

AETE NEWSLETTER

Editor: Francesca Mossa



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Presidents Letter

By Hilde Aardema

Utrecht, 13 December 2024

Dear AETE members,

It is an honor and pleasure to write my first president's letter in a very special year, with the 40th anniversary of our AETE society. We were able to celebrate our anniversary in the lovely and historical atmosphere of the city Brescia, in the North of Italy, which was a true gift! Apart from the attractive social events, excellent speakers were able to cover 40 years of innovation and development in embryo technologies. We could not only enjoy two nice conference days, but also a highly attended preconference with great speakers that linked science with practice, and a post-conference organized by Avantea. Thanks again to the Local Organizing Committee, under the guidance of Pierluigi Guarneri, for the very well-organized AETE meeting and for everyone who contributed, including all our sponsors, to the now four (!) days of AETE science and joy.

The year 2024 was also the year where our former president Marja Mikkola had to leave the Board. In all the years in which she was part of the AETE Board, she gave her endless support to maintain the nice atmosphere that most of you recognize as the 'AETE family'. The former years have been truly dynamic years, that were also financially sometimes challenging due to increasing costs, which make it difficult to keep the 'all-inclusive format' for all the attendees

while keeping registration fees low. We will miss Marja in the Board and are thankful for her guidance of the AETE society in the last years.

When someone leaves the Board, there is also a spot that needs to be filled again and we are grateful that so many people are willing to step in the AETE Board, based on the many people that were eligible in Brescia. We had the pleasure to welcome Francesca Mossa as our new AETE Board member! It is very nice that Italy is now represented in the AETE Board. Francesca will be the person primarily responsible for social media, including the website and newsletter.

Apart from looking back, we can also look forward to a great AETE event next year in Ireland. The AETE conference event is located in the historical center of the city of Cork, with the City hall where we will host our welcome reception, pubs to digest the science, and a must-see gala dinner location, this again promises to become a great annual meeting!

We are looking forward to meeting you all in Cork, Ireland, next year from 3 until 5 September 2025.

For now I wish you all very nice Christmas with family and friends, and good luck and good health for 2025!

Hilde Aardema

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Reflection on the AETE 2024 in Brescia

By Pierluigi Guarneri, Davide Bolognini and Francesca Mossa

Local organizing committee

Dear colleagues,

This year we celebrated the 40th anniversary of our association in Brescia, a hidden gem in the North of Italy. A Preconference Workshop organized by the Italian Society of Embryo Transfer (SIET) kicked-off the meeting, with 4 speakers (Alex Bach, Francesca Mossa, Daniela Demetrio and Michal Kosior), focusing on management of young animals from fetal life to enhance fertility, in vivo oocyte collection and oocytes and embryo grading. The practical session on ovum pick-up and oocyte evaluation (held by Pierluigi Guarneri, Daniel Martinez, Rob Simmons and Daniela Demetrio) was also very well received.

The meeting was attended by 245 delegates including both scientists and ET practitioner; this was one the highest number of participants in the last ten years. The scientific program consisted of 5 sessions, including invited talks and oral presentation from selected abstracts, 2 workshops and 3 poster sessions.

Patrick Lonergan (University College Dublin, Ireland) was awarded the AETE pioneer award acknowledging his scientific discoveries on factors influencing oocyte and embryo development *in vitro*, maternal-embryo communication and the impact of circulating progesterone on uterine biology and embryo development. Prof. Lonergan's presentation entitled "Embryo transfer: past, present, future – a personal perspective" was introduced

by Dr. Dimitrios Rizos, who described their professional and personal friendship, as well as his outstanding mentoring role for young scientists.



Congratulations to Prof Patrick Lonergan for the 2024 pioneer award

The invited speakers were Cesare Galli, Jose Nélío de Sousa Sales, Gabriela Mastromonaco and Rebecca Krisher and they all focused on our society 40th anniversary. Cesare Galli reviewed the progress achieved in assisted reproductive techniques in the last 40 years, underlying the role played by European scientists in this process. On the other hand, Jose Nélío de Sousa Sales, together with Guillermo Pugliesi, described the evolution over the last 40 years of the artificial insemination and the timed-AI protocols in cattle from a Brazilian perspective. Gabriela Mastromonaco presented the impact of ARTs on wildlife species, highlighting the

importance of collaboration between researchers and practitioners from zoological, academic, governmental, and private sectors. Rebecca Krisher summarized the evolution of culture media for bovine embryos, including significant milestones and remaining challenges. Oral presentations, flash talks and the poster sessions also contributed to the scientific program (see prize winners in the following paragraph). The student-mentor lunch was also a good opportunity for young scientists to share their thoughts on their work with peers and senior researchers.

The first workshop was sponsored by Calier and created a platform for a good discussion on embryo therapy. The second workshop on emerging diseases as risk to international trade of genetic materials was also very interactive and well participated.

In the General Assembly, we had to say goodbye to the president Marja Mikkola. Thank you for the many years of dedicated service. Hilde Aardema, is the new president and we all wish the best of luck with her new role. The board also welcomed Francesca Mossa as a new member.



Marja Mikkola shares some tips & secrets with Hilde Aardema on how to be a great president

Social events were also a great celebration of AETE 40th anniversary with the welcome reception at the Paolo VI garden, the Gala Dinner at the Vita Restaurant and the farewell party at the Trattoria Caprese.

Overall, AETE 2024 was a great success and on behalf of the local organizing committee, we would like to thank all participants, sponsors and board members who contributed to the meeting.

We look forward to seeing you in Cork next year!

Pierluigi Guarneri

Davide Bolognini

Francesca Mossa



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Post-conference tour to Avantea: Innovation and Leadership in Equine Reproductive Techniques

On Saturday, September 7th, after the end of the AETE 2024 congress in Brescia, Avantea welcomed approximately 40 scientists from all over Europe for an exclusive visit to its laboratories and stables. This event was a unique opportunity to explore a worldwide-renown excellence in the area of equine and bovine reproductive techniques.

With over 30 years of experience, Avantea has set the global standard in equine assisted reproduction, thanks to the introduction and refinement of the Ovum Pick Up (OPU) and Intracytoplasmic Sperm Injection (ICSI) technique. This innovative methodology involves the retrieval of oocytes from donor mares (OPU), their fertilisation in the laboratory with a single spermatozoon (ICSI) and the in vitro culture of the embryo, which is then frozen for implantation in a recipient mare at the proper time. This technique offers remarkable solutions even in complex situations, such as mares with uterine pathologies or the use of semen from hypo-fertile stallions or available in limited quantities.

The visit began with a presentation by Prof. Cesare Galli, co-founder of Avantea, who illustrated the main milestones

achieved by the company and the new frontiers of assisted reproduction.



Prof Cesare Galli

Participants then explored the state-of-the-art laboratories where these techniques are carried out, visited the new stables and met Prometea, the world's first cloned horse, born in 2003, a symbol of Avantea's innovation and pioneering vision.

The visit also highlighted Avantea's extensive expertise in biotechnology, which includes cloning and gene editing techniques and the creation of animal models for scientific research. These models represent crucial tools for scientific progress, allowing the study of complex human pathologies with the aim of the development of advanced therapies.



AETE 2024 Prizes

Student Competition winner

Inne Xhonneux,
University of Antwerp, Belgium



Congratulations to Inne Xhonneux for her work on the impact of maternal and progeny obesogenic on the progeny in a murine model

Maternal diet induced obesity (DIO) affects oocyte mitochondrial functions, reducing the quality of the oocyte and subsequent embryo. Further embryonic development in the oviduct and uterus of DIO mothers may reprogram the offspring, a process that continues during lactation. This may increase the offspring's sensitivity to an obesogenic (OB) diet, exacerbating the direct effects of an OB diet on offspring health and oocyte quality. However, this was never thoroughly investigated. It also remains unknown whether the impact on offspring's fertility is only apparent at fertile age or may already be inborn. Such information is crucial to determine the need to mitigate or protect against maternal effects in offspring at risk, and to offer fundamental insights for sustainable advice. We hypothesized that both offspring and maternal OB diets affect adult offspring health and oocyte quality. Moreover, we hypothesized that maternal DIO influences the direct impact of the offspring's OB diet. We investigated mature oocytes, but also dormant ovarian follicles at adulthood and even earlier at weaning and at birth. Outbred Swiss offspring from control and

OB-fed mothers were weaned on control or OB diets for 7 weeks. At offspring adult age, we confirmed negative effects of the offspring's OB diet on offspring health and oocyte quality, and showed for the first time that even the dormant primordial follicle pool is hampered by the offspring's OB diet. Contrarily, maternal DIO did not hamper the offspring's metabolic profile, or increased the offspring's sensitivity to an OB diet, but improved their metabolic profile despite morphological alterations in muscle mitochondria. Furthermore, our data suggest that maternal DIO increases the offspring's oocyte bioenergetic capacity, without signs that are indicative for damage in mature and primordial follicle oocytes. Maternal DIO also did not interact with the direct effect of the offspring's OB diet. Offspring from DIO mothers had no increased cellular stress levels (Hsp70) in their primordial follicle oocytes at birth or at weaning, but had reduced TFAM expression which may regulate mtDNA replication. More prominent effects of maternal DIO were detected in offspring primordial follicle oocytes after lactation, of which functional implications on subsequent follicular development require further investigation. Based on our data, it is unlikely that adult obese women born to obese mothers would require different preconception care strategies to improve their oocyte quality. However, the subtle maternal DIO-induced changes in the offspring's oocyte bioenergetic capacity may suggest the need for personalized IVF media formulations.

For more information:

<https://doi.org/10.3389/fphys.2023.1288472>

<https://doi.org/10.3389/fphys.2024.1354327>

<https://doi.org/10.1371/journal.pone.0305912>

Best presentation winner

Maria Belen Rabaglino
Utrecht University, The Netherlands



Congratulations to Belen Rabaglino for her work entitled *In vitro procedures deregulate the embryonic disc and extraembryonic membranes transcriptome and epigenome of day 15 elongated bovine embryos*

Sustainable meat and milk production could be achieved by enhancing resilience and productivity traits while minimising the impact on the climate. In cattle, assisted reproductive technologies, particularly those involving embryo production, are the most promising toolbox for attaining this end (Hansen, 2024). Embryos produced either in vitro (IVP) or in vivo (IVV) can be employed to disseminate the superior genetics of the female and accelerate genetic gain, be subjected to genomic selection, and enhance the fertility of animals suffering from heat or metabolic stress. The transfer of IVP embryos carries the advantages of diminishing the economic costs for embryo production, obtaining genetic material from very young females, and ‘recycling’ genetic information (oocytes) from animals sent to the food chain. For these and other reasons, since 2016, the transfer of IVP embryos has passed, and currently far exceeds, the transfer of IVV bovine embryos (Viana, 2022). However, one of the main issues associated with IVP embryos is that their competence, or ability to sustain a pregnancy, is more compromised than an IVV embryo, with

around only 27% successfully producing a calf, estimated to be 24% less than IVV embryos (Ealy et al., 2019). High losses of IVP embryos occur between day 18 and 30 of gestation, probably because of impaired elongation from ~day 13 of pregnancy (Clemente et al., 2011). This period involves critical events for the embryo, such as gastrulation and formation of the embryonic disc (ED), as well as the development of the extraembryonic membranes (EEM). Therefore, we hypothesise that in vitro procedures negatively affect the molecular signatures of both embryonic regions. The goal was to quantify the effect of the in vitro procedures on the transcriptome and epigenome of ED and EEM of day 15 bovine conceptuses compared to IVV counterparts. IVP embryos were derived from oocytes aspirated from slaughterhouse ovaries after maturation, fertilisation, and culture in serum-free medium until transfer at day 7, while IVV embryos were generated after ovarian super-stimulation and artificial insemination, following standard protocols for both procedures. Animals were flushed at day 15 of gestation to recover the elongated embryos. Sections of the EEM and ED from IVP and IVV embryos (n=8 per group) were submitted to RNA sequencing or whole genome bisulfite. Raw fastq files were aligned to the ARS-UCD1.3 bovine genome. Processed data were integrated through a multi-omics approach based on machine learning to determine the key ontological terms characterising each embryonic tissue lineage according to its methylome and transcriptome. Next, differentially expressed genes (DEG) and differentially methylated genes (DMG) were determined with the DESeq2 or Methylkit packages for the R software, respectively, at a false discovery rate (FDR) < 0.05. Finally, enriched biological processes (FDR < 0.05) associated with

DEG or DMG in the EEM or ED between IVP and IVV embryos were determined using the DAVID database. There were 403 and 740 DEG in the EEM and ED, respectively, between IVP and IVV conceptuses, while for the DMG, 1360 and 970 were hypermethylated, and 2798 and 3698 were hypomethylated in the EEM or ED, respectively, of IVP conceptuses compared to the IVV counterparts. The functional analysis revealed that several of the identified critical ontological terms were also enriched by hypermethylated DMG and down-regulated DEG, mainly in the ED, including canonical Wnt, bone morphogenetic protein and transforming growth factor beta signalling pathways (10.5% of terms for ED versus 1.8% of terms for EEM). Furthermore, In the ED, biological processes such as gastrulation, segmentation, axis specification and mesoderm development were down-regulated in IVP conceptuses compared to IVV counterparts. In conclusion, our study on day 15 bovine embryos highlights the negative effect of the IVP technology on the developmental processes of both tissue lineages analysed, with a more pronounced effect in the ED than in the EEM, which can explain why most IVP conceptuses are lost after this period.

AETE 40th anniversary logo competition

Maria Belen Rabaglino

Utrecht University, The Netherlands



Maria Belen Rabaglino is also the winner of our 40th anniversary logo competition. Congratulations!

AETE new logo competition

Axelle Buydens, University of Antwerp, Belgium



Well done to Axelle Buydens, from the University of Antwerp, Belgium who designed the new AETE logo.



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Best poster winner

Judith Diaz Muñoz, Universitat Autònoma de Barcelona, Spain



Congratulations to Judith Diaz Muñoz for her poster on oxidative stress-induced extracellular vesicles from bovine granulosa cells

Isolation and characterization of oxidative stress-induced extracellular vesicles from bovine granulosa cells under oxidative stress conditions

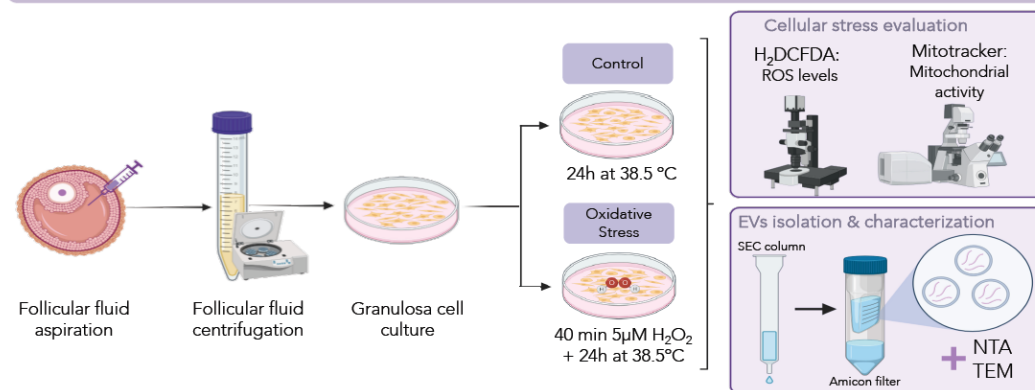
Judith Diaz-Muñoz^{1,*}, Sonia Gago¹, Karina Cañón-Beltrán², Yulia N. Cajas³, Mabel López-Béjar¹, Dimitrios Rizos⁴, Teresa Mogas¹

¹Universitat Autònoma de Barcelona, Spain; ²Universidad Complutense de Madrid, Spain; ³Universidad Politécnica de Madrid, Spain; ⁴Instituto Nacional de Investigación y Tecnología Agraria y Alimentaria, Spain; *judit.diaz@uab.cat



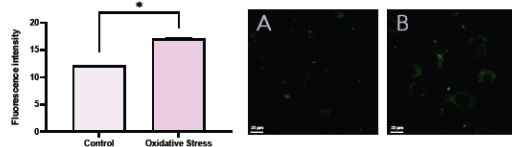
BACKGROUND: Extracellular vesicles (EVs) are naturally released particles from cells into the extracellular space, encapsulated by a lipid bilayer, and containing bioactive molecules. Their cargo is highly heterogeneous, varying with the cellular source and environmental conditions. Previous studies have shown that oxidative stress exposure induces modifications in the cargo of EVs derived from granulosa cells, triggering an adaptive response to cellular stress in recipient cells. **Herein, we aimed to isolate and characterize extracellular vesicles derived from granulosa cells subjected to oxidative stress.**

EXPERIMENTAL DESIGN



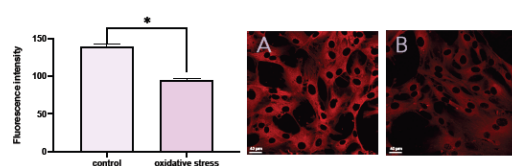
GRANULOSA CELLS

Reactive Oxygen Species Levels



ROS levels in granulosa cells in the Control group (A) and the Oxidative Stress group (B). * indicates statistically significant differences ($p < 0.05$) among groups. Data are presented as the mean \pm SEM.

Mitochondrial Activity



Mitochondrial activity in granulosa cells in the Control group (A) and the Oxidative Stress group (B). * indicates statistically significant differences ($p < 0.05$) among groups. Data are presented as the mean \pm SEM.

The induction of oxidative stress in granulosa cells results in:

- Higher ($P < 0.05$) levels of ROS in the Oxidative Stress group compared to the Control group
- Reduced ($P < 0.05$) mitochondrial activity in the Oxidative Stress group compared to the Control group

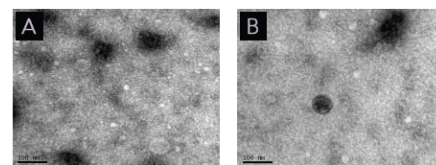
EXTRACELLULAR VESICLES

Nanoparticle Tracking Analysis

Group	Particles/mL \pm SD	Mean \pm SEM (nm)	Mode \pm SEM (nm)
Control	$2.07 \times 10^{11} \pm 1.6 \times 10^{10}$	237.3 ± 4.9	170.1 ± 8.3
Oxidative stress	$1.98 \times 10^{11} \pm 2.2 \times 10^{10}$	223.2 ± 7.0	160.0 ± 13.4

Concentration, mean, and modal size of granulosa cell-derived extracellular vesicles in Control and Oxidative Stress groups.

Transmission Electron Microscopy



Transmission electron microscopy images of granulosa cell-derived extracellular vesicles in the Control (A) and Oxidative stress (B) groups.

- Nanoparticle Tracking Analysis show no differences in terms of concentration and mean and modal sizes.
- Transmission Electron Microscopy analysis confirmed the presence and morphology of isolated EVs

Experience from Representing AETE at the Brazilian Embryo Technology Society (SBTE) Meeting in Atibaia

By Marja Mikkola

Past President of AETE

In August, I had the privilege of representing AETE at the SBTE meeting in Atibaia, Brazil. I am sincerely grateful to AETE for this opportunity and to SBTE for their kind invitation to attend and present. This was an invaluable experience, offering unique insights into the parallels and contrasts between our societies and the cultural dynamics of Europe and Brazil.

The SBTE meeting drew over 640 participants, predominantly from Brazil but also from other South American countries. Before the official start of the meeting, a day of hands-on pre-conference workshops was held in various locations, emphasizing practical training. The conference venue—a sprawling holiday resort complete with water parks and diverse sports facilities—added a distinct charm, enabling attendees to combine professional development with family time. Many attendees took their families and children with them to enjoy this familial atmosphere and enjoy the annual gathering.



In the opening session, led by President José Nélío de Souza Sales, two notable

awards—the Young Scientist Award and the Pioneer Award—were presented. The scientific sessions followed an engaging format: two flash talks of selected abstracts, three invited half-hour presentations, and a dynamic round-table discussion. This structure fostered lively, in-depth conversations and provided a comprehensive perspective on each topic.

The poster sessions with nearly 280 posters showcased the Brazilian research activities. Thus, navigating in the poster hall was definitely not possible in a glance. The abundance of posters presenting data on large numbers of animals was impressive. Brazil's dominance in the field of OPU-IVF and fixed-time artificial insemination (FTAI), supported by its vast cattle population, was evident. There was a nice balance between basic and applied science. The poster and student competitions were divided into two categories: awards for the best work in basic science and in applied science. In addition, there was an award for the best work by field professionals/case report. This structure could inspire also AETE to further promote applied and field-driven research at our meetings.

Beyond the scientific aspects, the social program highlighted Brazilian hospitality and a lively party spirit. My Brazilian colleagues extended a warm welcome, ensuring I felt at home in their community. This enriching experience

reinforced the value of international collaboration and exchange, leaving me inspired by Brazil's contributions to embryo technology and the collaboration with the SBTE society.



Upcoming Events

INTERNATIONAL EMBRYO TECHNOLOGY SOCIETY

18-22 January 2025

Forth Nox, Texas, USA

<https://www.iets.org/Meetings/2025-IETS-Annual-Meeting>

SOCIETY FOR THE STUDY OF REPRODUCTION

28 July -1 August 2025

Washington D.C., USA

<https://ssr.org/events/2025-annual-meeting/>

BRAZILIAN EMBRYOTECHNOLOGY SOCIETY

13-15 August 2025

Costa do Suaípe, Bahia, Brazil

<https://www.sbte.org.br/en/>

AETE

3-5 September 2025

Cork, Ireland

<https://www.aete.eu/>

EUROPEAN SOCIETY FOR DOMESTIC ANIMAL REPRODUCTION

11-13 September 2025

Albena Resort, Bulgaria

<https://www.esdar.org/>

AETA & CETA/ACTE JOINT ANNUAL CONVENTION

16-18 October 2025

Reno, Nevada, USA

<https://www.aeta.org/Conventions/Annual-Conventions>

The Elongated

Calling all former AETE board members: Be part of The Elongated!

We are excited to invite you to join The Elongated, a group created by former AETE board members to stay connected and catch up during our annual meetings. This tradition started two years ago with a small group of us, but now we'd like to extend the invitation to all past board members.

If you've ever served on the AETE board, this is your chance to reconnect with

former colleagues, share insights, and continue contributing to the AETE community. We also have a WhatsApp group to keep everyone informed and in touch throughout the year.

If you'd like to be part of the group, please contact Jan Detterer (jandetterer@gmail.com) to be added.

Join us and make The Elongated a welcoming space for all past board members. Together, we can ensure that no one is left out.

Stay tuned for more details, and we look forward to welcoming you

Invitation to Cork 2025

Dear Colleagues,

I am delighted to invite you to the 2025 Congress set in the vibrant city of Cork, Ireland. Following our previous gathering in Brescia, we eagerly anticipate another enriching experience in Ireland's spirited second city.

Cork, affectionately known as the "Rebel City," offers a blend of rich cultural heritage and contemporary charm. As a cultural hub, Cork is bustling with arts, markets, and an exceptional food scene that champions local produce. The city serves as a gateway to the scenic South West of Ireland, providing a picturesque backdrop for our congress.



This prestigious event will be hosted at the Clayton Hotel, located in the heart of Cork City. This venue, situated along the picturesque River Lee, provides modern facilities that will cater to our needs for fruitful discussions and networking.

The pre-conference activities are particularly exciting this year. You will experience a practical insight into cutting-edge agricultural technology and veterinary practices, which will cover advancements in veterinary medicine, including embryo work. These sessions promise to be both informative and engaging, offering hands-on experiences in a dynamic setting.



AETE president and local organizing committee are working together to plan the pre-conference sessions

Our gala dinner will be held at the Cork City Jail, an iconic venue known for its stunning architecture and historical significance. The evening will be filled with traditional Irish music, and gourmet cuisine, ensuring a memorable experience for all attendees.



The Congress is easily accessible via Cork Airport, with great connections to many international destinations. Cork's compact size and efficient public transportation make it easy to explore and enjoy the city's warm hospitality.

We look forward to welcoming you to Cork in 2025 for a blend of great scientific content, practical workshops, and fun cultural exchanges. More details will be provided as the event approaches, but for now, please mark your calendars for an unforgettable experience in Ireland.

Looking forward to an engaging and inspiring Congress in Cork!

Warm regards,

James Quinn

Head of the Local Organizing Committee

AETE 2025 invited speakers

Pioneer award 2025 - Urban Besenfelder



Urban Besenfelder is Professor at the Institute of Animal Breeding and Genetics at the University of Veterinary Medicine Vienna. He has set himself the task of investigating the development of early embryonic stages in more detail and making it accessible to science and practice. In addition to rabbits, he has also worked with sheep, goats, pigs and cattle. Early embryonic development has been examined from various levels in numerous collaborative studies. The main focus was on providing biomedical models and investigating early embryonic development in the context of fertility and reproduction of these species. A major research area was dedicated to bovine fertility, mainly comparing *in vivo* vs. *in vitro* embryo development, examining the effect of milk performance and hormonal influences. As these embryo stages mainly develop in the oviduct, it was a particular concern to technically establish and finally provide a routine access to the Fallopian tube via the use of transvaginal endoscopy as a minimally invasive approach.

His work in scientific fields is characterized by numerous international collaborations and networks, which have resulted in a wide range of publications, lectures and supervision of doctoral students. His longstanding experience in dealing with animals for science,

research and teaching have contributed to his participation in commissions of the University of Veterinary Medicine, the Austrian Academy of Sciences, the Federal Minister of Education, Science and Research and the Austrian Veterinary Chamber.

Valentina Lodde



Dr. Valentina Lodde is an Associate Professor of Animal Anatomy and Physiology at the University of Milan's Department of Veterinary Medicine and Animal Sciences. She earned her degree in Biotechnology in 2002 and a PhD in Biotechnology Applied to Veterinary Science in 2006, both from the University of Milan. She furthered her expertise through postdoctoral training at the University of Connecticut Health Center (USA).

She was awarded with the LOREAL-UNESCO for women in Science National Award in 2006 and was the recipient of the Marie Curie Career Integration Grant (Individual Fellowship programme) in 2012. Dr. Lodde's research focuses on mammalian female fertility, with a particular emphasis on oocyte and preimplantation embryo development in bovine species. Together with the team of the Reproductive and Developmental Biology Laboratory (ReDBioLab), she has contributed to the characterization of the morphological and functional features of oocyte growth and

development in bovines, significantly advancing the optimization of protocols for in vitro oocyte culture.

ORCID <https://orcid.org/0000-0002-9768-2292>

Osvaldo Bogado Pascottini



Osvaldo grew up in a beef farm in Paraguay, where his interest in bovine reproduction began. He completed his Doctor of Veterinary Medicine degree in 2010 at the National University of Asuncion (Paraguay). In 2016, Osvaldo concluded his Ph.D. at Ghent University (Belgium). In 2017, he started his first post-doctoral fellowship at the Ontario Veterinary College of the University of Guelph (Canada), where he focused on improving uterine health in dairy cattle by controlling inflammation around the time of parturition. From 2019 to 2023, Osvaldo was a Research Associate in a joint project between the University of Antwerp and Ghent University (Belgium) that aimed to demystify the role of uterine extracellular vesicles on fertility using a dairy cow model. As of 2024, Osvaldo is an Ad Astra Assistant Professor at the School of Veterinary Medicine of the University College Dublin (Ireland). Osvaldo is a Diplomate of the American College of Theriogenologist, author of over 90 (A1) peer-reviewed publications, and supervisor of multiple PhD students.

Roberto Sartori



Roberto Sartori received his Veterinary degree and Masters from School of Veterinary Medicine and Animal Science – São Paulo State University (1992 and 1997, respectively). His Ph.D. degree in Dairy Science was from University of Wisconsin-Madison (2002) in the area of Reproductive Physiology of Dairy Cattle. From 2004 to 2009, Roberto worked as a Researcher at Embrapa Genetic Resources and Biotechnology in Brazil. Currently, Dr. Sartori is an Associate Professor at the Department of Animal Science of the University of São Paulo (ESALQ/USP), Piracicaba, SP, Brazil. His main research interests are in physiology of reproduction in *Bos taurus* and *Bos indicus*, influence of nutrition on reproduction, reproductive biotechnologies, and reproductive efficiency in beef and dairy cattle. He has published more than 160 peer-reviewed papers with more than 5,500 citations and h-index 35.

RESEACHER ID:
<http://www.researcherid.com/rid/I-3339-2013>

Marie Saint-Dizier



Marie Saint-Dizier completed her DVM degree at the Veterinary School of Lyon (France), where Reproduction was her favourite discipline. In 2000, she completed a Master's degree in Reproductive Physiology at the University of Paris and started her PhD at INRAE on the roles and mechanisms of action of equine Chorionic Gonadotropin in pregnant mares, under the supervision of Drs Peter Daels and Yves Combarnous. From 2004 to 2015, Marie was a lecturer in animal reproduction at AgroParisTech (Paris) and conducted her research project on the endocrine regulation of oocyte maturation in dogs. Because the maturation of dog oocytes take place in

the oviduct, she started to study the physiology of this mysterious and little-known organ in the 2010s. Since 2015, Marie is a Professor at the University of Tours (France), where she's always surrounded by dozens of students from the "Sustainability and quality in animal production" Master's degree. At INRAE (Nouzilly), she's the head of a sympathetic group studying the interactions between sperm/embryos and the female tract and their roles in embryo quality and pregnancy success in mammals.

Do you want to share news?

Do you have a job opportunity at your university or company? Do you have a conference that you want to inform about? Do you have other news you want to share with members of the AETE?

Send the information to info@aete.eu and it will be published on the website and social media. Check the website <https://www.aete.eu/news/> for news updates and our Facebook page!

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Preliminary program



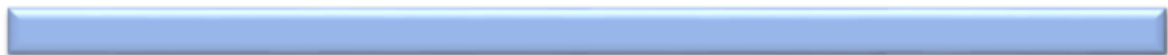
Association Européenne des Technologies de l'Embryon
Association of Embryo Technology in Europe

41ST SCIENTIFIC MEETING

Cork, Ireland

Clayton Hotel Cork City

4th – 5th September 2025



WEDNESDAY, September 3rd 2025

09.00-17.00: Preconference

18.30-20.00: Registration

20.00-22.00: Welcome Reception

THURSDAY, September 4th 2025

08.00-17.00: Registration

08.45-18.00:



SESSION 1: *First invited lecture:*

Osvaldo Pascottini, School of Veterinary Medicine, University College Dublin, Ireland.
Microbiome-based therapies for restoring uterine health in domestic species.

Short oral communications



Second invited lecture:

Roberto Sartori, Department of Animal Science, University of São Paulo (ESALQ/USP), Piracicaba, SP, Brazil.
Pregnancy loss in cattle with emphasis on embryo recipients.

POSTER SESSION 1 and coffee break

Short oral communications: *Student Competition*

Student Lunch/Lunch



SESSION 2: *Third invited lecture:*

Valentina Lodde, Department of Veterinary Medicine and Animal Sciences, University of Milan, Italy.

***In vitro* oocyte growth.**

Short oral communications

POSTER SESSION 2 and coffee break

Workshop: Challenges in donor and recipient management in commercial bovine ET.
chaired by James Quinn

20.00–02.00: Gala Dinner at Cork City Gaol

FRIDAY, September 5th, 2025

08:00-18.00:



SESSION 3: *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.

Short oral communications

POSTER SESSION 3 and coffee break

General Assembly

Sponsor presentation

Lunch

SESSION 4: Short oral communications



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.

Pioneer award 2025 – Urban Besenfelder AETE Medalist Presentation
Introduced by Michael Hölker (Germany)

POSTER SESSION 4 and coffee break

Short oral communications

Closing session:
Student Competition results and invitation to the AETE Conference 2026

20.00-24:00: Farewell party at the Bodega

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From the AETE board