



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

# 40<sup>th</sup> SCIENTIFIC MEETING

**Centro Paolo VI  
Brescia, Italy**

**P R O G R A M**

---

September 4<sup>th</sup> to 6<sup>th</sup> 2024

---

## Preconference Workshop (Wednesday 4<sup>th</sup>, 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

## Workshop I (Thursday 5<sup>th</sup>, 17.00-18.45)

### 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 (Friday 6<sup>th</sup>, 17.00-18.30)

### Emerging diseases as risk to international trade of genetic materials

- **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**

**Tuesday, September 3<sup>rd</sup> 2024**

**15.00-18.30:** Registration (Hotel reception)

**Wednesday, September 4<sup>th</sup> 2024**

**07.30-18.30:** Preconference

**15.00-20.00:** Registration (Hotel reception)

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

## Thursday, September 5<sup>th</sup> 2024

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

**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 Mastro Monaco, 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 6<sup>th</sup> 2024

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

**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 trophoblast 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