



## CONFERENCE 2017, Dublin, Ireland

### Animal Forensic Genetics Workshop

STANDING COMMITTEES / WORKSHOPS Information will be posted online

Organised by a standing committee yes ~~no~~

Date and meeting time: Monday, July 17, 2017, 14:30 pm – 17:30 pm.

Chair, name and contact email: Guillermo Giovambattista,  
[guillermogiovambattista@gmail.com](mailto:guillermogiovambattista@gmail.com) / [ggiovam@fcv.unlp.edu.ar](mailto:ggiovam@fcv.unlp.edu.ar)

Agenda / programme attached

<b>Animal Forensic Genetics Workshop</b> Chair: <b>Guillermo Giovambattista, Universidad Nacional De La Plata</b> <b>Lynch Theatre, O'Brien Science Building</b>		
2:30 PM	1	<b>De novo genome assembly of <i>Agapornis roseicollis</i> and SNP discovery for parentage verification.</b> H. van der Zwan* <sup>1</sup> , R. van der Sluis <sup>1</sup> , and C. Visser <sup>2</sup> , <sup>1</sup> North-West University, Potchefstroom, North-West, South Africa; <sup>2</sup> University of Pretoria, Pretoria, Gauteng, South Africa.
2:45 PM	3	<b>Effectiveness of SNPs genotyping assay as a tool for genetic traceability of cattle production chain.</b> A. Pozzi <sup>1</sup> , C. Previtali <sup>1</sup> , R. Capoferri <sup>1</sup> , S. Arabi <sup>1</sup> , A. Galli <sup>2</sup> , and G. Bongioni* <sup>1</sup> , <sup>1</sup> Istituto Sperimentale Italiano L. Spallanzani, Rivolta d'Adda, Cremona, Italy; <sup>2</sup> Centro di ricerca per le produzioni foraggere e lattiero-casearie CREA, Lodi, Italy.
3:00 PM	4	<b>The population and landscape genetics of the European badger (<i>Meles meles</i>) in Ireland.</b> A. Allen* <sup>1</sup> , J. Guerrero <sup>2</sup> , A. Byrne <sup>1,3</sup> , J. Lavery <sup>1</sup> , E. Presho <sup>1</sup> , G. Kelly <sup>1</sup> , E. Courcier <sup>4</sup> , J. O'Keefe <sup>5</sup> , U. Fogarty <sup>6</sup> , D. O'Meara <sup>7</sup> , G. Wilson <sup>8</sup> , D. Ensing <sup>1</sup> , C. McCormick <sup>1</sup> , R. Biek <sup>9</sup> , R. Skuce <sup>1,3</sup> , <sup>1</sup> Agri Food and Biosciences Institute, Belfast, Northern Ireland; <sup>2</sup> CEFE-CNRS, Centre D'Ecologie Fonctionnelle et Evolutive, Montpellier, France; <sup>3</sup> School of Biological Sciences, Queen's University Belfast, Belfast, Northern Ireland; <sup>4</sup> Department of Agriculture, Environment and Rural Affairs, Belfast, Northern Ireland; <sup>5</sup> Department of Agriculture Food and the Marine, Dublin, Ireland; <sup>6</sup> Irish Equine Centre, Johnstown, Republic of Ireland; <sup>7</sup> Waterford Institute of Technology, Waterford, Ireland; <sup>8</sup> Animal and Plant Health Agency (APHA), Stonehouse, Gloucestershire, England; <sup>9</sup> University of Glasgow, Glasgow, Scotland.
3:15 PM	5	<b>Comparison of the effectiveness of 19 STR and 22 STR panels for forensic DNA analysis of canine in Poland.</b> A. Radko*, A. Podbielska, and M. Mischczak, Department of Animal Genomics and Molecular Biology, National Research Institute of Animal Production, Balice, Poland.
3:30 PM	6	<b>Can-ID: The genetic Identification system for canine samples based on SNPs.</b> O. Ramírez* <sup>1</sup> , A. Cuscó <sup>1</sup> , A. Sánchez <sup>2</sup> , O. Francino <sup>2</sup> , and L. Altet <sup>1</sup> , <sup>1</sup> Vetgenomics, Barcelona, Spain; <sup>2</sup> Molecular Genetics Veterinary Service (SVGm), Barcelona, Spain.
3:45 PM	7	<b>Application of multiplex microsatellite panel in <i>Felidae</i> family.</b> A. Podbielska* <sup>1</sup> , A. Radko <sup>1</sup> , W. Nizanski <sup>2</sup> , J. Kochan <sup>3</sup> , A. Nowak <sup>3</sup> , and M. Bugno-Poniewierska <sup>1</sup> , <sup>1</sup> Department of Animal Genomics and Molecular Biology, National Research Institute of Animal Production, Balice, Cracow, Poland; <sup>2</sup> Department of Reproduction and Clinic of Farm Animals, Faculty of Veterinary Medicine, Wrocław University of Environmental and Life Sciences, Wrocław,

		<i>Poland;</i> , <sup>3</sup> <i>Faculty of Animal Sciences, Institute of Veterinary Science, University of Agriculture in Krakow, Cracow, Poland.</i>
4:00 PM		<b>Coffee/Tea Break.</b>
4:30 PM	8	<b>Plains bison triallelic SNPs for determining parentage, estimating cattle introgression, and inbreeding.</b> T. Kalbfleisch* <sup>1</sup> , J. Tait <sup>2</sup> , V. Basnayake <sup>2</sup> , B. Simpson <sup>2</sup> , T. Smith <sup>3</sup> , and M. Heaton <sup>3</sup> , <sup>1</sup> <i>University of Louisville, Louisville, KY, USA;</i> , <sup>2</sup> <i>GeneSeek, Lincoln, NE, USA;</i> , <sup>3</sup> <i>USMARC, USDA, Clay Center, NE, USA.</i>
4:45 PM	9	<b>Discrimination of native chicken breeds using SNP marker combination.</b> S. Jin* <sup>1</sup> , N.-R. Choi <sup>1</sup> , D. Seo <sup>1</sup> , P. Manjula <sup>1</sup> , H.-Y. Kim <sup>2</sup> , S. H. Lee <sup>1</sup> , and J. H. Lee <sup>1</sup> , <sup>1</sup> <i>Chungnam National University, Daejeon, Republic of Korea;</i> , <sup>2</sup> <i>Insilicogen, Inc, Yongin, Republic of Korea.</i>
5:00 PM		<b>Results of the 2016-2017 Comparison Test.</b> Dr. Luis Cancela, Duty Lab.
5:15 PM		<b>Election of new chairperson and committee members.</b>
5:30 PM		<b>Other Business: Membership approval of Standing Committee Goals*.</b>
5:45 PM		<b>Meeting ends.</b>

**Number of participants at meeting: ~70**

**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 5 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 nine speakers, who also presented their posters at the conference, gave their oral presentations as detailed in the Workshop Agenda. Then, Dr Luis Cancela gave the results of the 2016-2017 Animal Forensic Comparison Test. XX Labs required DNA samples to Duty lab and eighteen laboratories submitted the results to the Computer Lab. Thermo Fisher, represented by Dr Chris Adams their Assoc. Director of Product Management (Animal Health/Agrigenomics Division) sent out the Thermo Fisher Finnzymes Canine Genotyping kit v1.1 (SKU# F860s), that contains 19 STR markers, to all labs which participated in the CT.

Dr. Guillermo Giovambattista proposed the implementation of a second DNA based comparison test for 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 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 be also 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 designated as the Duty Laboratory and Dr. Luis Cancela from Identitas Laboratory (Uruguay) was designated 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 members** (the new committee)

Chair	term of service	E mail address:
Guillermo Giovambattista	7	ggiovam@fcv.unlp.edu.ar
Other members	term of service	E mail address:
Denise Aparecida Andrade de Oliveira	3	denise.evufmg@gmail.com
Torsten Brendel	3	TorstenBrendel@eurofins.com
Corinne Cherbonnel	7	ccherbonnel@genindexe.com,
Sean Corley	7	s.corley@uq.edu.au
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** (2016-2017)      yes    ~~no~~    (If no delete the rest of this page)

**Duty laboratory name and email address**

Dr. med. vet. Torsten Brendel  
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  
Email: [torstenbrendel@eurofins.com](mailto:torstenbrendel@eurofins.com)

**Comments (issues rising)**

No new issues rising were discussed.

**List of recommended markers with primer information**

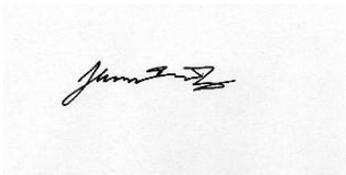
The 19 STR markers included in the Thermo Fisher Finnzymes Canine Genotyping kit v1.1 (SKU# F860s) were used. Some laboratories used additional markers.

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	

**Duty laboratory for the next comparison test** with contact details

Dr. med. vet. Torsten Brendel  
Laboratory Manager Applied Genomics, Eurofins Genomics  
Eurofins Medigenomix GmbH  
Anzinger Str. 7a  
85560 EBERSBERG  
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Phone: +49 8092 8289-252  
Fax: +49 8092 828 920 1  
Email: [torstenbrendel@eurofins.com](mailto:torstenbrendel@eurofins.com)

**SIGNATURES**



**Chair**  
Guillermo Giovambattista

**Duty laboratory**  
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@assochq.org](mailto:ISAGsecretary@assochq.org)**

**DEADLINE AUGUST 31st 2017**

The secretary will take care of sending this report to the ISAG members having participated in the 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 TEN days , the report is considered to be approved and will be published on the ISAG web.

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