



Association Européenne des Technologies de l'Embryon
Association of Embryo Technology in Europe

Program Book

40th Scientific Meeting



Brescia, Italy, September 4th - 6th 2024

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CALIER
SUSTAINABILITY
IN ANIMAL HEALTH





Association Européenne des Technologies de l'Embryon
Association of Embryo Technology in Europe

40th Scientific Meeting

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Dr. Patrick Lonergan

Special Celebration

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Brescia, Italy, September 4th - 6th 2024

Preface

Dear colleagues,

it is our great pleasure to welcome you to the Annual Scientific Meeting of AETE in the beautiful city of Brescia, Italy as we celebrate the 40th anniversary of our association. Brescia is not as famous as Roma, Venice, or Firenze but, as you could imagine, every Italian city has something special to offer. This year, Brescia, together with Bergamo, is the Italian capital of culture. This has unfortunately a sad reason: these two cities suffered severely during the Covid pandemic, but fortunately that's now just an old memory...

The city is connected to the most important European cities with 3 international airports: Linate, Bergamo, and Verona. A one-hour drive will take you to the beautiful Lake Garda and Lake Iseo. Brescia is also not far from Milan, Venice, and Verona and the city is very close to the wonderful Alps.

The "Centro Pastorale Paolo VI", located in the center of Brescia, will host us for the two-day meeting. The building dates back to the 17th century with a typical expression of Baroque art. Hoping for two days with sunny weather, the ancient garden is great to socialize and to share experiences with a cup of good Italian coffee.

The highlight of this year is the pre-conference workshop that will kick off our annual event. The workshop will be held at the agriculture high school ITAS G. Pastori, not far from the Paolo VI. Here all the facilities for theoretical and practical sessions are at our disposal, including a farm with 50 dairy cows.

A short walk from the Paolo VI will take us to the Piazza Arnaldo where we will have our Gala dinner enjoying music, good food and wine. Don't miss it!

In the center of Brescia you will find some beautiful architecture such as the old cathedral (12th century), the new cathedral and several cozy squares. You can also visit the castle of Brescia built in the 13th century or have a walk in the beautiful piazza della Loggia where we will have the farewell party.

Dear colleagues, this is only a little part of what Brescia offers. Let's make this 40th anniversary meeting a memorable and inspiring celebration!

Sincerely,

Pierluigi Guarneri,
on the behalf of the LOC



Marja Mikkola,
on the behalf of the Board of Governors



General information

Conference Venue

Centro Paolo VI
Via Gezio Calini, 30
25121 Brescia (BS)
Italy
Tel: +39 030 377 3511
E-mail: ricevimento@paolovi.it
<https://paolovi.it/en/>



Opening hours registration desk

Tuesday September 3 rd	15.00-18.30 h (hotel reception)
Wednesday September 4 th	15.00-18.30 h (hotel reception)
Thursday September 5 th	08.00-18.00 h (desk outside "Aula Magna")
Friday September 6 th	08.00-18.00 h (desk outside "Aula Magna")

Board of Governors AETE

Marja Mikkola, Norway	President
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LOC members AETE 2024 Brescia, Italy

Dr. Pierluigi Guarneri – Chair of the LOC

Dr. Davide Bolognini (SIET President)

Prof. Francesca Mossa

Dr. Santo Sola

Dr.ssa Ana Sanchez

Dr. Daniele Fiore

Dr. Antonio Spezzigu



The AETE Board acknowledge and thank the following people acting for the various juries:

Student Competition:

Amelie Bonnet-Garnier
Trudee Fair
Federica Franciosi
Gabriela Mastromonaco
Erik Mullaart

Poster:

Lais Barbosa Latorraca
Marta Muñoz Llamosas
Erika Alina Ordonez Leon
Carmen Maria Picazo Córdoba
Soo-Young Yum

Short Oral:

Laurence Guilbert-Julien
Pat Lonergan
Waleed Marei
Francesca Mossa
Maria Belen Rabaglino

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Benoit Guyonnet
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Nataša Šterbenc
Nina Hårdnes Tremoen
Svetlana Uzbekova
Ann Van Soom
Peter Vos
Christine Wrenzycki
Marc Yeste

Conference Language

The official language of the conference is English. Simultaneous translation is not provided.

Upload of Presentations

Each speaker must upload her/his presentation file (power point or pdf formats) in poster room 1 ("Franceschetti", see Map of the venue). A technician will be there on Thursday 5th and on Friday 6th from 08:00 to 19:00 to make sure that everything goes well.

WIFI connection in the building

Super high-speed internet is free in all hotel areas for all attendees during the conference days. Access codes are available at the hotel reception.

Cloakroom

The cloakroom is not guarded and for use on personal responsibility only.

Badges

For security reasons, we ask all participants of the conference to wear their name badges to all sessions and social events.

Weather

It is still summer in the month of September in Brescia, with an average temperature of 21 °C and almost no rain.

Scientific sessions

The plenary sessions and workshops will take place at the "Aula Magna" (see Map of the Venue).

Poster sessions

Posters sessions will be located in poster rooms 1 ("Franceschetti") and 2 ("Moretto"; see Map of the Venue). Posters are numbered as listed in the Program Book (see pages 14-17).

All posters can be put up on Wednesday, 4th and early in the morning on Thursday 5th. Poster numbers 1 - 53 will be placed in poster room 1 and poster numbers 54 - 77 in poster room 2. All posters will remain up throughout the entire meeting. All posters must be removed on Friday 6th after poster session 4. Posters that are not taken down in time will be discarded.

Poster session 1 will take place on Thursday 5th, 10.30-11.30 h → EVEN numbers;

Poster session 2 will also take place on Thursday 5th, 16.00-17.00 h.

Poster session 3 will take place on Friday 6th, 10.15-11.15 h → ODD numbers;

Poster session 4 will also take place on Friday 6th, 16.00-17.00 h.

The electronic version of each poster will be downloadable in ConfTool until December 2024.

Certificates of Attendance

A certificate of attendance will be included in your congress bag.

Coffee and Lunches

Coffee and lunches are included and offered to all attending delegates. Coffee and lunches (standing buffet) will be served at the "Sala del Papa" (see Map of the Venue).

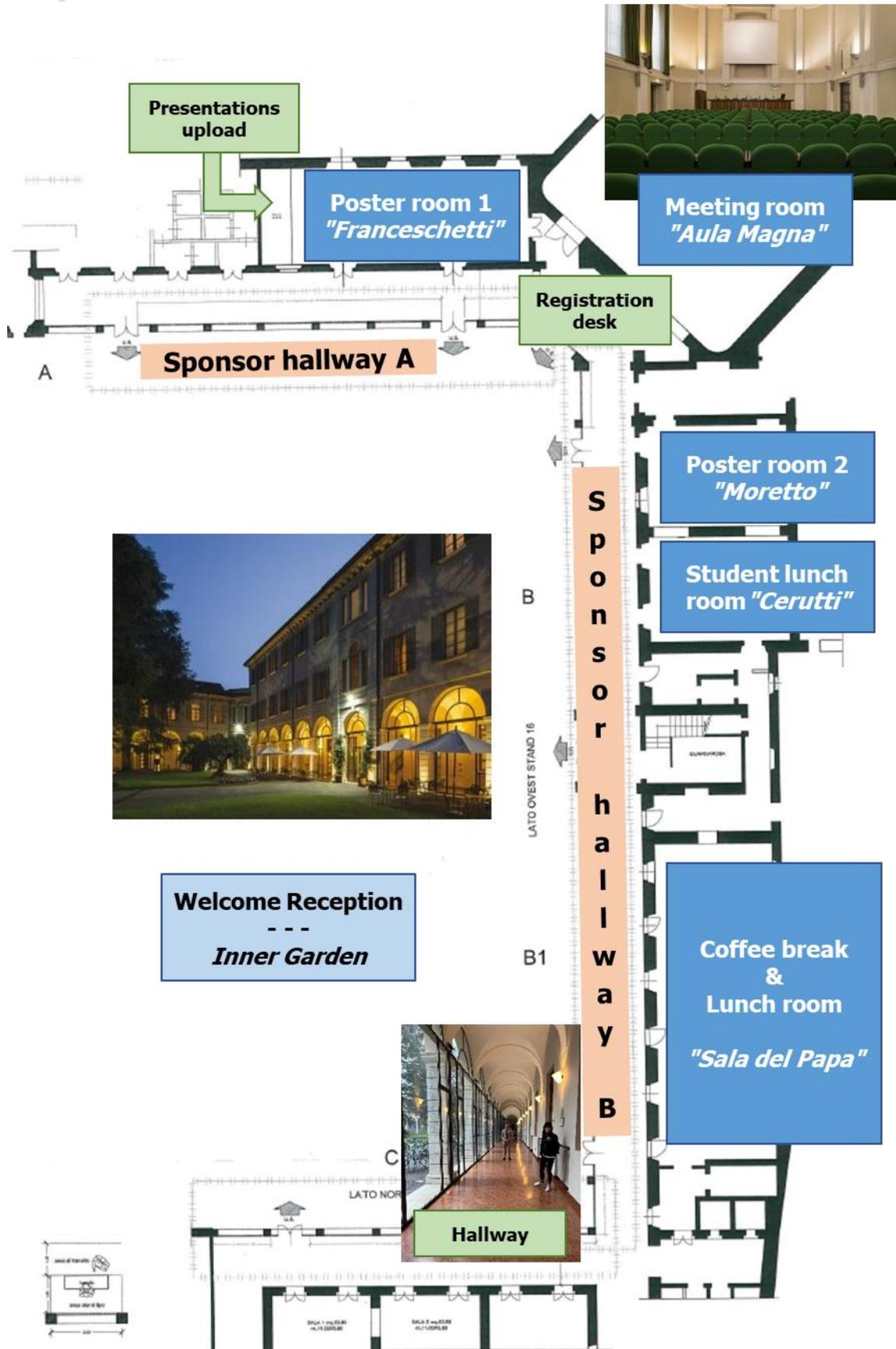
Student Lunch

The student lunch will take place on Thursday 5th, 13.00-14.30 h and will be served in the student lunch room "Cerutti" (see Map of the Venue).

Transport in the city of Brescia

Hotel and social event locations for the Gala Dinner and the Farewell Party are in walking distance in the city centre of Brescia.

Map of the Venue



Booth locations



Social events

Welcome Reception on Wednesday, September 4th, 20.00-22.00 h

The Welcome reception will take place at the Paolo VI indoor garden. In case of bad weather, the reception will take place inside (see Maps of the Venue).



Gala Dinner on Thursday, September 5th, 20.00-03.00 h

The gala dinner will take place at the Vita restaurant located in the centre of Brescia (Piazzale Arnaldo, 20, 25121 Brescia BS, Italy), 300 m from the Paolo VI center (4 min by walk). The dinner will be served seated under the arches with jazz music. After the dinner, the dancing floor will be open with a DJ until 3 am.



Farewell party on Friday, September 6th, 21.00-24.00 h

The Farewell party will take place at the "Trattoria Caprese" pizzeria located in Brescia's heart (Piazza della Loggia, 11, 25121 Brescia BS, Italy), 1100m from the Paolo VI center (16 min by walk). Typical Italian specialties will be served as a buffet in a warm and friendly atmosphere.



Preconference Workshop (Wednesday 4th, 07.30-18.30)

Place: State Agricultural Technical Institute Giuseppe Pastori, Viale della Bornata, 110, 25100 Brescia

07.30: Transport from Paolo VI, Brescia

Morning session (lectures)

- **Alex Bach:** Management of young animals: from calves to heifers to have the best performance
- **Francesca Mossa:** Developmental programming in ruminants: is fertility established in utero?
- **Daniela Demetrio:** Evaluation of oocytes and IVF embryos

Lunch break

Afternoon session (lecture and practical sessions)

- **Bianca Gasparrini:** OPU in buffaloes (lecture)
- **Pierluigi Guarneri, Daniel Martinez & Rob Simmons:** Oocyte collection by OPU on 3 donors (practical session)
- **Daniela Demetrio:** Real time evaluation of the oocytes recovered (practical session)

18.00: Transport back to Paolo VI, Brescia

Postconference Tour (Saturday 7th, 09.00-14.00)

Visit of Avantea facilities in Cremona, sponsored by **AVANTEA**



Avantea is one of the largest ART laboratories in Europe with both research and commercial activities in several species. They hold international leadership for production of equine OPU-ICSI embryos.

9.00 am: Departure from Paolo VI, Brescia

10.00 am: Arrival at Avantea
Tour and lunch

14.00 pm: Return to Paolo VI, Brescia

Main program

Tuesday, September 3rd 2024

15.00-18.30: Registration (Hotel reception)

Wednesday, September 4th 2024

07.30-18.30: Preconference

15.00-18.30: Registration (Hotel reception)

20.00-22.00: Welcome Reception at the Paolo VI indoor garden

08.00-18.00: Registration (desk outside "Aula Magna")

08.15-08.30: Opening meeting: AETE President Marja Mikkola and Chair of the LOC Pierluigi Guarneri

SESSION 1: Chairpersons: Hilde AARDEMA and Pablo BERMEJO-ALVAREZ

08.30-09.15: First invited lecture: Cesare Galli, Fondazione Avantea, Cremona, Italy.

Forty years of AETE: The contribution of scientists and practitioners to the progress of reproductive biotechnologies in Europe

09.15-10.30: Short oral communications: *Student Competition*

Axelle Buydens, *The impact of a maternal obesogenic diet on offspring's oocyte mitochondrial biogenesis in the primordial follicles at birth and at weaning. Insights from an outbred mouse model (Poster 1)*

Alan D. Crowe, *Concentration of progesterone, relative mRNA abundance of Interferon-Stimulated Gene-15 and concentration of Pregnancy-Specific Protein B in maternal circulation following timed artificial insemination or embryo transfer in lactating dairy cows (Poster 2)*

Rosane Mazzarella, *Embryo-induced alterations in the protein profile of bovine uterine extracellular vesicles in vitro (Poster 3)*

Federica Piscopo, *Oleic Acid prevents the detrimental effect of the combination of saturated NEFAs with Lipopolysaccharide on bovine oocyte competence (Poster 4)*

Inne Xhonneux, *The effect of a maternal obesogenic diet on offspring oocyte mitochondrial ultrastructure at birth in an outbred mouse model (Poster 5)*

10.30-11.30: POSTER SESSION 1, EXHIBITION and coffee break

SESSION 2: Chairpersons: Pascal SALVETTI, Axelle BUYDENS and Alan D. CROWE

11.30-12.15: Second invited lectures: Jose Nélio de Sousa Sales, Department of Veterinary Medicine, Federal University of Juiz de Fora, Brazil.

Evolution over the last 40 years of the Assisted Reproduction Technologies in cattle - the Brazilian Perspective - Timed artificial insemination

Guilherme Pugliesi, Animal Reproduction Department of the School of Veterinary Medicine and Animal Science of the University of São Paulo, Brazil.

Evolution over the last 40 years of the Assisted Reproduction Technologies in cattle - the Brazilian Perspective for Embryo Transfer and Resynchronization Programs

12.15-13.00: Short oral communications (SO) & Flash talks (FT)

Adele Frau, *Evidence that undernutrition in early gestation reduces maternal leptin and impairs AMH in juvenile offspring in dairy cattle (SO, Poster 51)*

Jan Detterer, *Factors influencing calving rates after transfer of frozen-thawed in-vivo bovine embryos considering quality of corpus luteum of recipient animals (FT, Poster 13)*

Erik Mullaart, *Intergenerational inheritance of large offspring syndrome in IVP dairy cows (SO, Poster 41)*

Laura Thompson, *Relationship between fetal morphometrics and birth weight of calves following the transfer of in vitro-produced embryos derived from conventional or sex-sorted sperm (FT, Poster 23)*

13.00-14.30: Lunch/Student Lunch

SESSION 3: Chairpersons: Jane MORRELL and Rosane MAZZARELLA

14.30-15.15: Third invited lecture: Gabriela Mastromonaco, Reproductive Sciences Unit, Toronto Zoo, Toronto, Ontario, Canada.

Forty "wild" years: The current reality and future potential of Assisted Reproductive Technologies in wildlife species.

15.15-16.00: Short oral communications (SO) & Flash talks (FT)

Mohamed Hedia, *The positive association between maternal body condition score and antral follicle count does not affect the number of produced blastocysts in OPU mares (SO, Poster 18)*

Chiara Cosseddu, *M6a RNA methylation during in vitro maturation of sheep cumulus-oocyte complexes with different development competence (FT, Poster 30)*

Marie Saint-Dizier, *Phosphatidylserine on sperm head interacts with Annexin A5 on oviduct luminal cilia to form a sperm reservoir in pigs (SO, Poster 31)*

Bence Somoskői, *Effects of cold storage and different cryopreservation methods on canine epididymal sperm (FT, Poster 69)*

16.00-17.00: POSTER SESSION 2, EXHIBITION and coffee break

17.00-18.45: **Workshop I:** *Embryo therapy to increase the conception rate*

chaired by **Ana Isabel De Prado Taranilla**, and sponsored by **CALIER**

20.00-03.00: Gala Dinner at the Vita Restaurant

Friday, September 6th 2024

08.00-18.00: Registration (desk outside "Aula Magna")

SESSION 4: Chairpersons: Christine WRENZYCKI and Federica PISCOPO

08.30-09.15: **Fourth invited lecture: Rebecca Krisher**, Colorado Center for Reproductive Medicine, Lone Tree, USA.

Embryo production in vitro: Basic principles and commercial perspectives.

09.15-10.15: Short oral communications (SO) & Flash talks (FT)

Lien Loier, *Exploring mitophagy dynamics in bovine oocytes during in vitro maturation in response to mitochondrial membrane uncoupling (SO, Poster 56)*

Sonia Gago, *Comparison of dimethyl sulfoxide and propylene glycol for vitrifying in vitro matured bovine oocytes: effects on meiotic spindle and ROS levels (FT, Poster 71)*

Federica Franciosi, *Resilience of preimplantation bovine embryos to the availability of energy substrates (SO, Poster 49)*

Leopoldo González-Brusi, *A single-cell transcriptomic atlas of sheep gastrulation and conceptus elongation (FT, Poster 44)*

Jakomien Noordman, *Semen quality of young bulls does impact success rate of In Vitro Fertilization (SO, Poster 15)*

10.15-11.15: POSTER SESSION 3, EXHIBITION and coffee break

11.15-12.00: General Assembly

12.00-12.15: Sponsor presentation

12.15-13.45: Lunch/Student Lunch, meeting of the "Elongated Embryos"

SESSION 5: Chairpersons: Marja MIKKOLA and Inne XHONNEUX

13.45-14.45: Short oral communications & Flash talks

Inés Flores Borobia, *SOX17 ablation impairs hypoblast formation and reduces trophectoderm proliferation in bovine embryos (SO, Poster 58)*

Raquel Romar, *Growth parameters and their hormonal regulation in pigs are differently affected by sex and embryo origin (FT, Poster 9)*

Maria Belen Rabaglino, *In vitro procedures deregulate the embryonic disc and extraembryonic membranes transcriptome of day 15 elongated bovine embryo (SO, Poster 57)*

Daniel Angel-Velez, *Vitrification by two different protocols does not affect pregnancy outcomes in in vitro-produced equine embryos (FT, Poster 21)*

Serge Lacaze, *Bovine donors infected with Epizootic Hemorrhagic Disease: Impact on in vitro embryo production and risk of transmission through in vitro embryos production (SO, Poster 24)*

14.45-15.45: **Fifth invited lecture: Patrick Lonergan**, School of Agriculture and Food Science, University College, Dublin, Ireland.

Embryo transfer: Past, present and future.

15.45-16.00: **Pioneer Award 2024** – Patrick Lonergan AETE Medalist Presentation, introduced by Dimitrios Rizos (Spain)

16.00-17.00: POSTER SESSION 4, EXHIBITION and coffee break

17.00-18.30: **Workshop II:** *Emerging diseases as risk to international trade of genetic materials*

chaired by **Hanna Grothmann, Hélène Quinton, Karolien Desmet and James Quinn**

18.30-19.00: Closing session:

Results of competitions and elections and invitation to the AETE Conference 2025

21.00-24.00: Farewell party at the Trattoria Caprese

Workshops

Workshop I:

Embryo therapy to increase the conception rate

Sponsored by **CALIER**

- **Daniela Demetrio**, *RuAnn Genetics Embryo Production Director (USA), American Embryo Transfer Association President*
The use of embryos to improve pregnancy rates in lactating cows (45 min)
- **Pierluigi Guarneri**, *Embryovet Director (Italy), Head of the LOC*
Beef on dairy: is it a good opportunity for dairy breeders to use pure beef IVF embryos to increase the farm income? (20 min)
- **Daniel Martinez**, *Embriomarket, Embriovet Technical Director (Spain)*
Economic perspective of Embryo therapy. Understanding utility (20 min)

Round table: Moderator: **Ana I. de Prado** (*Global Ruminant Veterinary Manager -Calier-*)

Workshop II:

Emerging diseases as risk to international trade of genetic materials

In a more and more globalized world, the international trade with genetic material such as oocytes, embryos, and semen has become essential for breeders and breeding companies worldwide. In Europe, especially the trade of bovine, and equine oocytes, and embryos across borders have become routine for ET-collection and production teams.

Alongside trade, there is always a certain risk for the transmission of animal and human diseases. For trade within Europe, these risks have traditionally been regulated by the European Union and its member states. Global trade is regulated by each country after official risk assessment. Climate change, though, is one of the reasons for new challenges. With an increasing global temperature insect transmitted viruses have been spreading into new geographic regions and reach an unprepared population. Recent examples have been the emergence of Epizootic Hemorrhagic disease (EHD, in Europe currently present in Spain, Portugal, France, and Italy), Blue Tongue Disease (BTV, in Europe currently present in Great Britain, Germany, the Netherlands, Belgium, Luxemburg, France, Italy, Portugal, Spain, and Greece), Schmallenberg Virus Disease (SBV), or West Nile Fever Virus (WNV, currently present in Germany, Austria, France, Spain, Portugal, Greece, Corsica). Unfortunately, the risk of transmission of these viruses via embryos and oocytes is not clearly known.

Therefore, this workshop is designed to give the attendees an overview on the above-mentioned viruses and their clinical significance as well as provide the regulator's view on the situation. Additionally, practitioners who have had long years of involvement in the trade of genetic material are invited to discuss their experiences with each other and the audience, as well as report main critical points challenging import and export of genetic material from their perspective.

- **Bhavisha Patel**, *Veterinary Advisor, Veterinary Trade Facilitation (VTF), Global Animal Health, Animal and Plant Health & Welfare Directorate, Department for Environment, Food and Rural Affairs, London, UK*
The regulator's view on emerging diseases
- **Stéphan Zientara**, *Director of the ANSES Laboratory for Animal Health, Maisons-Alfort, France*
The virologist's view on emerging diseases

chaired by **Hanna Grothmann, Hélène Quinton, Karolien Desmet and James Quinn**

POSTERS

STUDENT COMPETITION

- 1 Axelle Buydens**, Inne Xhonneux, Isabel Pintelon, Jo LMR Leroy, Waleed FA Marei
The impact of a maternal obesogenic diet on offspring's oocyte mitochondrial biogenesis in the primordial follicles at birth and at weaning. Insights from an outbred mouse model
- 2 Alan D. Crowe**, José M. Sánchez, Stephen G. Moore, Michael McDonald, Matthew S. McCabe, Federico Randi, Patrick Lonergan, Stephen T. Butler
Concentration of progesterone, relative mRNA abundance of Interferon-Stimulated Gene- 5 and concentration of Pregnancy-Specific Protein B in maternal circulation following timed artificial insemination or embryo transfer in lactating dairy cows
- 3 Rosane Mazzarella**, José María Sánchez, Sandra Guisado Egido, Alberto Álvarez-Barrientos, Esperanza González, Juan Manuel Falcón-Pérez, Mikel Azkargorta, Félix Elortza, Encina González, Pat Lonergan, Dimitrios Rizos, Beatriz Fernandez-Fuertes
Embryo-induced alterations in the protein profile of bovine uterine extracellular vesicles in vitro
- 4 Federica Piscopo**, Kaylee Nieuwlan, Riccardo Esposito, Luca Masiello, Bianca Gasparrini, Hilde Aardema
Oleic Acid prevents the detrimental effect of the combination of saturated NEFAs with Lipopolysaccharide on bovine oocyte competence
- 5 Inne Xhonneux**, Waleed FA Marei, Jo LMR Leroy
The effect of a maternal obesogenic diet on offspring oocyte mitochondrial ultrastructure at birth in an outbred mouse model

AI / TAI / FTET

- 6 Manuel Álvarez Rodríguez**, Eduardo de Mercado, Helena Nieto-Cristóbal, Cristina A. Martinez, Heriberto Rodriguez-Martinez
Mapping of ADAMs and ADAMTs expression in response to mating, or seminal plasma infusion in periovulatory sows
- 7 Inmaculada Cuevas-Gómez**, Javier Lozano, Javier Jiménez Bejarano, Ana I. de Prado Taranilla, Dimitrios Rizos, **José María Sánchez Gómez**
Factors affecting recipient rejection rate in embryo transfer programs in lactating dairy cows
- 8 María Serrano Albal**, Jon Romero-Aguirregomezcorta, Sebastián Cánovas, Sonia Heras, Armando Arturo Quintero-Moreno, Jordana S. Lopes, Cristina Soriano-Úbeda, Joaquín Gadea, Pilar Coy, **Raquel Romar**
Long term study of the blood plasma biochemical profile of cattle born by assisted reproductive technologies
- 9 Sonia Heras**, Armando Quintero-Moreno, Evelyne Paris-Oller, Cristina Soriano-Ubeda, Joaquin Gadea, **Raquel Romar**, Sebastian Canovas, Pilar Coy
Growth parameters and their hormonal regulation in pigs are differently affected by sex and embryo origin
- 10 Jon Romero-Aguirregomezcorta**, Sebastián Cánovas, Sonia Heras, María Serrano-Albal, Guillermo Ramis, Evelyne Paris-Oller, Cristina Soriano-Úbeda, Joaquín Gadea, Pilar Coy, **Raquel Romar**
Blood plasma biochemical parameters in fully-grown pigs derived from assisted reproductive technologies
- 11 Julien Spyridon Karel D'hallewin**, Adele Frau, Roberta Cresci, Sebastiano Sale, Alberto Stanislao Atzori, Francesca Mossa
Seasonal fertility variation in dairy cows in two farms in the Mediterranean area
- 12 Jon Romero-Aguirregomezcorta**, Sonia Heras, Sebastián Cánovas, María Serrano-Albal, Alicia Masegosa, Ángela Juan, Ester Parraga-Ros, Pilar Coy, Raquel Romar, Joaquín Gadea
Testosterone, ano-genital distance, and epididymal sperm quality in bulls derived from artificial insemination and in vitro production

Superovulation / OPU-IVP / ET

- 13 Laura Pieper**, **Torleif Röpke**, Jan Detterer
Factors influencing calving rates after transfer of frozen-thawed in-vivo bovine embryos considering quality of corpus luteum of recipient animals
- 14 Maria D. Zamudio-Tavera**, Raymundo Rangel-Santos, Alfredo Lorenzo-Torres, Andrea Sanchez-Chavez, Juan Gonzalez-Maldonado
Superovulatory response of Creole ewes treated with autologous platelet-rich plasma (PRP)
- 15 Erik Mullaart**, Marleen Broekhuijse, **Jakomien Noordman**
Semen quality of young bulls does impact success rate of In Vitro Fertilization
- 16 Ana Gil**, Monica Ferrer, Maria-Teresa Paramio, **Dolors Izquierdo**
Capacitation-IVM system with C-type natriuretic peptide affects mitochondrial distribution, and calcium levels and patterns in lamb oocytes
- 17 Mònica Ferrer-Roda**, Ana Gil, Maria-Teresa Paramio, Dolors Izquierdo
Cumulus-oocyte communication in prepubertal goats according to GV chromatin configuration and nuclear stage during in vitro maturation
- 18 Nele Leenders**, Daniel Angel-Velez, Klaartje Broothaers, Ellen Polfiet, Andrea Fernándezo-Montoro, Emma Van den Branden, Sofie Peere, Jan Govaere, Ann Van Soom, Katrien Smits, **Mohamed Hedia**
The positive association between maternal body condition score and antral follicle count does not affect the number of produced blastocysts in OPU mares
- 19 Manuela Garcia-Canovas**, Alejandro Gonzalez-Plaza, Cristina Cuello, Inmaculada Parrilla, Heriberto Rodriguez-Martinez, Emilio A Martinez, Maria A Gil
Interleukin-6 supplementation during in vitro maturation improves the spindle and chromosome organization of pig oocytes

- 20 Eliza M Murphy**, Alan D Crowe, Laura Thompson, Stephen G Moore, Michael M McDonald, Rachel C Doyle, Federico Randi, Eber Rojas Canadas, Patrick Lonergan, Stephen T Butler
Effect of embryo breed and type of semen used for IVF on gestation length and calving characteristics following fresh transfer of IVP embryos
- 21** Sofie Peere, Mohamed Hedia, Andrea Fernández-Montoro, Tine De Coster, Klaartje Broothaers, Ellen Polfliet, Emma Van den Branden, Jan Govaere, Ann Van Soom, Katrien Smits, **Daniel Angel-Velez**
Vitrification by two different protocols does not affect pregnancy outcomes in in vitro-produced equine embryos
- 22 Jon Romero-Aguirregomez**corta, Ángela Juan, Alicia Masegosa-Domínguez, Raquel Romar, Pilar Coy
Comparative analysis of in vitro production efficiency between adult sows and prepubertal gilt ovaries
- 23 Laura Thompson**, Eliza M. Murphy, Michael McDonald, Maria Belen Rabaglino, Alan D. Crowe, Stephen T. Butler, Patrick Lonergan
Relationship between fetal morphometrics and birth weight of calves following the transfer of in vitro-produced embryos derived from conventional or sex-sorted sperm
- 24** Giselle Gamarra, Nicole Picard-Hagen, François Schelcher, **Serge Lacaze**
Bovine donors infected with Epizootic Hemorrhagic Disease: Impact on in vitro embryo production and risk of transmission through in vitro embryos production

Folliculogenesis / oogenesis

- 25** Raymundo Rangel-Santos, Alfredo Lorenzo-Torres, Andrea Sánchez-Chavez, Juan González-Maldonado, María D. Zamudio-Tavera
Follicular response to the intraovarian administration of autologous platelet-rich plasma (PRP) in Katahdin ewes
- 26** Waleed FA Marei, Kerlijne Moorrens, Filip Van Nieuwerburgh, Yannick Gansemans, Jo LMR Leroy
Acute and chronic effects of a high-fat high-sugar diet on the granulosa cell transcriptome. Insights from an outbred mouse model
- 27** Taisiia Yurchuk, Pawel Likso, Maryna Petrushko, Dariusz J. Skarzynski
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