

# **Companion Animal Genetics and Genomics**

Organised by a Standing Committee: YES NO

## **Meeting information**

Date: July 29, 2021

Time: 3:00-5:00pm CDT

Number of participants: 80-90

### Chair

Name: Heather J. Huson

Affiliation: Cornell University

Contact email: hjh3@cornell.edu

### **Co-Chair (optional)**

Name: Jeff Schoenebeck

Affiliation: Roslin Institute and Royal (Dick) School of Veterinary Medicine

Contact email: jeff.schoenebeck@roslin.edu.ac.uk



# Agenda

Companion Animal Genetics and Genomics Workshop (orals) Chair(s): Heather Jay Huson, Cornell University Location: Live 1 Date & Time: Thursday, July 29, 3:00 PM - 5:00 PM						
3:00 PM	85514	ROS_Cfam_1.0: A High-Quality, <i>De Novo</i> Assembly of a Male Labrador Retriever.  L Eory, W Zhang, DM Ozdemir, EL Clark, AL Archibald, and JJ Schoenebeck*, <i>The Roslin Institute and Royal (Dick) School of Veterinary Studies</i> , <i>Midlothian</i> , <i>UK</i> .				
3:15 PM	85513	Genome-wide association studies identify novel QTL for canine health traits.  Heather J. Huson* <sup>1</sup> , Dolores M. Holle <sup>2</sup> , Ariella Walker <sup>1</sup> , Nicole Anclade <sup>1</sup> , and Katy M. Evans <sup>2</sup> , <sup>1</sup> Department of Animal Science, Cornell University, Ithaca, NY, USA, <sup>2</sup> The Seeing Eye, Inc, Morristown, NJ, USA.				
3:30 PM	85512	ABHD5 frameshift deletion in Golden Retrievers with ichthyosis.  S. Kiener* <sup>1,2</sup> , D. J. Wiener³, K. Hopke⁴, A. B. Diesel⁴, V. Jagannathan¹, E. A. Mauldin⁵, M. L. Casal⁵, and T. Leeb¹,², ¹Institute of Genetics, Vetsuisse Faculty, University of Bern, 3001 Bern, Switzerland, ²Dermfocus, University of Bern, 3001 Bern, Switzerland, ³Department of Veterinary Pathobiology, Texas A&M College of Veterinary Medicine and Biomedical Sciences, College Station, TX 77843-4467, USA, ⁴Department of Small Animal Clinical Sciences, Texas A&M College of Veterinary Medicine and Biomedical Sciences, College Station, TX 77843-4474, USA, ⁵University of Pennsylvania, School of Veterinary Medicine, Philadelphia, PA 19104, USA.				
3:45 PM	85167	A genome-wide association study of hypertrophic cardiomyopathy susceptibility in cats.  J. Raffle*1, J.N. Matos1, D.J. Connolly1, V.L. Fuentes1, and A. Psifidi1, 1  Royal Veterinary College, London, UK.				
4:00 PM	85456	Canine Y chromosome features uncovered by long-read sequencing assembly and male dog phylogeny inferred from Y haplotype.  Wengang Zhang*, Lel Eory, Emily Clark, Alan Archibald, and Jeffrey Schoenebeck, Roslin Institute, University of Edinburth, Edinburgh, Scotland, UK.				
4:15 PM	85392	More than a Moggy; A population genetics analysis of the United Kingdom's non-pedigree cats.  Jennifer Irving McGrath* <sup>1</sup> , Wengang Zhang <sup>1</sup> , Regina Hollar <sup>2</sup> , Alison Collings <sup>3</sup> , Roger Powell <sup>4</sup> , Rob Foale <sup>5</sup> , Nikki Thurley <sup>5</sup> , Ruth Campbell <sup>5</sup> , Richard Mellanby <sup>1</sup> , Danièlle Gunn Moore <sup>1</sup> , Jeffrey Brockman <sup>2</sup> , and Jeffrey Schoenebeck <sup>2</sup> , <sup>1</sup> Royal (Dick) School of Veterinary Studies & Roslin				



### INTERNATIONAL SOCIETY FOR ANIMAL GENETICS

Institute, University of Edinburgh, Easter Bush Veterinary Campus, Midlothian, UK, EH25 9RG, <sup>2</sup>Hill's pet nutrition centre, Topeka, Kansas, USA, <sup>3</sup>Idexx laboratories, Wetherby, UK, LS22 7DN, <sup>4</sup>DragonVet Consulting Ltd, Herts. SG5 1EH UK, <sup>5</sup>Dick White Referrals, Station Farm, London Road, Six Mile Bottom, Cambridgeshire, CB8 0UH.

# 4:30 PM 85466 New variant in *ADAMTS2* segregates with recessively inherited Ehlers-Danlos syndrome in a cat family.

R Simon\*<sup>1</sup>, S Kiener<sup>2,3</sup>, N Thom<sup>4</sup>, L Schäfer<sup>4</sup>, M Roy<sup>1</sup>, E K Schlohsarczyk<sup>5</sup>, C Herden<sup>5</sup>, T Leeb<sup>2,3</sup>, and G Lühken<sup>1</sup>, <sup>1</sup>Institute of Animal Breeding and Genetics, Justus Liebig University, 35390 Giessen, Germany, <sup>2</sup>Institute of Genetics, Vetsuisse Faculty, University of Bern, 3001 Bern, Switzerland, <sup>3</sup>Dermfocus, University of Bern, 3001 Bern, Switzerland, <sup>4</sup>Clinic for Small Animals, Justus Liebig University, 35392 Giessen, Germany, <sup>5</sup>Institute of Veterinary Pathology, Justus Liebig University, 35392 Giessen, Germany.

4:45 PM **Business meeting.** 

### **Summary of the meeting**

ISAG was held virtually via zoom this year with the Companion Animal Genetic and Genomic Workshop scheduled on Thurs, July 29<sup>th</sup>, from 3-5pm CDT. We note that this time was less convenient for attendees from western Europe and Africa, New Zealand, and Australia and particularly inconvenient for attendees from western Asia to attend the session live. We also chose a 2-hour timeslot with the virtual meeting as opposed to 3 hours which was our historical meeting length when in-person. Despite the virtual platform and time zone challenges, the workshop had good attendance throughout with roughly 80-90 participants. In total, 24 abstracts were submitted for this section providing ample resources to choose 7 oral presentations. Our workshop opted for 15- minute presentations with the presenters available to answer questions during the live session. All presenters were able to upload pre-recorded talks and were available for the live session. Oral presentations reflected both canine (n=4) and feline (n=3) topics. We do note that of the abstracts submitted, only 4 were directly focused on felines. For future in-person meetings, we discussed at the 2019 ISAG meeting the idea of "lightening" talks (3min) to highlight graduate students and represent more abstracts. This was not considered for the 2021 virtual session and was generally thought to be a good idea if our session was held prior to poster presentation. This idea can be considered for the next ISAG in-person meeting.



Our standing committee in 2021 consisted of a chair, co-chair, and 3 members. For 2021, co-chair Jeffrey Schoenebeck's first 4-year appointment termed. All other members (Huson, Grahn, Leeb, and Warren) term in 2023. Jeffrey Schoenebeck accepted a nomination to run for a 2<sup>nd</sup> term and new candidates of Katy Evans from the Seeing Eye Inc. and Nicole Tate from the University of Minnesota, were nominated. In answer to inquiry, Secretary Sofia Mikko, noted that standing committee members do not have to possess a PhD to serve on a committee. Election results provided Jeff Schoenebeck with 17 votes, Katy Evans with 15 votes, and Nicole Tate with 16 votes. As a committee, we had an initial desire to bring our standing committee up to a full 7 members this year going into elections and to encourage diversity, including representation of research and geographical regions. As such, all 3 candidates were brought onto the standing committee for a term from 2021-2025. The standing committee supported having Heather Huson remain as chair and Jeff Schoenebeck as co-chair. Overall, this balances our committee much better with 3 members having terms from 2021-2025 and 4 members having terms from 2019-2023.

#### **New Committee chair**

Chair: Heather J. Huson

Term of service (add years of first and second term of service): 2015-2019 (member) 2019-2023 (chair)

Affiliation: Cornell University

E-mail address: hjh3@cornell.edu

### New Committee co-chair (optional)

Chair: Jeff Schoenebeck

Term of service (add years of first and second term of service): 2017-2025

Affiliation: Roslin Institute and Royal (Dick) School of Veterinary Medicine

E-mail address: jeff.schoenebeck@roslin.ed.ac.uk

Note: One term runs for two bi-annual conferences (i.e. four years)



## **New Committee members**

Other committee members	First term of service (from year to year)	Second term of service (from year to year)	Email address
Robert Grahn	2019-2023		ragrahn@ucdavis.edu
Tosso Leeb	2016-2019	2019-2023	tosso.leeb@vetsuisse.unibe.ch
Wes Warren	2019-2023		warrenwc@missouri.edu
Katy Evans	2021-2025		kevans@seeingeye.org
Nicole Tate	2021-2025		nmtate@umn.edu

COMPARISON TEST (2020-2021)	YES NO	
SIGNATURES		
Heather J. Huson		
Chair	Duty laboratory	