

## Novel epilepsy gene in Rhodesian Ridgebacks - more samples needed

Professor Hannes Lohi's Canine Genetics Group in collaboration with professor A. Fischer (Munich, Germany) have discovered a novel gene for juvenile myoclonic epilepsy in the Rhodesian Ridgeback breed.

Rhodesian Ridgebacks (RR) suffer from a form of juvenile onset (1,5-18 months) epilepsy that is characterized by strong muscle jerks or twitches. The seizures usually happen at rest but can occur at other times as well. Some dogs also develop generalized or absence seizures. The severity of the symptoms and the dogs' response to treatment varies.

So far we have tested ~300 RRs for the mutation. **The carrier frequency is ~15%** for a recessive mutation. Only the dogs that inherit the mutation from both their parents suffer from the juvenile onset myoclonic epilepsy. The carrier dogs do not show any signs of this myoclonic epilepsy.

To further analyze the prevalence of the mutation in the breed and to identify genetically affected dogs for additional clinical studies we hope to recruit more RR dogs for free genetic testing. We ask also the owners of epileptic RRs to fill in our epilepsy questionnaire. All owners who have sent blood samples before 31.5.2016 will get a free gene test. Test results will be informed as soon as possible but latest 15.7.2016.

Click here for instructions on how to send us a blood sample and for the epilepsy questionnaire.

Any questions can be addressed to PhD student Riika Sarviaho (riika.sarviaho(at)helsinki.fi).

You can find more general information about our genetic research here: www.koirangeenit.fi.