Health

The canine genome was first mapped entirely in 2005. This information has since evolved to studies of breed origins, archeology and genetic diseases. Through domestication and selective breeding, the dog has evolved into the most diverse species in existence ranging from a 4 lb Chihuahua to a 180 lb Mastiff.

Over the last 15 years the availability of this information, computer analysis and breeder participation has helped identify markers for more than 100 genetic diseases. The Norfolk terrier club supplied genetic material and cardiac ultrasound information on 100 affected and normal dogs for one such study but more data will be needed to find this marker. Mitral valve disease is the most common heart disease in all dogs as well as humans so there is much incentive for this research to produce an answer.

Commercial laboratories offering canine genetic testing have really proliferated in recent years making testing both more affordable and simpler to perform. A cheek swab can be collected at home and give a huge amount of information including DNA individual analysis. One company will provide 160 different tests and DNA banking for less than 130!

There are several tests that are applicable to Norfolk Terriers that we know of out of this list and more could be identified if we looked further.

The first is a test for Primary Lens Luxation. This is a simple dominant/recessive trait. Carriers are normal and if bred to a clear individual can produce clear pups. PLL is common in terriers and causes the lens to tilt forward in the eye and may lead to glaucoma and blindness.

Next is a condition called Icthyosis seen as well in Golden Retrievers. There is an excellent article about Icthyosis in Norfolks in the ANTA library. This condition causes chronic skin conditions with scaly skin and itchiness. Also can be screened easily because this is a simple dominant/recessive trait.

As a breeder it is simple to swab our pups and this information can be processed and used to make decisions on breeding for the future. The cost is minimal, less than a weekend of entries...Information is always useful. While not all of it is going to be used in this generation, storing this genetic information could be very useful for future research and is stored indefinitely in many labs. Be your own geneticist and start testing!🐾

Submitted by Marian Shaw