

NATIONAL PARENT CLUB HEALTH CONFERENCE

The AKC Canine Health Foundation held its 2013 National Parent Club Canine Health Conference August 9-11 in St. Louis, Missouri. Leading specialists from around the country presented the latest research and updates on an array of canine health issues such as epilepsy, cancer, cardiomyopathy, cataracts, bloat, nutrition and genetic testing.

Trying to cover all presentations here would amount to writing a book, but AKC CHF will be posting presentations as webinars on its site, and you can “virtually” be there listening to a speaker. We will send alerts as these webinars become available.

Exciting Advances in Treating Soft-Tissue Injuries

One webinar already posted previews the fascinating conference talk by Sherman Canapp, DVM, CCRT, DACVSMR, Chief of Staff at the Veterinary Orthopedic & Sports Medicine Group in Annapolis Junction, Maryland. Dr. Canapp discussed the amazing progress made in the emerging field of regenerative medicine therapy using stem cells and platelet rich plasma to augment medical and physical therapy in dogs with soft-tissue orthopedic injuries. The 40-minute webinar includes stories and video of several dogs whose lives were drastically improved through this exciting and innovative treatment. You can find “Regenerative Medicine for Canine Orthopedic Conditions” at www.akcCHF.org/webinars.

The Genius of Dogs

The conference keynote was “The Genius of Dogs” by Brian Hare, PhD, Associate Professor of Evolutionary Anthropology at Duke University, whose recently published book with the same title discusses peer-reviewed scientific findings on canine intelligence. In the past 10 years, Dr. Hare pointed out, we have learned more about how dogs think (and their genius for getting along with humans) than in the last century. And no, Dr. Hare wouldn’t rank intelligence of breeds, because he said intelligence (in dogs and humans) has many different facets and scientists have yet to compile information on what he calls the “cognitive profile” of large numbers of individual dogs in different breeds. But researchers now have tools to address long unanswered questions about breed differences in cognition, with tests to evaluate the capacities of a dog in cognitive areas such as navigation, memory, inhibition, social learning, etc. and answer questions such as, “Are dogs capable of intentional deception?” or “Do dogs know what you know?” They are finding that individual dogs may vary widely in cognitive profile, and as they amass more data, they expect to see some general breed profiles as well. In addition to helping us understand more about canine and human minds, results of this research may have applications such as helping evaluate a dog for its fit with potential jobs such as therapy dog, military dog, search and rescue dog, and service dog.

Scientists already know that some cognitive abilities take the dog beyond wolves and even chimpanzees, Dr. Hale noted. Studies have shown that neither of these other two species understand a human point and gaze when, for example, they didn't see where the treat landed on the floor. We all know that dogs can. In another example, dogs and wolves both enjoy retrieving food treats from a box, time and again, until the person conducting the experiment places food in the box and securely seals it. Wolves will tear at that box for some time, trying in vain to open it. Most dogs, however, will assess the situation and quickly turn to the human with an expression that clearly says, "Hey, help me, fix this." Evidence suggests that these and some other canine capacities developed with domestication. For more on Dr. Hale's work and to assess your dog's cognition profile, see www.dognition.com.

Educating Puppy's New Family About Bloat

One point made several times during conference sessions bears repeating for our Standard Poodle breeders: **EDUCATE YOUR PUPPY BUYERS ABOUT BLOAT!** Speaker Elizabeth Rozanski, DVM, DACVIM, DACVECC, Director of Critical Care at the Cummings School of Veterinary Medicine at Tufts, stressed that she and other emergency veterinarians often see dogs in bloat/torsion (GDV) whose families had never heard of bloat, had no idea what was wrong and may have delayed taking action. Unless tissue death is too advanced by the time the dog gets IV fluid and surgery (and quite a lot of dead stomach can be removed successfully), the vast majority of dogs with bloat/torsion can be saved and fully recover.

Bloat Initiative Update

Conference experts noted that gastropexy remains the only proven preventive measure for bloat with torsion until more is known about the causes of GDV. The AKCCHF will soon award five grants under the Bloat Initiative announced this year and supported with funding by a number of parent clubs and other organizations, including Versatility in Poodles and the PCA Foundation. The Summer 2013 CHF publication Discoveries notes that, "These grants will delve deeply into the pathophysiology of bloat, including investigating the role of glucose levels and gastric emptying, the gastrointestinal microbiome and gastric dysrhythmia in the development of disease. Investigators have proposed to use cutting-edge techniques, and several will take a "multi-omics" approach with the hope of helping breeders make informed breeding decisions and mitigate the risk of bloat in their dogs."

Genetic Testing and Degenerative Myelopathy

The conference included the excellent presentation "Genetics 101 for Dog Breeders" by Danika Bannasch, DVM, PhD, of the UC-Davis School of Veterinary Medicine. At a conference breakout, Dr. Bannasch, Jerold Bell, DVM, of Tufts University, and other leading geneticists fielded questions about genetic diseases and DNA testing. One question reflected common confusion among breeders about the DNA test now available

for a mutation associated with Degenerative Myelopathy (DM): What does the test mean and how should breeders use it?

DM generally develops in older dogs and has been reported in a number of breeds (including Poodles, although uncommon). Since other problems may clinically resemble DM, the disease can only be diagnosed after death by microscopic examination of the spinal cord. For more info on DM, see www.offa.org/dnatesting/dm.html.

Researchers at the University of Missouri and the Broad Institute found that dogs with DM always have two copies of a certain gene mutation, and a DNA test for the mutation is available through OFA. However, panel geneticists stressed that having two copies of the mutated gene does NOT mean a dog is “affected” and will develop DM; it means a dog is “at risk” for the disease if the disorder is found in that breed. Evidence is mounting that other factors must be present for a dog to develop DM, such as other genes, epigenetics, and environmental influences. But these factors are yet unknown. The mutated gene associated with DM has been around for a long time. So far, it has been found in more than 100 breeds, with a very high incidence in some, including breeds with no reported cases of DM. More than 90 percent of Wire Fox Terriers, for example, have two copies of the mutated gene associated with DM, but DM has never been reported in Wire Fox Terriers. Panel members recommended using the DNA test if DM has been diagnosed in a dog’s close relatives, which suggests that other genetic factors may be more common in that line of dogs. Testing stud dogs may also prove useful, allowing breeders to factor results into breeding decisions for bitches from families with cases of DM.

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