

Dear Welsh Terrier Friend,

Now is the time to make a huge effort for our beloved breed and make sure it has a bright future tomorrow! Academy Award winning professor Hannes Lohi is conducting DNA Research in Dogs at the University of Helsinki in Finland.

Professor Lohi and his group have started to collect pedigrees and DNA samples from many breeds with a variety of diseases such as epilepsy, autoimmune diseases, cancers, vision disorders and behavioral problems. They have collected about 20.000 DNA samples from 240 breeds and have already found new disease genes and loci in many disorders. These discoveries will help to develop DNA markers for improved breeding practices to eliminate genetic diseases and at the same time to maintain the genetic diversity of the breeds.

Professor Lohi's group is part of the new large EU-funded LUPA project for canine genomics ([www.eurolupa.org](http://www.eurolupa.org)) and collaborates with many other international research groups working with canine genetic disorders.

Read more about his research generally:

**in English**

[http://www.koirangeenit.fi/index.php?option=com\\_content&task=blogcategory&id=18&Itemid=44](http://www.koirangeenit.fi/index.php?option=com_content&task=blogcategory&id=18&Itemid=44)

**på Svenska:**

[http://www.koirangeenit.fi/index.php?option=com\\_content&task=view&id=33&Itemid=42](http://www.koirangeenit.fi/index.php?option=com_content&task=view&id=33&Itemid=42)

The Finnish Welsh Terrier Club has contacted professor Lohi's group to include our breed as a part of his research. We now have a great chance to get more information about diseases and try to solve at least some of inherited problems in our beloved breed! The key point here is that we need to collect enough samples from Welsh Terriers for different research projects. Both affected and healthy dogs are needed. The research in the Welsh Terrier includes collaborations with other Universities. The University of Missouri has already Glaucoma and Epilepsy researches going in the Welsh Terriers and Professor Lohi will be part of that research.

#### **The Welsh Terrier Research**

As the Welsh Terrier is a small breed in number, it is essential to have samples from affected dogs Worldwide. It is important for the success of the project that the owners and breeders participate actively with the research group to help them to collect enough DNA samples, pedigree information and clinical data to ensure necessary resources for disease gene identification. The main purpose is to identify genes behind certain conditions known in the Welsh Terrier and to develop a gene test to identify affected individuals, healthy carriers as well the dogs with normal genes. In future this will provide as large a population of individuals for breeding as possible and help to keep the genetical variation as large as possible.

Disorders of interest:

**Allergies** (chronic symptoms)

**Epilepsy** (also a separate all breed study)

**Glaucoma/ lens luxation**

**Legg Calve Perthes disease**

**Megaesophagus**

**Severe mental problems or abnormalities**

We kindly ask you to show your responsibility for the future of the healthier Welsh and take part in the Research right now! This demands huge efforts from all Welsh Terrier Friends, especially breeders, but will be worth it!

#### **Samples**

Blood samples from the affected dogs and as many of their healthy siblings as possible are needed and the samples from the parents also. The more samples we collect, the faster Professor Lohi and his Group can proceed and have results. Name of the dog and information about the owner will be handled confidentially. See information for the sample collection:

[http://www.koirangeenit.fi/index.php?option=com\\_content&task=view&id=37&Itemid=44](http://www.koirangeenit.fi/index.php?option=com_content&task=view&id=37&Itemid=44) (eng)

[http://www.koirangeenit.fi/index.php?option=com\\_content&task=view&id=33&Itemid=42](http://www.koirangeenit.fi/index.php?option=com_content&task=view&id=33&Itemid=42) (sve)

#### **Health information**

To guarantee that the results of this Research will give accurate information it is essential to keep health information about each dog updated. If donating a sample, remember to update changes in condition of your dog. It can be done with the same questionnaire used for the original donation.

#### **Funding**

Although the research group is responsible for the major funding of the projects, all help is welcome! Please contact Hannes Lohi directly if you or your Club are interested in supporting this Research (hannes.lohi@helsinki.fi).

Yours,

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The Welsh Terrier Club of Finland (www.walesinterrieri.fi)

Breeding Committee

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