

Saluki health research update, April 2000

by MaryDee Sist, DVM

My thanks to everyone who put aside their differences and cooperated to make the auction for Saluki Health Research such an enormous success. Each and everyone of you (from the auction crew who contributed considerable amounts of time and expertise, to the people who graciously donated items and the Saluki fanciers who generously purchased the items) has significantly contributed to the shared goal of giving something back to our special breed.

Updates of projects, minutes of SHR board meetings, and financial accounting, including income and expense statements, will be made available at the close of the fiscal year of Saluki Health Research, Inc. each June.

To further the goal of expanding the knowledge base of the Saluki's uniqueness among canines, the following projects are currently being considered and/or supported:

- **Saluki Health Research contribution to the AKC CHF**

SHR set up a donor advisory fund with the Canine Health Foundation to help fund Saluki-specific research. This \$2500 contribution will be matched with the remaining SCOA health funds of \$2000 and this, in turn, will be matched by the AKC to fund approved projects. I have been informed of two applications for grant funding that include Salukis.

1. Cystinuria. Scientists at the U of PA School of Veterinary Medicine have discovered a genetic defect that causes cystinuria in Newfoundland dogs. Cystinuria is an inherited disorder characterized by stones in the kidney, urethra and bladder. I have not heard of this being a problem in Salukis. A survey would help to identify if this is prevalent in Salukis and, therefore, would benefit Salukis if funded.

2. Bone mineral densitometry. Summary by Dr. Rosenstein: Broken bones are common injuries in all types of dogs. When a dog is in a traumatic accident, even a healthy bone may break, but sometimes bones break without such trauma.

The ability of a bone to resist breaking is a measure of its strength, which depends on its size and density. This project will examine healthy dogs from six breeds of various body sizes (Italian Greyhound, Saluki, Rhodesian Ridgeback, Welsh Corgi, German Wirehaired Pointer, and Scottish Deerhound) to look for differences in bone size and density. Athletic dogs will be compared to inactive dogs to determine if exercise strengthens the bones. Measurements of several bones will be done with radiographs and CAT scans in 120 dogs. The results of this project will determine if small or fine-boned dogs normally have weaker bones than larger dogs and whether or not exercise strengthens dogs' bones.

Dr. Rosenstein has initiated preliminary studies and two Salukis have been scanned. Supporting this study would document whether Salukis do have increased bone density and show the effects of exercise. The CHF tends to fund DNA studies and, if this project is not approved for their funding, I would like to see SHR make a direct contribution.

- **Saluki heart pathology**

In a continuation of this study, 54 Saluki hearts have now been harvested and examined to determine both gross and microscopic pathology. This will help characterize our "normal" group, as well as determine the incidence of various heart problems and the causes of sudden death in Salukis.

- **Viral contributions to heart disease in Salukis**

A section from each harvested heart has been sent to Dr. Gerlach who is examining the DNA to look for

viral contributions to heart disease. This initial study, and a continuation, have been funded by the CHF through the SCOA contributions.

- **Autoimmune project**

Twenty Saluki DNA samples that were banked have been sent to a researcher in the UK interested in including the Saluki as one of 40 breeds being screened for markers for autoimmune conditions.

- **Saluki DNA**

DNA samples have been banked from previous Saluki CBC and thyroid projects. I propose to continue collecting Saluki samples to harvest and store the DNA. Then, as markers for genetic diseases or conditions are discovered, these samples can be examined. The samples must be paired with pedigrees so genetic studies can be done.

- **Saluki tumor investigation**

I find the incidence of cancer in Salukis alarming. I have been meeting with researchers that are analyzing DNA from dogs with mammary gland cancers. We are exploring setting up a study to compare DNA from blood samples and DNA from tumor samples in Salukis. They have suggested that I collect tumor sections and bank them for future study.

- **Saluki health survey**

A survey of health problems in Salukis needs to be done. This would help focus investigations into projects that would be of most benefit to the breed.

If you are interested in supporting, or having your Salukis participate in any of these projects, you can contact me at Salukihealth@aol.com, or 1629 Meech Rd., Williamston, MI 48895.

Current studies have shown that the majority of hypothyroidism in dogs is the end result of inherited autoimmune disease.

Information on thyroid conditions is available at various websites.

"Canine hypothyroidism: Prevalence of positive TgAA in laboratory samples from Salukis" is available at:
www.saluki.org/committees/health.htm

Information on the Canine Thyroid Registry is available at:
www.ahdl.msu.edu/ahdl/ctr.htm

"Interpreting thyroid test results" is available at:
www.gazehound.com/SalukiHealth/thyroid.html