORMATION AND SAMPLES
for DNA Research at the University of Missouri

First, THANK YOU for participating in this important research project! The samples you provide will allow researchers to continue discovering the genes controlling traits in your breed, and dogs in general. As the canine genome is mapped, breeders will have an unprecedented opportunity to identify and avoid producing disease, and concentrate on positive advances in their breeding programs.

It is of utmost importance that the information you provide with the samples is as complete and accurate as possible. The presence of disease, unusual, or "undesirable" characteristics should be revealed to the researchers wherever it has been identified. Information on specific, individual dogs will not be revealed - results of the research will identify what markers have been found, but not the names of those who submitted the samples where a characteristic was located, nor which individual dogs show affected or carrier status for any given condition. Information provided will be kept strictly confidential. As the research produces results, participants may request information on the genetic status of their dog(s).

Complete families are critical to locating specific genes and markers. Wherever possible, submit samples from all siblings, both parents, and all available grandparents.

Begin by gathering the pedigree, litter information, and litter list(s) for each family you plan to submit. You will need a correctly formatted (sire on top, dam on the bottom), typed or computer-generated pedigree (3- to 5-generation) of the litter where an affected appeared. If the sample is for a DNA bank, send a pedigree of the individual dog. The pedigree will connect each sample you submit to the family it comes from, so make copies for each individual dog who will be sampled. The breeder of the litter, or other person familiar with the litter should make a "Litter Packet" for each litter - this consists of the *Litter Information* sheet, *Litter List*, and the *Pedigree*. For the Litter ID code use the kennel name or breeder name, plus the date of birth of the litter, so if Pat Doe had a litter born May 15, 1992, the code would be "Doe 05-15-92". Dr. Johnson's staff has a different system of coding in the lab to anonymously identify samples, but the Litter ID code is a way to tie your information together and place individuals in the families where they belong as samples are submitted. This ID code should be on each form sent in. Keep a copy of the packet for your own records, and send a copy to Dr. Johnson. This family information may be sent with the blood samples, or separately.

Next, begin collecting and submitting samples for DNA extraction. See the *Sample Handling* sheet for procedures. The *Individual Dog* submission form should accompany each sample, along with the marked *Pedigree* copy that will tie in with the family information sent. Make copies of the *Sample Handling* and *Individual Dog* forms as needed for all samples to be submitted. If several dogs' samples are being sent together, number the forms and samples to be certain there is no confusion (Sample #1, #2, etc). On a spare copy of the pedigree you may want to mark (for yourself) who is alive and sampled, not sampled, and those no longer living, to keep track of who you need to get samples from. As stated before, entire families will give the best chance at finding specific genes - do your best to include all living family members.

Send samples and information to Dr. Johnson's lab at this address;

Dr. Gary Johnson - (breed of dog) DNA 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). Liz is Dr. Johnson's Coordinator of Veterinary Information, and can help with any questions you may have.

Once again, thank you for participating in this important research - you are contributing to the betterment of future generations.