

# PROGRAMME

## Thursday 27<sup>th</sup> September 2018

Rectorate building (conference venue)

14:00            **ESDAR Board meeting**  
20:30-22:00    **Welcome reception of ESDAR**

## Friday 28<sup>th</sup> September 2018

- 08:45-09:10    **Opening session. Auditorium**  
Geert Opsomer (President of ESDAR)  
José Carlos Gómez Villamandos (Rector of the University of Cordoba)  
Manuel Hidalgo (Chair of the local organizing committee)
- 09:10-10:30    **Plenary session I. Auditorium**  
**Chair: Geert Opsomer**
- 09:10-09:50    Keynote lecture 1: **Assisted reproductive techniques in mares**  
Katrin Hinrichs (Texas A&M University, USA)
- 09:50-10:30    Keynote lecture 2: **Gene expression analysis and in vitro production procedures for bovine preimplantation embryos: Past highlights, present concepts and future prospects.**  
Christine Wrenzycki (Justus Liebig University Giessen, Germany)
- 10:30-11:00    **Coffee break**
- 11:00-12:00    **Poster session I (posters with ODD CODE)**
- 12:00-13:05    **Oral communications I: Young scientist competition. Auditorium**  
**Chair: Manuel Hidalgo**
- Transcriptomic analysis reveals that genes related to oxidative phosphorylation are downregulated in embryos obtained with frozen thawed sperm  
(J.M. Ortiz Rodriguez et al., Spain)
- Effects of testicular hemodynamic and echogenicity changes on ram semen characteristics  
(A.Ntemka et al., Greece)
- Vitrification in straws conserves motility features better than spheres in donkey sperm  
(M. Diaz-Jimenez et al., Spain)

Investigating the effect of IGF-1, FSH and LH on gene expression in bovine granulosa cells  
(M.J. Wieteska et al., Ireland)

Gene expression and immunolocalization of low-affinity receptor (p75) in rabbit male reproductive tract during sexual maturation.  
(A.Sanchez-Rodriguez et al., Spain)

Ejaculation effect on blood testosterone and prostatic pulsed-wave Doppler ultrasound in dogs  
(S. Alonge et al., Italy)

Comparison of different sucrose-based extenders for stallion sperm vitrification in straws  
(C. Consuegra et al., Spain)

Elastase inhibition affects collagen transcription and prostaglandin secretion in mare endometrium during the estrous cycle  
(A. Amaral et al., Portugal)

Extracellular vesicles derived from endometrial human mesenchymal stem cells improve IVF outcome in an aged murine model.  
(F. Marinaro et al., Spain)

13:05-13:15 **Sponsor session: Ongo sperm test exhibition. Auditorium Tamas Babel**

13:15-14:45 **Lunch break**  
Meeting of the ESDAR Country Representatives. Room 4  
ECAR Annual Business Meeting. Auditorium

14:45-16:00 **Oral communications II**

**Session 1: Spermatology. Auditorium**  
**Chair: Jesus Dorado**

Enrichment of a nanomicelle extender with reduced glutathione for bull semen cryopreservation  
(T. Nadri et al., Iran)

Age effect on semen quality, metabolomics and fertility in young Norwegian Red bulls  
(B. Narud et al., Norway)

Effect of protein during calcium ionophore A23187 treatment on the acrosome status of stallion sperm  
(I. Ortiz et al., USA)

Effect of nanowater on characteristics of deep frozen boar semen.

(A. Rzaša et al., Poland)

Characterization of calcium-gated channels in boar spermatozoa.

(H. D. Bui et al., Deutschland)

## **Session 2: Embryology and Obstetrics. Room 1**

**Chair: Graça Ferreira Dias**

Effect of glucose concentration during in vitro culture of equine embryo produced by ICSI

(M.J. Sánchez-Calabuig et al., Spain)

Transport-related stress response in newborn foals and their dams

(C. Nagel et al., Austria)

Reproductive characterization of a gray squirrel (*Sciurus carolinensis*) alien population: uterine scars and genital tract morphological seasonal changes

(M. Maranesi et al., Italy)

Reproductive performance, endocrine and metabolic profiles in cows calving twins or singletons

(A. Waldmann et al., Estonia)

Incidence of uterine torsions and the relation to blood calcium levels in Dutch dairy cows

(F. H. Jonker et al., Netherlands)

## **Session 3: Oocyte. Room 2**

**Chair: Toni Dovenski**

Lactate – a novel factor influencing the gene expression pattern in bovine granulosa cells

(A. Baufeld et al., Deutschland)

Post-mortem collection, in vitro maturation and detailed assessment of caracal oocytes – a case report

(S. Prochowska et al., Poland)

Omentin, new adipokine expressed in porcine ovarian follicles and regulated by progesterone hormone.

(A. Rak et al., Poland)

Expression level of genes encoding antioxidant enzymes in cat (*Felis domesticus*) oocytes and cumulus cells during in vitro maturation (IVM)

(A. Niwinska et al., Poland)

Advanced age reduces the total number of oocytes per OPU session but does not influence the blastocyst rate and embryo viability after ICSI in the mare

(J. Cuervo-Arango et al., Netherlands)

#### **Session 4: Endocrinology. Room 3**

**Chair: Carlo Tamanini**

Vaspin (VASP) expression is regulated by several factors in porcine ovarian follicles in vitro study

(P. Kurowska et al., Poland)

Identification of microRNAs (miRNAs) predicted to regulate prostacyclin synthase (PTGIS) expression in the porcine luteal tissue

(M. Szymanska et al., Poland)

The relationship between concentrations of serum IGF-I and uterine disease as well as response to synchronisation in dairy cows

(M. Beltman et al., Ireland)

Expression and cellular localization of P300, CREB, SRC-1 coactivators and NCOR-2 corepressor of progesterone receptor and acetyltransferase and deacetylase activity in the reproductive system of cows

(R. Rekawiecki et al., Poland)

Does early postpartum (pp) disease affect the pattern of resumption of ovulatory cycles in Holstein dairy cows?

(N.S. Ibrahim et al., Scotland)

16:00-16:30 **Coffee break**

16:30-18:00 **Parallel workshops 1-5**

**WS1: Embryo technologies: how do they affect embryo quality?**

**Auditorium**

**Moderator: Cristina Cuello**

How vitrification affects porcine embryo quality: a key to improve vitrification outcomes – Cristina Cuello (University of Murcia, Spain)

Preimplantation embryo development in cattle: mimicking physiological conditions in vitro -Dimitrios Rizos (Institute for Agricultural and Food Research and Technology (INIA), Spain)

Optimization of protocol for medium-term storage of porcine embryos - Maria A. Gil (University of Murcia, Spain)

**WS2: Artificial Insemination with frozen semen in the bitch: how to make it successful. Room 1**

**Moderator: Alain Fontbonne**

Ovulation timing and oocyte survival: impact on canine AI with frozen semen? - Alain Fontbonne (The National Veterinary School of Alfort, France)

AI with frozen semen in the bitch - how to make it successful - Catharina Linde-Forgsberg (Swedish University of Agricultural Sciences, Sweden)

Survival and fertilizing ability of frozen-thawed canine semen after insemination - Ann Van Soom (Ghent University, Belgium)

**WS3: Developmental programming and the use of epigenetics in farm animal production. Room 2**

**Moderator: Karel Verdrú**

Season of birth affects performance in cattle –Karel Verdrú (University of Ghent, Belgium)

Prenatal programming of commercially important traits in sheep and pigs - Cheryl Ashworth (University of Edinburgh, Scotland)

**WS4: Assisted-reproductive technologies for the conservation of wildlife species. Room 3**

**Moderator: Julián Santiago-Moreno**

Ultra-rapid cryopreservation of sperm from wild species: an alternative for the cryopreservation in the field - J.Santiago-Moreno (National Institute for Agronomic Research (INIA), Spain)

Studies in pampas deer (*Ozotoceros bezoarticus*) reproductive biology: a strategy as a base for conservation - Rodolfo Ungerfeld (Universidad de la República, Uruguay)

Critical endangered rhino species - a new rescue approach - Thomas Hildebrandt (Leibniz Institute for Zoo & Wildlife Research, Germany)

**WS5: Models to predict fertility: flow cytometry analysis. Room 4**

**Moderator: Isabelle Barrier**

Models to predict semen fertility : how can flow cytometry help us? – Isabelle Barrier (Institut Français du Cheval et de l'Équitation (I.F.C.E.), France)

Assess semen quality and monitor field performance: how to identify sub-fertility - Dr Marleen Broekhuijse (CRV/Topigs, The Netherlands)

- 18:30            **Old Town Run (5K).** Meet at conference venue
- 20:30            **Gala dinner**

## **Saturday 29<sup>th</sup> September 2018**

09:00-11:30    **Plenary session II. Auditorium**  
**Chair: Gaby Hirsbrunner**

- 09:00-09:40    Keynote lecture 3: **Embryonic maternal interaction in cattle and its relation with infertility**  
Patrick Lonergan (University College of Dublin, Ireland)
- 09:40-10:20    Keynote lecture 4: **Recent advances in pig reproduction: Focus on impact of genetic selection for female fertility**  
Bas Kemp (Wageningen University, The Netherlands)
- 10:20-10:50    Coffee break
- 10:50-11:30    Keynote lecture 5: **Flow cytometry analysis of spermatozoa: Is it time for flow spermetry?**  
Fernando Peña (University of Extremadura, Spain)

11:30-12:45    **Oral communications III**

**Session 5: Embryology and Gynecology. Room 1**  
**Chair: Primoz Klinc**

On-farm ovum pick-up in pregnant Holstein cows and in vitro production of embryos in Estonia  
(E. Mark et al., Estonia)

IGF- binding protein-2 concentration is higher in cows suffering from embryonic/early fetal mortality  
(L. Jessen et al., Deutschland)

How ram epididymal and electroejaculated sperm differ in their behavior during capacitation: impact on cleavage and blastocyst development  
(O. Garcia Alvarez et al., Spain)

Generation of TPC2 knock out pig embryos by CRISPR-Cas technology  
(J. Gadea et al., Spain)

Comparison of conventional sediment smears and cytopspins in low volume uterine lavage – a study in 16 mares  
(R. Marcos et al., Portugal)

## **Session 6: Spermatology. Auditorium**

**Chair: Fernando Peña**

Effect of ultra-low concentrations of benzimidazole derivative on equine sperm resistance to freezing  
(E. Nikitkina et al., Russia)

Cryopreservation of rhinoceros sperm  
(R. Hermes et al., Ireland)

Isolation and characterization of cysteine-rich venom protein-like isoform X2 from turkey (*Meleagris galopavo*) seminal plasma  
(M. Słowińska et al., Poland)

Improvement of canine spermatozoa vitrification  
(J. Cerdeira et al., Spain)

Effect of different seminal plasma fractions on viability of jack spermatozoas and on its interaction with polymorphonuclear cells  
(M. Papas et al., Spain)

## **Session 7: Gynecology. Room 2**

**Chair: Jean-François Bruyas**

Bovine viral diarrhoea virus infection interrupts the regulatory pathways for uterine interferon stimulated gene expression in cows  
(Z. Cheng et al., United Kingdom)

Fibrosis in donkey endometrium: how can we interpret it?  
(J. Aguiar Silva et al., Portugal)

DNA methylation in equine endometrium with different degrees of fibrosis  
(J. Alpoim-Moreira et al., Portugal)

Assessment of automatic quantitative analysis of slides to fast endometritis evaluation in mares  
(L. Zdrojkowski et al., Poland)

Non-esterified fatty acids (NEFAs) increase the production of IL-6 and IL-8 in bovine endometrial epithelial cells (bEECs) in culture  
(W. Chankeaw et al., Sweden)

## **Session 8: Endocrinology. Room 3**

**Chair: Andres Valdmann**

Immune checkpoint control of corpus luteum: expression profile of PD-1, PD-L1, and CTLA4 mRNAs in the ovine corpus luteum during early pregnancy and prostaglandin F<sub>2α</sub>-induced luteolysis  
(M. Hitit et al., Turkey)

Search for a pleiotropic effect of the FecLL prolific mutation in Lacaune meat sheep  
(L. Chantepie et al., France)

Maternal and fetal hair cortisol concentrations in beef cattle at delivery  
(T. Peric et al., Slovenia)

The effect of GnRH on the endometrial expression of oestrogen receptors in dairy cows  
(M. Trela et al., Poland)

NGF system is differentially expressed in the ovary, oviduct and uterus of rabbit does although independent of serum hormonal levels  
(R.M. Garcia Garcia et al., Spain)

12:45-13:15 **ESDAR Annual Business Meeting. Auditorium**

13:15-14:45 **Lunch break**

14:45-15:45 **Poster session II** (posters with PAIR CODE)

15:45-16:15 **Coffee break**

16:15-17:45 **Parallel workshops 6-10**

**WS6: Novel fertility traits and genomic markers in dairy cows.**

**Room 1**

**Moderator: Mark Crowe**

Novel fertility traits and genomic markers in dairy cows - Mark Crowe  
(UCD School of Veterinary Medicine, Ireland)

Metabolic clustering of dairy cows at early and peak lactation - Jenne de Koster  
(Ghent University, Belgium)

Genomic markers derived from novel milk mid-infrared spectra based fertility traits - Nicolas Gengler  
(University of Liege, Belgium)

**WS7: Assisted-reproductive techniques in cats applied to wild felids conservation. Room 2**

**Moderator: Wojciech Nizanski**

Assisted Reproductive Techniques (ART) in rescue programs of endangered wild felids-possibilities, obstacles and challenges –  
Wojciech Nizanski (Wroclaw University of Environmental and Life Sciences, Poland)

Fertility preservation in felids - Gaia Cecilia Luvoni (University of Milan, Italy)



In situ artificial insemination in large felids: practical approach, recent advances and difficulties - Alain Fontbonne (Ecole Nationale Vétérinaire d'Alfort, France)

**WS8: Sperm selection. Room 3**

**Moderator: Jane Morrell**

Sperm selection for assisted reproduction – Jane Morrell (Swedish University of Agricultural Sciences, Sweden)

Use of Single Layer Centrifugation to select sperm in dromedary camel semen - Clara Malo (Camel Reproduction Center (RDC), United Arab Emirates)

**WS9: The use of Anti-Müllerian hormone in fertility management. Room 4**

**Moderator: Francesca Mossa**

Anti-Müllerian hormone as a predictor of fertility in cattle - Francesca Mossa (University of Sassari, Italy)

Dysregulation of the anti-Müllerian hormone and its specific receptor by LH and steroids may contribute to their overexpression in granulosa cells from women with polycystic ovary syndrome - Nathalie Di Clemente (Centre de Recherche Saint-Antoine, France)

Relationship between circulating AMH and puberty, fertility and prolificacy of small ruminants - Stephane Fabre (INRA, ENVT, Université de Toulouse, France)

**WS10: Endometritis/Endometriosis in the mare: applications of stem cells. Auditorium**

**Moderator: Graça Ferreira**

Evidence-based treatment of persistent post-breeding endometritis in mares - Terttu Katila (University of Helsinki, Finland)

Can cell-free products secreted by stem cell promote endometrial regeneration? Anna Lange-Consiglio (Università degli Studi di Milano, Italy)

17:45 **Closure of ESDAR**

20:00 **Equestrian show**