

Animal Health Trust meeting 9/11/19

Dr Sally Ricketts, Canine Geneticist, and Chris Jenkins, Genetics research assistant, from the Animal Health Trust (AHT) gave interesting talks to a small group of Norwich Terrier owners & breeders at Weedon on 9th November. This was preceded by an excellent lunch prepared by Mary McLaughlin. We were joined by the attendees of the Judging Seminar which had taken place that morning. Lesley Crawley had given her usual in depth lecture & practical demonstration of the breed with the aid of no fewer than three of her excellent champions! The candidates were happy to relax & enjoy lunch having taken the first multiple choice exam on the breed standard which had been compiled by Barry Day using a selection of questions devised by Eileen Needham.

Dr Ricketts gave an overall summary of the work of the Complex Disease Research carried out at the AHT. The proposal is to carry out a large Genome-wide association study (GWAS) to attempt to identify specific regions of DNA that might be associated with 'Paroxysmal Dyskinesia' (formerly known as 'Canine Epileptiform Cramping Syndrome') in Norwich Terriers.

Chris Jenkins talked more specifically about the studies that have been carried out on the breed so far since setting up the project about 16 years ago. Scientific advances have resulted in vastly reducing the time in which any particular DNA sample can be analysed & genes identified & compared to others. So far, a GWAS of 24 affected & 24 unaffected dogs aged over 6 years has been carried out. Unfortunately, the results were inconclusive with no specific regions of DNA being identified as associated with Paroxysmal Dyskinesia. The likelihood is that a complex mode of inheritance is involved.

The next plan is to enlarge the study to include 60 unaffected dogs of over 6 years old, matched with 60 affected dogs. In collaboration with Dr. Jeff Schoenbeck at Edinburgh University, who is sharing data from over 200 samples previously used to investigate the Upper Airway Syndrome, plus ever more sophisticated analytical techniques they hope to take the investigation forward.

The aim is that one day in the near future breeders will be able to have the DNA of their potential breeding dogs & bitches tested for indications of this problem. With this knowledge it should in theory be possible to avoid ever producing an affected dog. The incidence of this syndrome has already been reduced markedly by careful & selective breeding.

Sally & Chris were accompanied by Donna Foster, study sample coordinator, who was able to supply DNA sample collection packs & was on standby to take samples from any dogs present. Sadly there were no dogs attending specifically to be sampled but some people took packs home promising to use them!!

The AHT presentations can be viewed on www.norwichterrierclub.co.uk go to 'Health and Welfare' then to Paroxysmal Dyskinesia to find them.