

HEALTH AND GENETICS REPORT

Written by Jane Folkman, Chair of the Health and Genetics Committee

The last comprehensive HGC update was provided in the spring issue of Quackers. We continue to work with the Toller community here in the US and around the world to assist with and report on research involving Tollers. If you hear of a Toller with a health issue or genetic concern, please let us know so we can urge you to participate in Toller related research.

Cleft Palate in Tollers – NEW STUDY

Claire Wade and Danika Bannasch are currently collecting samples for a genetic study of cleft palate in Tollers. They strongly suspect this is inherited as an autosomal recessive trait similar to the recent finding in the Brittany Spaniel. They are hoping to get samples from 10 hard cleft pups before they approach the funding agencies to support their research. At this time they have 8 hard cleft samples. They have had wonderful cooperation so far, and are so close to their target that it would be great to get a few more affected samples so the research can begin. Where possible they would also like to get DNA from healthy littermates of the cleft pups.

Claire and her fellow researchers from the Broad Institute in Boston, MA showed that as few as 10 affected and 10 control samples from a single breed are able to identify the genetic cause of a fully penetrant autosomal recessive trait. They would need only 10 affected samples from different pedigrees to begin to map the gene using the genotyping array.

This study is in the preparatory stages and Claire and Danika need your help to get the samples soon. They would also appreciate soft-cleft samples and samples from their littermates to use in a follow-up.

Danika is taking delivery of samples to her laboratory at UC Davis. Nili Karmi will be the person responsible for the samples and you can email her at nkarmi@ucdavis.edu.

This study will be a joint study between Danika Bannasch's lab and Claire Wade's new lab in the School of Veterinary Sciences at the University of Sydney in Australia.

As a side note, there has been no thorough exploration of palate morphology in the Tollers so far, so if you have a dog that is being anaesthetized for other purposes it would be great if you could ask your veterinarian to take a digital photo of the back edge of the palate for us (You will probably have to provide the camera). It is nearly impossible to view this in a dog that is awake.

Addison's disease Study at the NIH – ONGOING STUDY (Contact Update 08/09)

Dr. Elaine Ostrander and her research team are continuing to research Addison's disease in Tollers. They have had a change in staffing and the current samples manager is now Donna Viglietti. If you have a Toller with Addison's PLEASE contact Donna for a samples kit to participate in this important study.

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Any owner wishing to take part will be asked to complete a brief consent form, blood sample and pedigree. All genetic information regarding your dog as well as contact information will remain confidential. Should you need more information contact Jane Folkman at JaneTolls@aol.com

Addison's Study at UC Davis – ONGOING STUDY

Researchers at the School of Veterinary Medicine at UC Davis are continuing to investigate Addison's disease in Tollers. DNA samples and health information from both affected and unaffected Tollers are still being accepted, as are health updates for dogs that have already sent samples. It is vital to collect as many samples as possible so that the search for a genetic cause is not limited by too few individuals. Thank you very much to everyone who has provided information and DNA samples, this project would certainly not be possible without your assistance. If you have any questions or would like to participate, please see online information at <http://faculty.vetmed.ucdavis.edu/faculty/dlbannasch/lab/index.htm> or contact Dr. Hughes at amhughes@ucdavis.edu (530) 752-1046 or Jane Folkman at JaneTolls@aol.com.

Hemolife Thyroid Study – ONGOING STUDY

This is an ongoing pilot study to investigate thyroid health and disease, and hopefully identify a gene marker for autoimmune thyroiditis in Tollers. The thyroid function study is being conducted by Dr. Jean Dodds whereas the marker investigation is being conducted by Dr. Lorna Kennedy from the UK. Discounts are given in both studies on complete thyroid panel screens and results are reported back to owners and attending vets.

Researchers recommend the need to actively screen Toller breeding stock as a result since autoimmune endocrine disorders have a heritable basis. For more information about this study please contact Deena Mottola at mottola@comcast.net or Jane Folkman at JaneTolls@aol.com

MSU Thyroid/Addison's Study – COMPLETED

Dr. Marcus Rick is no longer at Michigan State University and this study is no longer collecting samples for the MSU Thyroid/Addison's research.