



# CONFERENCE 2012, Cairns, Australia

## Dog Genetics and Genomics

**STANDING COMMITTEES / WORKSHOPS**      Information will be posted online

**Organised by a standing committee**       **yes**       **no**

**Date and meeting time: 19 July 2012, 9 AM to 12:30 PM**

**Chair, name and contact email: Dr. Kathryn Graves ktgraves@uky.edu**

**Agenda / programme attached (separate attachment)**

**Number of participants at meeting: 44**

**Summary of the meeting including votes, decisions taken and plans for future conferences**

**(See separate attachment)**

### **Committee members (see attached)**

**Chair**      **term of service**  
**E mail address:**

**Other members**      **term of service:**

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# Program for ISAG 2012 Dog Genetics and Genomics Workshop

Chair: Kathryn T. Graves, University of Kentucky

Opening remarks: Kathryn Graves

9:05 In remembrance of Alan Wilton: Barbara Zangerl, University of Pennsylvania

9:15 Featured Presentation (45-60 minutes): "A pilot study of the genetic basis of separation-related stress disorder in dogs"

Claire Wade, University of Sydney

Short presentations (15-20 minutes):

10 "Genome-wide association study for cryptorchidism in dogs"\*  
Max Rothschild, Iowa State University

*\*provided there is no conflict with the pig genomics or developing countries workshops*

10:15 "Pigmentary chorioretinopathy: A novel disease in Chinese Crested dogs"  
Tomas Bergström, Swedish University of Agricultural Sciences

11:00 BREAK  
"Genetic analysis of hereditary nasal parakeratosis (HNPK) in Labrador Retrievers"  
Tosso Leeb, University of Bern

11:15 "Genome-wide association mapping identifies several major susceptibility loci for Canine Lymphocytic Thyroiditis"  
Katarina Sundberg, Swedish University of Agricultural Sciences

## Cat Workshop

Opening remarks: Leslie Lyons

11:30 "Three Burmese cat specific diseases identified by genome-wide association studies"  
Leslie Lyons, University of California - Davis

11:45 "Pedigree of Abyssinian cats with Amyloidosis and polymorphism of SAA gene in several feline breeds"  
Maria Longeri – University of Milan

Discussion for vote:

Would the group be interested in adding cats to the dog workshop, leading to a renaming as "Companion Animal Genetics and Genomics"

## REPORT OF DOG GENETICS AND GENOMICS WORKSHOP

ACTING CHAIR: KATHRYN T. GRAVES

19 July 2012 ISAG Meeting CAIRNS, Queensland , Australia

The workshop was called to order at 9:01 AM by the acting chair Kathryn Graves. It was announced this would be a combined dog/cat workshop but a vote would be taken at the end to officially create a combined committee/workshop. After opening remarks, Dr. Barbara Zangerl (University of Pennsylvania) gave a brief presentation in memory of Dr. Alan Wilton, former Chair of the dog workshop, who passed away this past year. She then invited others to share their memories of Alan and several people did so.

Dr. Claire Wade, University of Sydney, gave the featured presentation entitled "A Pilot Study of the Genetic Basis of Separation-related Stress (SRS) Disorder in Dogs." She described approaches to looking for the genetic basis of this complex behavioral trait in Golden and Labrador Retrievers. A preliminary GWAS indicated significant regions of interest on chromosome 15 and chromosome 28 within breeds and chromosome 12 across breeds.

Four short canine poster presentations followed. The first was given by Dr. Max Rothschild of the University of Iowa entitled "Genome-wide association study for cryptorchidism in dogs" describing the project of major author Xia Zhao. The study, performed using Siberian Huskies and Chinook, indicated possible regions of interest on chromosomes 2, 5, 22 and X.

The second talk was given by Dr. Tomas Bergström, Swedish University of Agricultural Sciences, on "Pigmentary Chorioretinopathy: A novel disease in Chinese Crested Dogs". The incidence of this retinal degenerative condition has been noted with the increased popularity of this breed. Potential regions of interest were identified on chromosome 5 and chromosome 8.

Break from 10:30-11:00.

The third presentation was on "Genetic analysis of Hereditary Nasal Parakeratosis (HNPK) of Labrador Retrievers" given by Dr. Tosso Leeb, University of Bern. This disorder presents as an autosomal recessive. A missense mutation in the SUV39H2 gene appears cause loss of function of the protein. An explanation as to how the mutation might cause the mutant phenotype was given.

The final talk of the canine portion of the workshop was given by Katarina Sundberg, Swedish University of Agricultural Sciences, on "Genome-wide association mapping identifies several major susceptibility loci for Canine Lymphocytic Thyroiditis". The study was performed in Giant Schnauzers which have a higher incidence of this disorder compared to many other breeds. She indicated that both susceptible and protective DLA haplotypes had been identified, and that in addition, GWAS had indicated other loci might exist on chromosomes 11 and X.

This concluded the dog portion of the workshop. Dr. Leslie Lyons, University of California, Davis, introduced her speakers for the cat segment of the workshop.

Bianca Haase of the University of Sydney spoke about the Scottish Fold breed of cat and the occurrence of a debilitating osteochondrodysplasia that appears to segregate with the ear fold mutation, but varies in its severity.

Maria Longeri of the University of Milan followed, and gave a presentation on amyloidosis in Abyssinian and Siamese cats and how difficult it has been to identify the genetic basis of this condition.

A short business meeting followed, where a motion was made (Leslie Lyons) and seconded (Claire Wade) to combine the dog and cat genetics workshops into a single committee/workshop called the Companion Animal Genetics and Genomics Committee/Workshop. Leslie Lyons and Tomas Bergström were named as co-chairs.

Therefore the new combined committee is:

Leslie Lyons (co-chair)

Tomas Bergström (co-chair)

Kim Summers

Kathryn Graves

Barbara Zangerl

Olga Francino Morti.

There were 44 delegates in attendance.