

ISAG . 2019

**37th International Society for
Animal Genetics Conference**

July 7 - 12, 2019 - Lleida, Spain

Animal Forensic Genetics

Organised by a standing committee: YES ~~NO~~

Meeting information

Date: Monday, July 8,

Time: 2:30 PM - 6:00 PM

Number of participants: 90

Chair

Name: Guillermo Giovambattista

Affiliation: IGEVET, Facultad de Ciencias Veterinarias, Universidad Nacional de La Plata

Contact email: guillermogiovambattista@gmail.com

Agenda

2:30 PM. Comparing two commercial domestic dog (*Canis familiaris*) STR genotyping kits for forensic identity calculations in a mixed breed dog population sample. Sree Kanthaswamy*, Evolutionary & Forensic Genetics Laboratory, Arizona State University, 4701 W Thunderbird Road Glendale, AZ 85306-4908, USA.

2:45 PM. 79950. Application of mtDNA for determining species of forensic traces. Malgorzata Natonek-Wisniewska* and Anna Radko, National Institute of Animal Production, Krakowska 1; 32-083 Balice, Polska.



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3:00 PM. 80092. Multiplex PCR assay for identification and quantification of bovine and equine in minced meats using species-specific nuclear DNA sequences. Xiang Zhou*, Wenjun Wang, and Bang Liu, Huazhong Agricultural University, Wuhan, Hubei, China.

3:15 PM. 80138. Patterns of SP-InDels for mammalian species identification in forensic casework. M.L. López Díaz, E.J. Santillana, and D. Parra*, Departamento de Medio Ambiente, Servicio de Criminalística, Dirección General de la Guardia Civil, Madrid, Madrid, Spain.

3:30 PM. 80144. Analysis of the cross-reactivity of the canine ISAG 2.0 kit. M.L. López Díaz*, E.J. Santillana, and D. Parra, Departamento de Medio Ambiente, Servicio de Criminalística, Dirección General de la Guardia Civil, Madrid, Madrid, Spain.

3:45 PM. 79632. A robust and in-depth analysis and validation provide multiple metrics supporting the use of the proposed Neogen canine parentage and profiling SNP set. O Forman*¹, K Lytle², R Mouridsen⁴, E Laurell³, and J Donner³, ¹Wisdom Health, Waltham on the Wolds, Leicestershire, UK, ²Wisdom Health, Vancouver, WA, US, ³Wisdom Health, Helsinki, Finland, ⁴Eurofins, Galten, Denmark.

4:00 PM. Coffee/Tea Break.

4:30 PM. 80157. Canine-specific STR typing of traces on the attacked cat. J. Zabavnik Piano*¹, M. Gombac², and M. Cotman¹, ¹Institute of Preclinical Sciences, Veterinary Faculty, University of Ljubljana, ¹Institute of Preclinical Sciences, Veterinary Faculty, University of Ljubljana, 1115, Ljubljana, Slovenia, ²Institute of Pathology, Game, Fish and Bees, Veterinary Faculty, University of Ljubljana, Institute of Pathology, Game, Fish and Bees, Veterinary Faculty, University of Ljubljana, 1115, Ljubljana, Slovenia.

4:45 PM. 79854 Investigation of SNP marker combination for new Korean native chicken breeding stocks identification using high-density SNP chip data. S.H Cho*¹, D. Seo¹, H. Kim², S.H Lee¹, and J.H Lee¹, ¹Division of Animal and Dairy Science, Chungnam National University, Daejeon, Republic of Korea, ²Insilicogen Inc, Yongin-si, Gyeonggi-do, Republic of Korea.

5:00 PM. Results of the 2018-2019 Comparison Test.

5:15 PM. Election of committee members.

5:30 PM. Other Business.

Summary of the meeting

Including votes, decisions taken and plans for future conferences

The current Committee was established in 2014 and members whose terms of service that are five years or more will undergo re-election at the next ISAG Conference in Lleida (Spain) in 2019.

Dr. Guillermo Giovambattista (Chair) gave the introductions and welcomed the speakers. The seven out of eight selected speakers, who also presented their posters at the conference, gave their oral presentations as detailed in the Workshop Agenda. Then, Dr Guillermo Giovambattista gave the results of the 2018-2019 Animal Forensic Comparison Test. 19 Labs required DNA samples to Duty lab and submitted the results to the Computer Lab. 19 labs reported STR results, and one lab also reported SNP results.

Dr. Guillermo Giovambattista proposed the implementation of a third DNA based comparison test for genetic identification and species identification of questioned biological samples, and the members present agreed to perform the test. For the proposed CT, a domestic dog (*Canis familiaris*) reference sample (of a known breed and STR profile) and diluted and/or degraded from several aliquots of samples from the reference sample will be included for DNA quantitation and profiling. Samples from an unknown species will also be included for species determination in the CT. Therefore, the aims of the test will be to 1. identify the species origin of the samples, 2. determine and compare the genetic profile of dog samples (original, diluted and/or degraded). Dr. Torsten Brendel from Eurofins Genomics Laboratory (Germany) was renewed as the Duty Laboratory, and Dr. Luis Cancela form Identitas Laboratory (Uruguay) was also renewed as Computer Laboratory.

Both these goals were motioned, seconded, and discussed at the meeting, and both motions carried. Consequently, the Standing Committee has agreed to move ahead with the proposed goals, including making the necessary arrangements to communicate these goals with the Society.

Committee chair (the new chair)

Chair: Guillermo Giovambattista

Term of service: 7 year
Affiliation: IGEVET, Universidad Nacional de La Plata, Argentina
E-mail address: guillermogiovambattista@gmail.com

Committee members (the new committee)

Other members	Term of service	Email address
Denise Aparecida Andrade de Oliveira	3	denise.evufmg@gmail.com
Torsten Brendel	3	TorstenBrendel@eurofins.com
Rebecca Johnson	3	Rebecca.Johnson@austmus.gov.au
Sree Kanthaswamy	11	skanthaswamy@ucdavis.edu
Haifa Khoory	3	haifakhoory@hotmail.com
Romy Morrin	7	rmorrin@weatherbys.ie,

COMPARISON TEST (2018-2019) YES ~~NO~~ (If no delete the rest of this page)

Duty laboratory

Contact person: Dr. med. vet. Torsten Brendel
Affiliation: Laboratory Manager Applied Genomics, Eurofins Genomics, Eurofins Medigenomix GmbH, Anzinger Str. 7a, 85560 EBERSBERG, GERMANY, Phone: +49 8092 8289-252, Fax: +49 8092 828 920 1
E-mail address: torstenbrendel@eurofins.com

Comments (issues rising)

No new issues were discussed.

List of recommended markers with primer information

The 19 STR markers included in the Thermo Fisher Finnzymes Canine Genotyping kit v1.1 (SKU# F860s) were used. Some laboratories used additional markers.

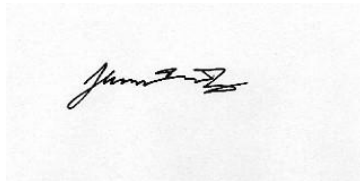
Marker name	Primers sequences
AHT121	
AHT137	
AHTh130	
AHTh171	
AHTh260	
AHTk211	
AHTk253	
CXX0279	
FH2054	
FH2848	
INRA021	
INU005	
INU030	
INU055	
K9-AME	
REN105L03	

REN162C04	
REN169D01	
REN169O18	
REN247M23	
REN54P11	

Duty laboratory for the next comparison test with contact details

Contact person: Dr. med. vet. Torsten Brendel
Affiliation: Operations Applied Genomics, Eurofins Genomics, Eurofins Medigenomix GmbH, Germany
E-mail address: torstenbrendel@eurofins.com

SIGNATURES



Chair

Dr. Guillermo Giovambattista

Duty laboratory

Dr. Torsten Brendel

For information - please delete this page from the report

IMPORTANT INFORMATION FROM THE WORKSHOP AND STANDING COMMITTEE GUIDELINES:

All members of a standing committee need to have individual membership of ISAG throughout the time of service. If new committee members are not ISAG members when elected it is necessary to become so as soon as possible.

The workshop Chair has to compile the report of the workshop and then circulate it to the members of the Standing Committee for any comment and revision. The report then has to be emailed to the ISAG secretary within the noted deadline.

PLEASE EMAIL A WORD VERSION AND A SIGNED PDF VERSION OF THIS REPORT TO THE ISAG SECRETARY: ISAGsecretary@assoqh.org

DEADLINE AUGUST 31st 2019

A draft of this report will be available to all ISAG members on the ISAG web. Workshop participants are allowed to comment and may ask for revision. Such a request for revision has to be given, including relevant reasons and arguments. The Secretary will send these requests to the Chair for dispute in the Standing Committee. Within two weeks the Standing Committee has to answer the Secretary. If no comments from participants have been received within two weeks, the report is considered to be approved and published on the ISAG web.

For more information please see the committee guidelines and comparison test rules.