

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

41ST SCIENTIFIC MEETING

Cork, Ireland

Clayton Hotel Cork City

3rd – 5th September 2025

Wednesday, September 3rd 2025

PRECONFERENCE WORKSHOP – EQUINE

07.00: Registration desk open and welcome coffee

07.50: Introductory remarks, welcome *(Cesare Galli, Thomas Züchner)*

08.00: Introductory keynote lecture on: "in vivo, vs OPU/ICSI vs OPU/IVF where do we came

from, where are we going to in the equine industry" (Edward Squires)

09.00: Exploring ethical opinions surrounding equine OPU (*Niamh Lewis*)

09.30: Embryo production in the lab *(Giovanna Lazzari)*

10.10: Coffee break

10.30: Cryopreservation and pre-implantation genetic testing of equine embryos (*Katrien Smits*)

11.30: Management of the recipient mare *(Michaela Kölling)*

12.00: Factors affecting recovery and pregnancy rates in equine embryo transfer program *(Denis Necchi)*

12.45: Regulations on equine germplasm shipments (*James Crabtree*)

13.15: Lunch

14.00: Start of 4 parallel wet labs with changing groups every 60 minutes

- WS1 post mortem oocyte recovery (Avantea)
- WS2 Vitrifying and warming of equine embryos (Katrien Smits, Denis Necchi)
- WS3 sperm selection (Matheus Felix)
- WS4 slow freezing and thawing of embryos (Avantea)
- **15.10:** Same as above with swapped groups
- **16.20:** Same as above with swapped groups
- **17.30:** Same as above with swapped groups

18.45: Closing remarks (Cesare Galli, Thomas Züchner)

PRECONFERENCE WORKSHOP – BOVINE

9.30: Bus to Lisduff Pedigree Holstein Farm, 300 cow dairy unit run by O'Sullivan family outside of Cork City

10.00: Coffee Break

10.15: Overview of Dairy and Beef Cattle Breeding Industry in Ireland (*M. Kavanagh, CEO Munster Bovine*)

- **10.45:** Questions and Answers
- **11.00:** Breeding Strategies and ET in Ireland *(J. O. Sullivan, Farmer)*
- **11.30:** Global overview of ART in the cattle breeding industry (*P. Ross*)
- **11.45:** Questions and Answers

12.30: Bus to O'Connor's Farm, 150 cow dairy high type Pedigree Holstein unit run by the O'Connor brothers

13.00: Reception and explanation of breeding strategies by O'Connor brothers

13.15: Lunch

14.00: Demonstration of Color Doppler Ultrasound, evaluations of recipients and early pregnancy (G. Pugliesi)

15.00: Parallel sessions

Embryo Analysis Software (MGenesis)

Nutrition (M. Sheehy, Cattle Nutritionist)

Synchronization (MSD)

Automation, robotics and data capture in modern dairy farming (Lely and MSD)

Infectious causes of reproductive losses in Irish dairy farms and prevention strategies at farm level (*B. Toland, Regional Veterinary Laboratory*)

Identifying embryo competence to establish pregnancy (P. Hansen)

17.00: Bus back to hotel

Tuesday, September 2nd 2025

15.00-18.30: Registration (Hotel reception)

Wednesday, September 3rd 2025

- **07.30-18.15:** Preconference (see program above)
- **15.00-18.30**: Registration (Hotel reception)
- **20.00-24.00:** Welcome Reception at the city hall of Cork

Thursday, September 4th 2025

08.00-18.00: Registration

08.15-08.30: Opening meeting: AETE President Hilde Aardema and Chair of the LOC James Quinn

SESSION 1:

08.30-09.15: *First invited lecture:* **Osvaldo Pascottini,** School of Veterinary Medicine, University College Dublin, Ireland.

Microbiome-based therapies for restoring uterine health in domestic species.

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

Alexia Siegmund Sabater, Endometrial organoids medium does not support epiblast development during ovine post-hatching development (Poster 1)

Giuliana Ferronato, Changes in bull epididymal extracellular vesicles miRNA cargo in response to natural heat stress (Poster 2)

Maria Plevridi, *Embryo-induced comparison of the mitochondrial hydrogen peroxide production in bovine oocytes and zygotes (Poster 3)*

Aitana Salvo-Jiménez, TEAD3 is not required for bovine blastocyst formation (Poster 4)

Quinn A. Hoorn, Sperm metabolomic profiles reflect bull fertility status (Poster 5)

10.30-11.30: *POSTER SESSION 1, EXHIBITION* and coffee break **SESSION 2:**

11.30-12.15: *Second invited lectures:* **Roberto Sartori,** Department of Animal Science, University of São Paulo (ESALQ/USP), Piracicaba, SP, Brazil.

Pregnancy loss in cattle with emphasis on embryo recipients.

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

Giselle Gamarra-Lacaze, Comparative OPU-IVP efficiency across Bos taurus breeds under commercial and genetic selection programs (SO, Poster 15)

Eliza M Murphy, Mortality of calves derived from in vitro produced embryos (FT, Poster 26)

Carla Canedo-Ribeiro, Aneuploidy incidence does not differ between in vitro produced (IVP) and in vivo derived (IVD) bovine embryos of excellent quality (SO, Poster 103)

Francesca Mossa, Ovarian gene expression in juvenile calves exposed to nutrient restriction as fetuses (FT, Poster 78)

13.00-14.30: Lunch/Student Lunch

SESSION 3:

14.30-15.15: *Third invited lecture:* **Valentina Lodde,** Department of Veterinary Medicine and Animal Sciences, University of Milan, Italy.

In vitro oocyte growth.

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

Waleed F.A. Marei, The vulnerability of primordial follicles to diet-induced mitochondrial damage and its persistence until ovulation despite preconception care (SO, Poster 38)

Carla Moros Nicolás, *ZP1 and ZP3 proteins are essential for zona pellucida formation and fertility in rabbits (FT, Poster 39)*

Mohammadreza Ebrahimi, In vitro culture of cumulus-oocyte complexes from sheep early antral follicles: achievements, challenges, and future directions (SO, Poster 35)

Silke Roofthooft, Murine oocyte mitochondrial activity following Tirzepatide exposure (FT, Poster 88)

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

17.00-18.45: Parallel workshop I: Equine ARTs.

chaired by Thomas Züchner

Katrien Smits, Recent Advances in Equine IVF and ICSI: Implications for Embryo Quality and Reproductive Success

Niamh Lewis, *Revisiting folliculogenesis in the context of OPU: can we manipulate the antral follicle count?*

Cesare Galli, Oocyte collection by transvaginal follicular aspiration (OPU)

Matheus Felix, Clinical integration of Standard IVF in Equine Embryo Production: challenges and opportunities

Edward Squires, *How does equine ARTs impact the industry and genetic diversity of different breeds.*

James Crabtree, Clinical success of transfer of frozen-thawed IVP embryos: How does it compare?

Ronan Cox, Equilume, Benefits of blue light for the pregnant mare and foal maturity

17.00-18.45: Parallel workshop II: Bovine ARTs

chaired by James Quinn

20.00–24.00: Gala Dinner at the Cork City Gaol

Friday, September 5th 2025

08.00-18.00: Registration

SESSION 4:

08.30-09.15: *Fourth invited lecture*: Marie Saint-Dizier, University of Tours, France.

What the in vitro-produced embryo misses: an insight into the maternal environment's role in sperm selection and embryo quality.

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

Vitezslav Havlicek, *Effect of oviductal fluid protein supplementation from different origins on bovine embryo development and quality in vitro (SO, Poster 61)*

Judith Diaz-Muñoz, Extracellular vesicles from oxidatively stressed granulosa cells improve embryo development and redox balance after vitrification of in vitro matured bovine oocytes (FT, Poster 65)

Dimitrios Rizos, Functional and structural profiling of region-specific bovine oviductal organoids (SO, Poster 69)

Ludivine Marco, Pre-binding to isthmic epithelial spheroids enhances bull sperm ability to fertilize oocytes and obtain blastocysts in vitro (FT, Poster 68)

Sergio Navarro-Serna, *Organoid-derived secretions mimic oviductal fluid composition and support bovine sperm function (SO, Poster 106)*

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:

13.45-14.45: Short oral communications & Flash talks

Adrián Martín-San Juan, Co-incubation of boar sperm with seminal extracellular vesicles from highfertility boars increases sperm parameters rather than those from low-fertility boars (SO, poster 57)

Flash Talk to be confirmed

Eva Díaz-Hernández, *Hydrogel-based preservation of ram semen at room temperature: a novel approach (SO, Poster 102)*

Marcos Luis-Calero, *Supplementation of INRA96 medium with penicillamine, hypotaurine, and epinephrine does not alter protein tyrosine phosphorylation of thawed stallion spermatozoa (FT, poster 55)*

Short Oral Presentation to be confirmed

14.45-15.45: *Fifth invited lecture*: **Urban Besenfelder**, Institute of Animal Breeding and Genetics, University of Veterinary Medicine Vienna, Austria.

Insights into early embryonic development: a personal assessment based on 30 years of experience.

15.45-16.00: Pioneer Award 2025 – Urban Besenfelder AETE Medalist Presentation,

introduced by Michael Hölker (Germany)

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

SESSION 6:

17.00-18.00:

Reina Jochems, High recovery of partially in vivo matured oocytes by ovum pick-up in sows and promising blastocyst rates following in vitro fertilization (SO, Poster 25)

Yasmine M. Hachani, *Prediction of cell stages and cleavage durations of IVP bovine embryos with a deep learning model (FT, Poster 75)*

Olga Sajecka, *Associations between vaginal microbiota and pregnancy outcome in mares (SO, Poster 13)*

Ludovica Donadini, Donor age as a limiting factor in the conservation of endangered cattle breeds through assisted reproductive technologies (FT, Poster 16)

Mònica Acacio Espinosa, *First successful application of maternal spindle transfer in equine oocytes to overcome embryo developmental arrest (SO, Poster 114)*

18.00-18.30: Closing session:

Results of competitions and elections and invitation to the AETE Conference 2026

20.00-02.00: Farewell party at The Old Town Whiskey Bar at Bodega