

AKC Canine Health Foundation Announces Funding for Epilepsy Study

-United States Australian Shepherd Association, United States Australian Shepherd Foundation, Australian Shepherd Health and Genetics Institute, Toby's Foundation and the English Springer Spaniel Field Trial Association Foundation all Partner to Contribute over \$50,000 in Support-

Raleigh, NC - The AKC Canine Health Foundation announces the funding of Grant 748, "SNP Association Mapping for Canine Epilepsy." Made possible through a unique partnership between several clubs and foundations, this important study will investigate the risk factors associated with epilepsy in Australian Shepherds and English Springer Spaniels with anticipated future applications in other breeds and eventually in humans. To date, the United States Australian Shepherd Association (USASA), the United States Australian Shepherd Foundation (USASF), the Australian Shepherd Health and Genetics Institute (ASHGI), Toby's Foundation and the English Springer Spaniel Field Trial Association Foundation (ESSFTA) have pledged over \$50,000 of the \$143,000 needed to support this important research.

Epilepsy is a serious, often inherited, seizure disorder affecting a large number of breeds. The variability in seizure types between breeds suggests that many different genes are likely to contribute to canine epilepsy. The canine genome project has recently provided researchers with thousands of single nucleotide polymorphisms (SNPs) that can be used as genetic markers for mapping studies. Made possible through funding from the AKC Canine Health Foundation, this technology has the potential to be much more powerful and efficient than the current marker technology currently in use for dogs. SNP technology allows use of unaffected and affected dogs instead of large multi-generational families.

USASA President Stevens Parr said, "Our vision is that future generations of Aussies will no longer suffer from epilepsy. Dr. Patterson's research is the next step in making that vision a reality."

The overall objectives of this project are to identify chromosomal regions associated with epilepsy in Australian Shepherds and English Springer Spaniels, as a start to identify the causative gene or genes, and to develop a marker test. Scientists in Dr. Ned Patterson's laboratory at the University of Minnesota College of Veterinary Medicine expect to identify an associated chromosome region or regions in these breeds, and to develop a screening genetic marker test. Future studies could then look in other breeds to see if they share the same genetic risk factor(s). If successful, this project would serve as excellent proof of the usefulness of this technology for epilepsy and lead to full - scale testing of other breeds in future studies with translational implications for human research as well.

Pamela Douglas, president of Toby's Foundation - the nonprofit dedicated to providing resources and support to aid in the fight against canine epilepsy - comments, "Affected dogs can appear 100% healthy and then suddenly they've fallen to the ground in a grand mal seizure. It's a viciously cruel disease - one whose time has come. Since the canine genome has been mapped, researchers are more effectively able to focus in on the chromosomal region. The timing and tools available have never been better to achieve the break through needed for a genetic marker test."

"The distinctive partnership between the USASA, the USASF, the ASHGI, ESSFTA, and Toby's Foundation has made the continuation of these important studies possible," says A. Duane Butherus, PhD, chair of the Canine Health Foundation Grants Committee. "The alliance proves the old adage that there is 'strength in numbers,' and makes the case for future partnerships between like-minded clubs."

"This is the culmination of a multi-year effort," notes C.A. Sharp, president of the Australian Shepherd Health and Genetics Institute.

"ASHGI is delighted to join Toby's Foundation, USASA, USASF and ESSFTAF in supporting this effort. Dr. Patterson and his team have been leaders in canine epilepsy research for many years; we are delighted to be supporting people of that caliber."

For more information on how you can donate to this important research or for more information regarding epilepsy studies funded by the AKC Canine Health Foundation, please visit their website at www.akcchf.org.

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Founded in 1995 by the American Kennel Club, the AKC Canine Health Foundation is the largest nonprofit worldwide to fund health research exclusively for canines. We work to raise the awareness and funds necessary to support non-invasive, innovative health research that helps dogs and their owners live longer and stronger. Through the financial support of the American Kennel Club, Nestle Purina PetCare Co. and the generosity of your donations - both large and small - we have allocated more than \$20 million to canine health research which will benefit all dogs.