

Announcing an International Study to Isolate Genes for Liver Shunts in Bernese Mountain Dogs

Liver shunts, (portosystemic shunts) are defects in the portal vein which connects the liver to the rest of the circulatory system. This defect affects many breeds, including Bernese Mountain Dogs. The liver removes toxins such as ammonia from the blood; shunts prevent blood from reaching the liver. Consequently, the liver does not develop properly as the puppy grows. In addition, toxins such as ammonia bypass the liver and reach the body's blood circulation, including the brain. Neurological symptoms begin in the first year of life and without treatment the condition is fatal. Surgery is the only long-term treatment, but is not always successful. Work by researchers at Utrecht University has shown that portosystemic shunts are most likely inherited.

Dr. Jan Rothuizen at the University of Utrecht, Netherlands, is working with the Dutch and US BMDC, with encouragement from the Berner-Garde Foundation, Inc., to find a genetic marker for portosystemic shunts in BMDs so that breeders can determine whether dogs carry this defective gene. He and his US colleague, Dr. Robert J. Washabau at the University of Minnesota, would like to have blood from PSS-affected Bernese Mountain Dogs, their parents and as many littermates as possible.

To participate please send the following:

- 4 to 8 mL of blood in EDTA-coated tubes (purple top) from the affected dog and as many relatives as possible sent via express mail;
- Veterinarian's report on the diagnosis of the shunt (blood test for ammonia, radiograph, surgery, etc);
- Pedigree of the affected dog.

Blood samples and pedigrees from **BERNESE MOUNTAIN DOGS** from the **UNITED STATES** or **CANADA** should be sent to Dr. Washabau at the address below. Please call to notify him that a sample is coming.

Robert J. Washabau, VMD, PhD, Dipl. ACVIM
Professor of Medicine and Department Chair
Department of Veterinary Clinical Sciences
College of Veterinary Medicine
1352 Boyd Avenue
University of Minnesota
St. Paul, Minnesota 55108
(612) 625-5273 Office/VoiceMail
(612) 624-0751 FAX
E-Mail: washabau@umn.edu

Blood samples and pedigrees from **BERNESE MOUNTAIN DOGS** in the **NETHERLANDS** should be sent to Dr. Rothuizen at the address below. Please call to notify him that a sample is coming.

Jan Rothuizen, Professor of Internal Medicine of Companion Animals
University Utrecht
PO Box 80154
3508 TD Utrecht
The Netherlands
E-Mail: J.Rothuizen@vet.uu.nl

If you are interested in participating in the study, contact Dr. Rothuizen. Questions about the study can be sent to Mary Maliarik, Ph.D. at mmaliarik@aol.com or Elizabeth Pearson at rogel@aol.com.