



GPCA Health Committee



CHF Grant (s) Description: 2008/09
Supported & Funded by the GPCA

The GPCA Health Committee and Board of Directors have approved the support of two studies through the AKC Health Foundation (CHF). Both studies are investigating aspects of osteosarcoma in canines.

The first study (Grant # 757 A) is a continuation of the study The GPCA funded and supported in the past, “ Hereditary Mutations in Genes Associated with Osteosarcoma in Large Breed Dogs” researchers: Kirsten Lindblad-Toh, PhD of the Broad Institute and Kenine Comstock, PhD of the University of Michigan Medical School. This is a two year study and will extend the information gathered to include other breeds. The initial study identified 7 loci on the genetic codes for Rottweilers and Greyhounds which appear only in dogs affected with osteosarcoma. The intent is to further refine the information on those two breeds and to investigate the 7 loci in additional breeds Great Pyrenees are included as one of the additional breeds being investigated.

In addition, samples from Great Pyrenees with osteosarcoma are requested. We also need samples from older, unaffected dogs (defined as Great Pyrenees age 8 or older who have no signs of osteosarcoma) to use as normal controls. To submit samples, go to the GPCA Health Committee website at: www.gpcahealth.org to download information and forms or go directly to: dog-info@broad.mit.edu

This new study will cost \$10,000.00 over two years, with \$4000.00 coming directly from Health Committee funds donated by members & held by the GPCA and \$6,000.00 coming from the GPCA donor-advised funds held by the Canine Health Foundation, which is funded by donations made by Purina through the Purina Parent Club Program via our members sending in weight circles from Purina Pro Plan foods. FMI on this program go to purinappcp@purina.com

The second study (Grant # 976) “Investigation of the Role of STAT3 Activation in Canine Osteosarcoma” researcher: Cheryl London, DVM, PhD, Ohio State University. The investigation has identified a cellular pathway that appears to be important for osteosarcoma cell survival. This involves a protein called STAT3, which is abnormally active in human cancers and has not yet been investigated in canine cancers. Several canine osteo cell lines have STAT3 present in them. The preliminary data indicates that an inhibitor of STAT3 is capable of destroying canine osteo cells lines, it is hoped that this research will lead to a new way of treating the disease (replacing the current amputation and chemo/radiation approach). Currently, no samples from Great Pyrenees are being requested.

This is a one year study and will cost a total of \$5000.00, with \$2,000.00 coming from Health Committee funds donated by members & held by the GPCA and \$3,000.00 from the GPCA DAF (Donor Advised Funds) held by the CHF and funded by Purina donations as described above.