1st European Symposium on Animal Reproduction

21-22-23rd
Sept.
2023

Welcome to NANTES

Nantes Convention Center, France
5 rue de Valmy
44000 Nantes

ECAR
ESDAR
EVSSAR

ESDAR
EVSSAR

ASconnect événement
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We are very proud to welcome you to the first European Symposium on Animal Reproduction, ESAR, organized from 21 to 23 September 2023, at La Cité Nantes Congress Centre, France.

The idea of organizing a joined conference between ESDAR, EVSSAR and ECAR had been on our minds for quite a while. As everybody knows: good ideas are like wine and cheese: they take time to mature. We wish to acknowledge our predecessor presidents and boards who paved the way.

There are plenty of good reasons for organizing the conferences of our three Entities together:

- **Transversality:** we are all the European Repro family! Whatever our subspecialty, preferred species to work with or whether we are practitioners, scientists, students, residents, or from academia, there is one common theme and interest we all share: Reproduction with a big “R”! That very same “R” that can be found in the acronym of all three Entities: together we can share knowledge, learn from each other and form new connections for future collaborations

- **Congeniality:** this is a great opportunity to see colleagues and friends we do not always get a chance to spend time with, because we did not attend the same congress that year

- **Science:** together we can build up a wider and better scientific program, one with cross-species talks and a wide panel of parallel sessions to satisfy all interests

- **Education:** research students and residents can seek out networking opportunities and mentors within the broad field of reproduction. This is crucial for your personal and professional development, and there is a lot of catching up to do after the pandemic years with low conference activity and impersonal digital seminars!

- **Environment:** are you among those attending more than one of the big European conferences? How about flying to one destination only? Together we can reduce our impact on the planet

- **Economics:** for those attending, this will mean one single flight ticket to buy, and one stay to pay for only; and for the Entities it will allow scale savings on the organization of the conference, sharing of the heavy workload for the board of each entity, better visibility of the bigger event, a more attractive arena for sponsors

And for those of us who only attend part of conference dedicated to one of the three entities? Well, we won’t be saving money or the planet this year, but we still will have the same quality conference we are used to, with all the extras of this joined venture!

As you can see, this idea is like good wine (or cheese)! We are convinced that the 1st ESAR will be the first of, hopefully, many more to come and we are thrilled to welcome you in Nantes to share it with you!

Andrea Del Carro  
President of EVSSAR

Renée Båge  
President of ESDAR

Stefan Deleuze  
President of ECAR
We are pleased and honored to welcome you in Nantes, for the 1st ESAR 2023...

Located in Nantes, close to the main pig, cattle and horse breeding basins, the most recent of the 4 French National Veterinary Schools will celebrate the diplomas of its 40th class of students in 2023. The DNA of teaching and clinical training in the reproduction of domestic mammals in Nantes has always rested and still relies on a transversal approach of compared physio-pathology between the different species: ruminants, pigs, horses, canines and felines.

Being, like many colleagues, each year torn as to the choice of the European congress in which we are going to participate (ESDAR or EVSSAR or ECAR annual congress?), it quickly made sense for us to have only one congress allowing us to benefit as much as possible from this transversal vision of animal reproduction. Vision that each in our favorite species allows us to progress even faster.

The veterinarians/the colleagues who work in the animal reproduction field know how important is the multi-species approach: comparative reproduction between species is a key-point not only for Academics, but also for practitioners.

The wish of the first European Symposium on Animal Reproduction (ESAR) became concrete for the first time in 2018. Covid-19 pandemic slowed down the organization process so the dream of 1st ESAR will become real after 5 years of intense exchanges and work.

The local organizing committee, which I have the immense pleasure of chairing, agreed to follow me with enthusiasm when I proposed that this 1st joint congress take place in Nantes.

In the past, only the 3rd edition of the ESDAR congress took place in France not very far from Nantes at the Haras National du Lion d’Angers in 1999, the same year in Lyon was organized one of the first congresses of the EVSSAR, a second edition took place in Paris in 2016. The National Veterinary School of Nantes hosted 2 sessions of the ECAR exam in 2014 and 2015.

The scientific committee, made up of members from each of the 3 boards, has done a fantastic job of offering you a high-level program combining the multi-species approach and more specific subjects while keeping an open mind towards young research colleagues and residents, without neglecting a practical clinical approach.

I hope that all of you, practitioners and clinicians, academics and researchers experienced but also more beginners, will appreciate the general organization and the facilities offered by the Congress Centre.

We warmly thank our sponsors of the event for their contribution and financial assistance. A big thank you to the local congress management company “AS connect” for having assembled and greased all the cogs so that this big machine that is the ESAR runs smoothly.

A huge thank you to all our speakers who came to share their expertise with us and who agreed to take part in a multi-species transversal approach.

Congratulations to all delegates who submitted abstracts, prepared posters or short communications, as well as the young researchers and residents selected during the competition process. I send respectful greetings to all colleague-reviewers who carried out in the shadow a difficult but indispensable work to ensure the quality of the sessions.

Finally, as this joint congress is a kind of marriage between ECAR, ESDAR and EVSSAR, we look forward to celebrating with you on Friday our gala evening and party, which is a bit like a French wedding reception in a nice private castle, “le chateau de la Pigossière”.

I can only encourage you to discover and appreciate the tourist, gastronomic and cultural riches of our beautiful historic city of Nantes (which with its port has always been turned towards the world) and of the pleasant and dynamic Pays de La Loire region.

Jean-François Bruyas
Chair of the local organizing committee
Wednesday 20th September 2023

1:45pm I Opening of the welcome desk, badge distribution

ECAR Board Meeting
ESDAR Board Meeting
EVSSAR Board Meeting

5:00pm - 7:00pm
Room 450 - Royal Canin Pre-symposium

Reproduction period matters for later healthy life: A DOHaD (Developmental Origins of Health and Diseases) perspective

- Feeding the puppy in the making: it starts with the parents
  Tabitha Hookey (Royal Canin, Aimargues, FRA)
- Genetic considerations to improve breed health, short and long-term implications
  Angela Hughes: (Royal Canin, St Charles, US)
- Round Table: The DOHaD in pets: what we (don’t) know (yet), but a world of clinical research opportunities
  Sylvie Chastant (ENV Alfort, FRA),
  Pascale Chavatte-Palmer (INRAE, Paris, FRA),
  Virginie Gaillard (Royal Canin, Aimargues, FRA),
  Franck Péron (Royal Canin, Aimargues, FRA)

7.00pm - 8.30pm I Welcome Reception, sponsored by
Thursday 21th September 2023

8:00am | Welcome coffee, badge distribution

8:30am | Opening Ceremony
Mrs. Laurence Deflesselle, DVM Dean of National College of Veterinary Medicine, Food Science and Engineering, Oniris (Nantes, FRA),
Pr Jean-Marie Bach, Vice-Dean of Oniris (Nantes, FRA)
Jean-François Bruyas, President of the Organizing Committee, Oniris (Nantes, FRA)

9:00am
Room 450 - 1st Plenary session: News & Insights. Jean-Marie Bach (Oniris, FRA)
- Intra-uterine programming of future fertility (review in all species)
  Pascale Chavatte-Palmer (INRAE, Paris, FRA)
- GnRH non only the conductor of pituitary-gonadic axis FSH and LH: a major player in brain plasticity, neonatal mini-puberty, implication in olfaction and in the cognition.
  Vincent Prévot (INSERM, CHU Lille, FRA)

10:30am | Coffee break, sponsors exhibition and posters (collection 1 - see list on QR code below)

11:00am
Room 450 - Young scientific competition. Gabriela Hirshbrunner (SWI)
- Anti-Müllerian hormone under short and long photoperiods in female cats,
  C. Lapuente (ARG)
- The influence of intra-venous glucose administration during in-vivoembryo production process in dairy cattle, A. Okuroğlu (TUR)
- Cow uterine fluid extracellular vesicles show oestrous cycle phase dependant proteomic changes affecting embryo development in vitro, J. Piibor (EST)
- Effect of equilibration temperature and time on feline ovarian tissue vitrification, I.M. Alkali (ITA)
- Stress during the transition period shortens telomere length in dairy cows, M. Dewulf (BEL)
- Adipokines expression profiles in pituitary gland and plasma levels during the estrous cycle of Large White and Meishan sows, N. Respekta (POL)
- The role of phoenixin-14 on endocrine function of porcine corpus luteum, an in vitro study, E. Młyczyńska (POL)
- Fertility in a randomized controlled study of customized voluntary waiting period in primiparous dairy cows, A. Edvardsson (SWE)
- The ex vivo response of canine pregnant myometrium to exogenous PGF2α, C. Jungmann (GER)
- In vitro effects of heavy metals on boar sperm motility, T. Oztas (FIN)
- In vitro evaluation of antimicrobial effect of ozone against bacteria responsible for equine endometritis, G.G. Donato (ITA)
- Fluorescent dyes to assess sperm competition in female North African Houbara Bustard (Chlamydotis undulata): impact on sperm motility and viability, L. Meunier (UAE)
- Alterations of Sertoli cells in dogs with chronic asymptomatic orchitis, P. Rehder (GER)
- AMH expression in cat ovaries and correlation with animal age and weight, S. Claassen (AUT)
- Prolonged cold-preservation outcome of feline ovarian tissue is improved by intra- and extracellular solutions but impaired by the fragmentation of ovary, O. Rodak (POL)
12:30pm | Lunch break, sponsors exhibition and posters (collection 1), sponsored by Virbac

2:30pm | Parallel specific sessions

**Room 450**
Tuire Tamminen (FIN)
Mammary carcinoma comparative pathology between small animals and humans - new therapeutic tools
Combined lecture
Jean-Sébastien Frenel (ICO Nantes - FRA)
Frédérique Nguyen (Oniris Nantes - FRA)

**Room 200**
Manuel Hidalgo (ESP)
Follow up of advances: pregnancy in equine
Ultrasound approach
Catherine Renaudin (UC Davies - US)
Endocrine approach
Alan Conley (UC Davies - US)

**Room GH**
Stefan Björkman (FIN)
Management, nutrition and reproduction in the peri-parturient sow in the context of changing production conditions.
Nicoline Soede (Wageningen University - NED)
Pieter Langendijk (Nutreco - NED)

*Parallel short communication OC7* Swine reproduction
- Influence of colostrum traits on the farrowing process of free farrowing sows, A. Grahofer (SWI)
- A greater frequency of nest-building predicts higher colostrum IgG and decreased piglet mortality in group-housed sows, M. Nystén (FIN)

4:00pm | Coffee break, sponsors exhibition and posters (collection 1 - see list on QR code below)

4:30pm
**Room 450 - 2nd Plenary session: neonatal morbidity - comparative point of view**
Stefan Deleuze (BEL)
- In bovine. John Mee (Teagasc, Fermoy - IRL)
- In equine. Aurelia Leroux (Oniris Nantes - FRA)
- In small animals. Sylvie Chastant (ENV, Alfort - FRA)
- In porcine. Emma Baxter (SRUC, Milothian - UK)

6:30pm - 7:30pm | Cocktail
Friday 22th September 2023

8:00am I Welcome coffee

8:30am

**Room 450 - 3rd Plenary session: Uterine diseases: endometritis comparative approach, sponsored by MAI Animal Health**

*Andrea del Carro (FRA)*
- Introduction by MAI Animal Health. *Jean-Louis Baldauf (FRA)*
- In bovine. *Osvaldo Bogado Pascottini (FMV, Ghent - BEL)*
- In equine. *Christine Aurich (FMV, Vienna - AUT)*
- In canine. *Gary England (Nottingham University - UK)*
- In porcine. *Alexander Grahofer (FMV, Berne - SWI)*

10:30am I Coffee break, sponsors exhibition and posters (collection 2 - see list on QR code below)

11:00am

**Clinical cases competition**

**Room 450 - Females** *Kathrine Kirchhoff (DEN)*
- Anti-muellerian hormone (AMH) concentrations during pregnancy and lactation in dogs, *S. Arlt (SWI)*
- Dystocia of a young dog with luteinized ovarian cysts, *S. Claassen (AUT)*
- Sudden, continuous estrus in a spayed Labrador bitch with no ovaries but intramyometrial granulosa cell seeding, *M. Pereira (ITA)*
- Ultrasonographic and hormonal follow up of a feline ovarian cyst, *P. Blanco (ARG)*
- Uterine fibroma and invagination in a non-pregnant bitch, *M. Nysten (FIN)*
- Perineal hernia in a pregnant Angus heifer, *E. Van den Branden (BEL)*
- It is not always what it seems: chorioallantois cervical pole necrosis, *J. Mariella (ITA)*
- Comparative effects of dexamethasone and diluted Nacetylcysteine in the prevention of Persistent Mating-Induced Endometritis in mares, *H. Farnia (FRA)*
- Atypical endometritis case in a lusitanian mare, *L. Vavasseur (FRA)*

**Room 200 - Males and neonates** *Cindy Maenhoudt (FRA)*
- Surgical management of paraphimosis secondary to surgical removal of a preputial sarcoid in a donkey: A case report, *M. Armangau (FRA)*
- Stuttering priapism in a dog, *F. Roux (FRA)*
- Improvement of semen quality in two dogs with Tribulus terrestris and Ledidium meyenii, *C. Otzdorff (GER)*
- Urethral prolapse in American Bully, a new common affection of the reproductive tract in an already ethically concerning breed: a case series of 4 dogs, *G. Robiteau (FRA)*
- Comparison of two pharmacological semen collection times with dexmedetomidine in domestic cats, *M. Hidalgo (BRA)*
- A high percentage of spermatozoa with distal droplets in a dog: a follow-up with subsequent semen evaluations and fertility, *A. Stock (CAN)*
- To be Brucella canis or not to be, *S. Egyptien (BEL)*
- Conservative treatment of flat thorax in two littermate kittens: a case report, *J. Fusi (ITA)*
- Appraisal of a kitten with congenital hypothyroidism, *G. Pagani (SWI)*
12:30pm | Lunch break, sponsors exhibition and posters (collection 2 - see list on QR code below)

2:30pm

**Parallel short communications and How to do session**

**Room GH - OC1 Spermatology** *Luis Ferret Dolcet (ITA)*
- Assessment of redox potential in the porcine ejaculate: relationships with seminal parameters and effect of storage, *E. Pintus (CZE)*
- The efficiency of Crocin supplementation in cryopreservation medium on post-thaw stallion sperm quality, *H. Farnia (FRA)*
- Reproductive pathology in African Houbara bustards: clinicopathological presentation and prevalence in artificially inseminated breeders, *M. Crispo (FRA)*
- Comparison of computer-assisted semen analysis, a fluorescent computer-assisted spermatozoal quantification method and manual counting using a haemocytometer in clinical semen samples in dogs, *J. Watts (AUS)*
- Semen collection of rams by artifcial vagina (AV) using a self-made dummy, *C. Otzdorff (GER)*
- Comparing different sperm concentrations for cooled semen shipment in dogs, *N. Sugai (USA)*

**Room 450 - OC2 Gynecology** *Toni Dovenski (MKD)*
- Relationship between polymorphonuclear neutrophils in the uterus and oviduct in postpartum dairy cows, *K. Wagener (AUT)*
- Reduced progesterone concentration in the early luteal phase delays pregnancy development and reduces foaling rate in horses, *L.-H. Wagner (AUT)*
- Pregnancy rates of Holstein-Friesian cows with cavitary or compact corpus luteum, *N. Vass (HUN)*
- The analytical method used for metagenomic sequencing influences the differential abundance of microbial species found in healthy or clinical endometritis cows, *M. Rashid (BEL)*
- Estradiol could prevent the production of fibrogenic PGF2α in an acute response to TGFα1 in equine endometrium during follicular phase, *A. Amaral (POR)*
- Pregnancy associated anogenital thermal features of ewes in non-breeding season, *K.T. Olğaç (TUR)*
Room 200 - OC3 Nutrition/fetal development Sylvie Chastant (FRA)
- Effect of Bisphenol S and metabolic status of the ewe on maternal-fetal metabolism, N. Picard-Hagen (FRA)
- Effect of maternal supplementation with live yeast S. boulardii l-1079 on the gut microbiota of newborn puppies, I. Bendahmane (FRA)
- Reduced reproductive performance in calves born small for gestational age, M. Meesters (BEL)
- Berv-K1: possible functional implications in feto-maternal communication and presence in bovine placental extracellular vesicles, J. Galli (SWI)
- Canine pregnancy and lactation – a close look at the metabolome, S. Arlt (SWI)
- Description and factors of variation of the weigh-suckle-weigh method in newborn puppies, H. Mila (FRA)

Room KL - How to do session 1 Jan Govaere (BEL)
- How to conduct a Diagnostic approach in case of abortion in the sow, or in case of problems with premature farrowing, stillborn piglets, excessive neonatal loss, D. Maes (BEL)
- How to evaluate the farrowing process in a free farrowing system, A. Grahofer (SWI)
- How to sample saliva from sows and piglets, M. Ornstup Kaiser (DEN)
- How to assess colostrum intake by piglets, D. Maes (BEL)
- How to evaluate and interpret changes of the vascularization of the corpus luteum during the cycle in cattle: application to reproductive management, N. Picard-Hagen (FRA)
- How to ultrasound a bull’s genital tract: images of the main genital disorders, N. Picard-Hagen (FRA)
- How to evaluate uterine cytological examination for the diagnosis of subclinical endometritis in dairy cows photographic review, O. Bogado (BEL)

4:00pm I Coffee break, sponsors exhibition and posters (collection 2 - see list on QR code below)

4:30pm
Room 450 - 4th Plenary session: metabolic and endocrinal disorders : impact on reproductive function, comparative point of view
Geert Opsomer (BEL), George Mantziaras (GRE)
- In equine. Laetitia Jaillardon (Oniris Nantes - FRA)
- In small animals. Laetitia Jaillardon (Oniris Nantes - FRA)
- In porcine. Marianne Ornstrup Kaiser (Anivet, Aarhs - DEN)

6:45pm I Departure to the Gala dinner, sponsored by
Saturday 23rd September 2023

8:00am I Welcome coffee

8:30am

**Room 450 - 5th Plenary session: Abortion comparative approach**

*Renée Bage (SWE)*

- In bovine. *John Mee (Teagasc, Fermoy - IRL)*
- In equine. *Albertine Léon (RESPE Labéo, Caen - FRA)*
- In canine. *Alain Fontbonne (ENV Alfort- FRA)*
- In porcine. *Dominiek Maes (FMV, Ghent - BEL)*

10:30am I Coffee break, sponsors exhibition and posters (collection 3 - see list on QR code below)

11:00am

**Parallel specific sessions**

**Room 200**

*Judith Roelofs (NED)*

**Mammary Immunity in Ruminants**

Knowledge and gaps

*Pierre Germon/ Rodrigo Prado Martins (INRAE, Tours-Nouzilly - FRA)*

Vaccination against mastitis: indication and efficacy in field

*Sofie Piepers (FMV, Ghent - BEL)*

**Room 450**

*Chiara Milani (ITA)*

**Follow up of advances in understanding canine pregnancy**

Ultrasound approach

*Cheryl Lopate (Reproductive-revolutions, Wilsonville - US)*

Endocrine and morpho-functional regulations of canine pregnancy

*Mariusz Kowalewski (Zurich University - SWI)*

**Room GH**

*Andres Valdmann (EST)*

**Evaluation of semen quality to predict fertility: new tools**

*Isabelle Barrier-Battut (IFCE, Le Pin - FRA)*

*Marleen Broekhuijse (CRV - NED)*

**Parallel short communication OC8 Semen**

- A gold standard methodology to control bovine and swine sperm motility reliability? *A. Camus (FRA)*
- Concentrations of ProAKAP4 as indicators of sperm quality in commonly used bull semen Extenders, *P. Thery (FRA)*

12:30pm I Lunch break, sponsors exhibition and posters (collection 3 - see list on QR code below)
12:30pm I  
**Room J - ESDAR Country representative meeting**  
Andres Valdman (EST), Stefan Björkman (FIN)

2:30pm  
**Parallel short communications and How to do session**

**Room GH - OC4 Andrology** Stefano Romagnoli (ITA)  
- Early neutering of kittens: breeders practices in France, S. Chastant (FRA)  
- Sarda breed: Even cryptorchid rams play a role, Ch. Nassif (ITA)  
- Anti-Mullerian hormone concentrations in dogs with testicular atrophy, B. Walter (GER)  
- Melatonin concentration in seminal plasma of goat bucks in the centre of Mexico, A.J. Cárdenas Padilla (MEX)  
- Metagenomics analyses of bull semen microbiota in different seasons, A. Cojkic (SWE)  
- Localization and seasonal variation of brain-derived neurotrophic factor and neurotrophin receptor kinase-2 in stallion testes, M. Shakeel (KOR)

**Room 450 - OC5 Oocyte/Embryo technologies, sponsored by MAI Animal Health**  
Christianne Otzdorff (GER)  
- Horse conceptuses increasingly produce autotaxin during the time of rapid expansion, S. Budik (AUT)  
- Association between cumulus expansion and blastocyst development in bovine in vitro embryo Production, A. Raes (BEL)  
- Selected aspects of lipids (lipid droplets, transcript expression) in immature and in vitro matured oocytes and cumulus cells of the domestic cat, N. Sowinska (POL)  
- Addition of secretome from equine preovulatory follicular fluid during oocyte maturation does not affect blastocyst development, B. Macías-Garcia (ESP)  
- Antiapoptotic and antioxidant effects of melatonin on cat vitrified oocytes, M. Colombo (ITA)  
- First approach for cryopreservation of Axolotl embryos (ambystoma mexicanum) as a conservation strategy, E. Servin (MEX)

**Room 200 - OC6 Endocrinology/Other** Emmanuel Topie (FRA)  
- Comparison of the cytokine profile of follicular fluid from preovulatory and subordinate follicles in mares, M. Luis-Calero (ESP)  
- Twice daily microdoses of a GnRH analogue decrease serum FSH concentrations in cycling mares, N. Orner (USA)  
- Proteomic basis of vitamin D3 and insulin interaction in the porcine granulosa cells of ovarian Follicle, K. Kamińska (POL)  
- Effect of a GnRH antagonist on anti-Müllerian hormone and follicular population in anestrous Bitches, M. Faya (ARG)  
- Ecbolic treatment may be detrimental to luteal development in mares, Y. Khan (AUT)  
- Arousing students’ interest in equine reproduction: an innovative case-based approach, M. Köhne (GER)
Room KL - **How to do session 2** **Paulo Borges (POR)**

- How to ultrasound the fetal equine first phalanx in utero: relevance for fetal aging and bone maturation assessment, **C. Renaudin (USA)**
- How to train a stallion for semen collection, **C. Aurich (AUT)**
- Urethral semen collection in cats with trans scrotal stimulation, **S. Prochowska (POL)**
- How to collect epididymal semen in the tomcat by retrograde flushing, **D. Monaco (ITA)**
- How to do a transcervical insemination in the bitch, **K. Kirchoff (DNK)**
- How to perform a reproductive visit: audit in kennels?, **S. Chastant (FRA)**
- How to perform a surgical approach of urethral prolapse in dogs, **G. Robiteau (FRA)**

4:00pm

**Closing ceremony**

- Competitions Awards ceremony
- Announcement and presentation of 2024 ECAR, ESDAR and EVSSAR Congresses
- Announcement of ECAR, ESDAR, EVSSAR General Assemblies
- Final words by ECAR, ESDAR, EVSSAR and Local Organizing Committee presidents

4:30pm | Congress closure