

## The Bearded Collie Joint Breed Liaison Committee



# Canine Addison's Disease Research Project

**Important update on the project led by Professor Brian Catchpole for which the Bearded Collie Joint Breed Liaison Committee ran the successful GoFundme campaign!**

**Research starting September 2016**

**We still need your help....now that the RVC are starting to collect blood samples for the project!**

Please alert as many people as you can to this new research, and ask them to inform their vets of this new project. The more vets we have on board the more samples will be included in the study.

A dog owner doesn't have to have a dog with Addison's to give this information to their vet. If nothing else, it will raise the awareness of Addison's disease among vets in general practice and that may lead to an increase in successful diagnosis which will save lives.

If you do have a dog with Addison's please go to the link given below and download the information sheet and sample submission forms and take them with you next time you go to your vet for a blood test with your dog. Please ask your vet to take a little extra blood and send it off with the forms to the RVC for the project. Most vets are happy to do this at little or no cost for a research project.

Samples from newly or recently diagnosed dogs are most valuable but all samples from dogs with Addison's will be useful.

**The following is taken from the Royal Veterinary College website:**

### *Serological testing for canine Addison's disease*

*Addison's disease (hypoadrenocorticism) is an autoimmune condition that occurs in dogs when the immune system attacks and destroys the adrenal gland, leading to a deficiency of steroid hormones.*

*We are interested in the genetics and autoimmune response in canine Addison's disease and have identified autoantibodies in the blood that react to proteins in the adrenal gland. We are interested in carrying out further research into this disease, to measure these autoantibodies, to see whether they can be used as part of diagnostic testing and potentially to identify dogs that have an autoimmune reaction, before they develop clinical signs. We are keen to recruit dogs that are undergoing blood sampling as part of diagnostic testing for Addison's disease or who are being monitored for their response to steroid replacement therapy.*

*The Owner Information sheet and the Sample Submission form can be down loaded from this link. <http://www.rvc.ac.uk/about/our-people/brian-catchpole#tab-research>*

## **More information about Addison's:**

Addison's disease is a serious, and an increasing genetic problem in some pedigree breeds and occasionally cross breeds of dog. Many dogs who, despite displaying well documented waxing and waning clinical signs and distinguishing blood results of Addison's disease, are not diagnosed by their vet and have subsequently died. Unfortunately, these dogs are often young to middle age and many of these deaths could have been avoided.

The diagnosis of Addison's disease is not complicated but some vets can have a reluctance to even consider it in their differential diagnoses. Addison's disease, known as 'The Great Pretender', has this notorious label because Addisonian dogs generally present with a wide variety of vague, clinical signs and this can result in a misdiagnosis of: renal failure, heart failure, gastrointestinal disease, acute pancreatitis, liver disease and even autoimmune haemolytic anaemia (AIHA) and immune mediated thrombocytopenia (IMTP).

Many vets say "It won't be Addison's as we never see it". Unless the vet is looking for Addison's disease, it will very often not be diagnosed. Addison's disease is generally progressive although rarely, sudden onset can occur, and most dogs are presented to their vet at least three times in the 6+ months prior to diagnosis, and many are in an Addisonian crisis before it is identified. An adrenal crisis is a true, life threatening emergency and immediate, supportive care is essential if the dog is to survive.

Addison's disease can only occur in dogs with a genetic predisposition. In the absence of a DNA test for Addison's disease, the development of a canine adrenal autoantibody test is even more relevant and vitally important to so many young dogs who are yet to develop this disease.

An adrenal autoantibody test will be an invaluable diagnostic tool which will greatly enhance the potential of an early diagnosis of Addison's disease. The development of this test will not only help to achieve a diagnosis, it also has the potential to avert an adrenal crisis and the inevitable life threatening outcome. The prognosis for that young dog then changes from grave to excellent! It will also have the added benefit of raising awareness of Addison's disease among vets in general practice and this can only be regarded as a positive step forward.

The detection of adrenal autoantibodies in the diagnosis of human Addison's disease is well documented; and recently the P450scc enzyme has been identified in a number of dogs with hypoadrenocorticism, so the development of an effective serology test for adrenal autoantibodies may also be the first potential screening test for dogs from breeds considered to be at risk.