

## **The Canine Epilepsy Project**

From the COA Health Committee

On Friday, June 24<sup>th</sup> from 8:00 to 10:00 a.m. at the Chinook Kennels in Wonalancet, NH, the COA will sponsor a free blood draw for all Chinook owners who would like to include their dogs in the Canine Epilepsy Project (CEP). Epilepsy is one of the most common neurologic diseases in dogs, and some studies estimate up to 4% of all dogs are affected. The CEP is an attempt to isolate the gene or genes associated with epilepsy through gene mapping. Currently, over 5,000 dogs from more than 50 breeds have provided samples to the CEP. This includes nearly 200 Chinooks.

Some Chinooks suffer from classic seizures. In addition, Chinooks suffer from what's been termed "Chinook seizures". As part of the CEP, researchers have been specifically studying "Chinook seizures" in an attempt to determine if the genes involved are the same or different than those involved in canine epilepsy. One theory is that "Chinook seizures" are more like a movement disorder in humans called paroxysmal dyskinesia.

Dr. Dennis O'Brien, DVM, from the University of Missouri is one of the lead researchers in the Canine Epilepsy Research Consortium. He has taken a special interest in Chinooks and the seizures they display. (See Dr. O'Brien's article on "Chinook seizures" at <http://www.canine-epilepsy.net/chinook/chinook.html>). We are thrilled that he will be our keynote speaker at a series of workshops to be held the day after the Specialty at the Chinook Kennels. He'll be speaking from 10:00 to 12:00. Dr. O'Brien will address the causes of epilepsy, the difference between a classic grand mal seizure and "Chinook seizures" and the promises and potential pitfalls of gene mapping.

As we're offering all Chinook owners an easy opportunity to participate in the CEP, we thought we should provide some basic answers to some questions you might have. If you'd like to find out more about the CEP generally, you can go to <http://www.canine-epilepsy.net/> If you cannot make the blood draw on June 24<sup>th</sup>, you can find all of the necessary submission forms through this link and can have your vet draw the blood (most vets will do this for free, as it's for research, not for testing).

***What if I don't want people to know that my dog is affected by seizures?*** Participation in the CEP is held in total confidence. No information that is provided by the owner will be disclosed to anyone. While information is collected about the family of your dog, this is to help the researchers do necessary gene mapping related to family sets. If a gene is located, the researchers will work on creating a test to determine if dogs have the gene. No dogs who participate in the Project will be identified as carriers of the gene.

***What if my dog is not affected by seizures? Should my dog still participate?*** The key to this Project is submission of entire family sets. While researchers are very interested in receiving samples from seizure-affected dogs, it is just as important for them to receive samples from the parents, siblings, half-siblings and off-spring of any affected dog. It is critical for researchers to be able to look at affected and unaffected family members to do

gene mapping. If you know your dog is directly related to a seizing dog, it is important to include your dog in the CEP.

***What if I just don't know if my dog is directly related to a seizure-affected dog?*** If you don't know if your dog has seizure-affected relatives, you can ask the breeder for more information. If the information is unavailable for whatever reason, it's better to include your dog than not to. Dr. O'Brien writes, "We're always happy to get more samples because sometimes we know of relationships that you won't because we keep all our information confidential. We would rather have a sample and not need it than the other way around."

***What happens to the genetic material I provide as part of the Project?*** The material and information you provide may be used to do mapping related to other genetic disorders in the breed. For instance, we may ask researchers to study inheritance issues related to cryptorchidism using these samples. Regardless of what additional research may be done using these samples, no personal information you provide about your dog will ever be released. The genetic material will not be used in research related to cloning.

We hope we've answered some of your preliminary questions. If you have more, come ask Dr. O'Brien your questions in person in June! If you can't make it, feel free to email your questions to our Health Committee Chairs Jess Maurer at [chinooks@adelphia.net](mailto:chinooks@adelphia.net) or Mary Berg Malkiel at [laughingmountain@comcast.net](mailto:laughingmountain@comcast.net) and they'll make sure to get all of your questions answered.

Remember, in the end, your participation in this or any other health study is voluntary. You need to feel completely comfortable with participating and understand the scope of the study. Please let us know if you have questions.