



media *release*

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CAVALIER KING CHARLES SPANIELS TO BENEFIT FROM TWO NEW DNA HEALTH TESTS

**The Kennel Club Genetics Centre at the Animal Health Trust launches DNA tests
for dry eye and curly coat syndrome and episodic falling**

Scientists working in the Kennel Club Genetics Centre at the Animal Health Trust have identified the mutations responsible for causing dry eye and curly coat syndrome and episodic falling in Cavalier King Charles Spaniels (CKCS).

The two separate conditions cause trauma and distress not only for the dogs but also their owners.

Episodic falling is a neurological condition, induced by exercise, excitement or frustration, in which muscle tone increases. This means the dog is unable to relax its muscles, becomes rigid and falls over. Affected dogs usually start to demonstrate clinical signs before one year of age, with most cases having their first episode aged four to seven months.

Dry eye and curly coat, known scientifically as congenital keratoconjunctivitis sicca and ichthyosiform dermatosis, affects a dog's eyes and skin. Affected dogs produce no tears making their eyes incredibly sore. Their skin becomes very flaky and dry,

particularly around the foot, and this can make standing and walking difficult and painful. This syndrome appears to be a problem unique to CKCS and most dogs diagnosed with the condition are put to sleep.

Claudia Hartley, Head of Small Animal Ophthalmology, at the AHT, said: "I have treated, and tried to help, many dogs with this horrible condition. We've been working hard to try to find alternative treatment solutions. I've always hoped that the work we've been doing would eventually identify the cause of this painful and blinding disease. We now have a real chance to eradicate dry eye and curly coat which is fantastic news for anyone involved with Cavalier King Charles Spaniels."

The mutations were identified by PhD student, Oliver Forman, who analysed over five million letters of DNA from CKCS affected with these two diseases. By identifying the genetic mutations responsible for causing these conditions, the AHT has been able to develop DNA tests to identify carriers. These new DNA tests will be available from Monday 18 April 2011.

Cathryn Mellersh, Head of Canine Genetics at the Animal Health Trust, said: "To date there has been no long-term effective treatment for either dry eye and curly coat syndrome or episodic falling so the development of the DNA tests is an important breakthrough for breeders, and owners, of Cavalier King Charles Spaniels."

Mike Townsend, Chairman of the Kennel Club Charitable Trust which helps to fund the Canine Genetics Centre's work, said: "Every dog deserves to lead a healthy, happy life and this breakthrough will make a real difference to the future health of Cavalier King Charles Spaniels. Our knowledge about inherited diseases in dogs is growing every day and by passing knowledge about the importance of health testing onto breeders and puppy buyers we can help to ensure that the healthiest genes are passed down through the generations."

The episodic falling study was undertaken in collaboration with Professor Jacques Penderis from the University of Glasgow School of Veterinary Medicine, who diagnosed many of the dogs that contributed to the study.

The support of the Kennel Club Charitable Trust, The WALTHAM Foundation, the Tezmae Charitable Trust, along with several breed clubs and individuals who have contributed samples and information, has been invaluable in the development of the DNA tests.

Cathryn added: "As with all inherited disease, it's important that breeders are armed with the facts and that they still continue to use carrier dogs in their breeding programmes. Breeding a carrier with a non-carrier will not produce affected puppies, however breeding just clear dogs with other clear dogs could reduce the gene pool within the breed and this could lead to other health problems in the future."

Owners and breeders can access the DNA tests for dry eye and curly coat and episodic falling, from 18 April 2011, through the AHT's online DNA testing webshop at: <http://www.ahtdnatesting.co.uk/>

The Kennel Club Charitable Trust has committed £1.2 million to the Kennel Club Genetics Centre at the AHT, which will undertake research into inherited diseases, facilitating the creation of further diagnostic tests which will improve the health and welfare of generations of dogs.

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For further information and/or interviews, please contact:

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Photographs:

A photo of a Cavalier King Charles Spaniel is available on request from Farrah Stevens at the AHT press office.

Additional notes:

- The Animal Health Trust is an independent charity, employing over 200 scientists, vets and support workers. It aims to improve the health and welfare of horses, dogs and cats through research. It also provides specialist referral services and continuing education to vets. Visit the website at www.aht.org.uk
- The Kennel Club Genetics Centre is led by Dr Cathryn Mellersh and Dr Sarah Blott, two of the AHT's genetics experts. Both have pioneered screening tests to identify a dog's genetic status and minimise the risk of producing affected puppies
- The Kennel Club Charitable Trust has donated over £5m since its formation to help fund research into dog diseases and to canine support and welfare charities. Money made by the Kennel Club, through events such as the Crufts, goes back into the Kennel Club Charitable Trust and into education and health initiatives to help all dogs
- Through Kennel Club Charitable Trust funding, the AHT has also launched DNA tests for primary lens luxation in 17 breeds of dog and progressive retinal atrophy (PRA) in Golden Retrievers, late-onset PRA (LOPRA) in Gordon Setters, and hereditary cataract in Australian Shepherd dogs, Staffordshire Bull Terriers and Boston Terriers. It is currently also investigating the genetics of a wide range of inherited conditions, including idiopathic epilepsy in Border Collies and Hereditary Cataract and Progressive Retinal Atrophy in many breeds, including American Cocker Spaniels and Tibetan Spaniels. The result of this will, hopefully, be DNA screening tests that breeders can use to control or even eliminate these debilitating diseases
- The WALTHAM Foundation is dedicated to pushing forward the frontiers of humane scientific research into the nutrition and healthy longevity of companion animals. Since its inception in 2001, the WALTHAM Foundation has received more than 500 proposals, funded projects in 20 countries, and provided over \$500,000 towards research that directly improves the health and welfare of our companion animals worldwide.

