

Dear Miniature Schnauzers Owners and Breeders,
RE: Liver Shunt Study at Cornell University, Investigator - Dr. Sharon Center

February 2010

We are interested in acquiring more diversity in the DNA samples from Schnauzers. From the work we are doing, the very nice population of dogs included thus far have markers suggesting a lack of genetic diversity. Unfortunately, genetic diversity assists with mapping strategies. A broader representation of North American and Foreign dogs would lend to the genetic diversity and would be quite helpful.

If there are willing participants to assist in finding the genetic cause of this devastating disorder, we need the following types of samples:

1. Samples from families of dogs: parents and at least 3 siblings with one being a shunt affected. We are interested in individual DNA samples from confirmed shunt dogs (veterinary opinion and testing).
2. Pedigrees and relevant health information.
3. Blood for DNA: For mapping we need pedigree information and EDTA blood samples for DNA extraction, at least 5 mL of EDTA blood, more is helpful.
4. Bile Acid testing: All dogs must be bile acid tested. While we are able to measure bile acids in our laboratory for the study and can provide that information to owners and their veterinarians, we do not have funds to cover the cost of the bile acid analyses in our grants at this time. However we can measure samples in our lab (a pre meal sample and a 2-hr post meal sample) at a cost of \$15.50 to cover reagents and technician associated expenses for the paired samples. Bile acid samples require a minimum of 1 ml of heparinized plasma or serum for each sample. Bile acid testing done locally should be pre-and post meal and be numerically (quantitatively) determined rather than a test that simply indicates "high" or "normal". If bile acids have been done, we can use quantitative values (numerical) and information regarding where the analysis was done (what method).
5. How to submit samples: DNA sample blood must not be frozen, the bile acid samples can be frozen. The DNA samples should be received within 5 -7 days of collection, the bile acid samples can be collected and frozen for shipping in groups as these are quite stable. Shipping information is as shown below. Please ship to arrive on weekdays only.

Sharon A. Center, DVM, Dipl ACVIM
Professor, Internal Medicine
Department of Clinical Sciences
College of Veterinary Medicine
Cornell University
Ithaca, NY 14853

If there are questions, you should have their veterinarian contact Dr. Center for clarification or further instructions, or you may contact any AMSC Health Committee member. All pedigree information submitted for this research will remain confidential. Members of the AMSC Health Committee will not have access to pedigree information submitted for this research. If individuals wish to submit case information to the AMSC Health Committee this needs to be done separately using the submission form available under the health section of www.amsc.us.

This study is funded by grants from the Morris Animal Foundation and the Canine Health Foundation (CHF), with co-sponsorship from the American Miniature Schnauzer Club CHF Donor-Advised Fund.