

22 JUNE 2022

14:00 – 15:00 Registration

14:45 – 15:00 Opening Ceremony (Prof. J. Janowski, Prof. D. Skarzyński)

Preconference Session: Genetic and biotechnological aspects of equine reproductive health – in memory of Prof. William Twink Allen

Chairman: Prof. Amanda de Mestre

Chairman: Prof. Graca Fereirra-Dias

15:00 – 15:30 Prof. Marian Tishner – in memory of Prof. William Twink Allen

15:30 – 16:00 Invited lecture: **Prof. Amanda de Mestre** “It’s not always the endometrium: genetic variants of the conceptus associated with pregnancy loss throughout gestation”

16:00 – 16:30 Invited lecture: **Prof. Graca Ferreira-Dias**: “Mare Endometriosis: From histopathology to epigenetics” G. Ferreira-Dias, M.R. Rebordão, J. Alpoim-Moreira, A. Amaral, A.Z. Szostek-Mioduchowska, D.J. Skarzynski

16:30 – 16:50 Coffee break

16:50 – 17:10 “Research trends in biotechnology of horse reproduction over the last two decades inspired by Krakow-Cambridge cooperation - summary of own research” **J.Kochan**, M. Tischner, A. Okólski, A. Nowak, W. Młodawska, M. Tischner Jr, J. Gabryś , M. Bugno-Poniewierska

17:10 – 17:30 “Semiautomatic detection of local vasodilation based on two vascular measures in inflamed equine endometrium” **Ł. Zdrojkowski**, T. Jasiński, A. Niwińska, B. Pawliński, M. Domino

17:30 – 17:50 “Immunohistochemical expression of Myeloperoxidase in the equine endometrium” **S. Parrilla-Hernández**, F. Reigner, E. Feyereisen, C. Munaut, T. Franck and S. Deleuze (online presentation)

20:00 “Welcome reception” with Cracow sightseeing tour

23 JUNE 2022

08:00 – 09:00 Registration

09:00 – 09:45 Plenary lecture: Prof. Martin Sheldon “Protecting the bovine endometrium against damage caused by pathogenic bacteria” (online lecture)

09:45 – 10:15 Coffee break

10:15-13:10 **Session I: Pathophysiology of Uterine Functions**

Chairman: Prof. Tal Raz

Chairman: Prof. Claudia Klein

10:15 – 10:45 Invited Lecture: **Prof. Tal Raz** “Postpartum ovarian and uterine functions associated with metritis and endometritis in dairy cows”

10:45 – 11:15 Invited Lecture: **Prof. Claudia Klein** “Excessive TAGLN and CCN2 expression in equine endometrial fibrotic glands” E. zu Klampen, R. Wittig, D. Necci, C. Klein

11:15 – 11:30 Coffee break

11:30 – 11:50 “How EVs affect reproduction” Prof. **A. Andronowska**

11:50 – 12:10 “Transcriptomic analysis of mare endometrium reveals molecular changes in immune response and metabolism at different stages of endometrosis” **A. Szóstek-Mioduchowska**, A. Wójtowicz, A. Sadowska, B.M. Jalali, M. Słyszewska, K. Łukasik, A. Gurgul, T. Szmatoła, M. Bugno-Poniewierska, G. Ferreira-Dias, DJ Skarzynski.

12:10 – 12:30 “The role of interleukin 13 in the development of endometrosis in the mare” **A. Wójtowicz**, A. Sadowska, Ferreira-Dias, A. Szóstek-Mioduchowska

12:30 – 12:50 “Substrate stiffness modifies gene expression of equine endometrial fibroblasts in vitro” **E. zu Klampen**, D. Herrmann, C. Klein

12:50 – 13:10 “DNA methyltransferases in equine endometrial fibroblasts” **J. Alpoim-Moreira**, A. Wójtowicz, A. Sadowska, A. Szóstek-Mioduchowska, M.R. Rebordão, D.J. Skarzynski, G. Ferreira-Dias

13:10 – 14:10 Lunch

14:25 – 15:00 **Around Animal Reproduction** - Poster session - Flash Talk

14:25-14:30 - “The effect of interleukin 6 on mRNA expression of fibrotic markers in equine endometrial fibroblasts” **E. Żebrowska**, G. Ferreira-Dias, A. Szóstek-Mioduchowska

14:30-14:35 – “Genetic polymorphism of *NOTCH4* gene is associated with anestrus in cows” **K. Gh. M. Mahmoud**, S. Ibrahim, A. Sosa, H. R. H. Darwish, E. A. Almadaly, D. E. Ilie, M, H. Hasanain¹, M. F. Nawito

14:35-14:40 - “EGF regulates expression of extracellular matrix proteins in porcine endometrium through STAT3 activation” **P. Likszo**, K. Łukasik, B.M.Jalali

14:40-14:45 - “Changes in transcriptome profile in equine corpus luteum during early pregnancy”- **K. Łukasik**, M.B. Jalali, A. Baclawska, A. Gurgul, M. Bugno-Poniewierska, D. J. Skarzynski Dariusz J

14:45-14:50 - "Expression pattern of apoptotic genes in corpus luteum during thermal stress in Egyptian buffaloes" **S.M. Galal**, S. Ibrahim, K. Mahmoud, O. Adel, A. A. Shokry, El-Belely M S1, Ismail S T

14:50 -14:55 "Gene expression and interaction between aryl hydrocarbon receptor, interleukin 17 and transforming growth factor β 1 in equine endometrial fibrosis" **A. Sadowska**, A. Wójtowicz, E. Żebrowska, M. Slyszevska, G. Ferreira-Dias, A. Szóstek-Mioduchowska

15:00 – 18:20 Session II: Effects of uterine disorders in reproductive health of farm animals

Chairman: Prof. Christine Aurich

Chairman: Prof. Wojciech Barański

15:00 – 15:30 Invited lecture **Prof. Christine Aurich** "Association of the breeding induced endometrial response with subsequent fertility in mares"

15:30 – 16:00 Invited lecture **Prof. Wojciech Barański** "Reproductive tract diseases – endometritis and what else?"

16:00 – 16:20 "Effect of heat stress on the occurrence of endometritis in dairy cows" **M. Tekin**, C. Guse, M. Iwersen, M. Drillich, K. Wagener

16:20 – 16:40 "Hastening first postpartum ovulation in early lactation may reduce the incidence of endometritis in dairy cows" Shaked Druker

16:40 – 17:00 Coffee break

17:00 – 17:20 "Nucleolar size of large luteal cells increases in mares with endometritis" **M.J. Estradé**, F. Pereyra Montants, S. Castro, N. Dziugys, C. Larranaga, B. Varela, R.C. Mattos, G. Pedrana

17:20 – 17:40 "Circulating and endometrial polymorphonuclear leukocyte function dynamics in postpartum dairy cows with subclinical or clinical endometritis" L. Lietaer, **O. Bogado Pascottini**, S. Heirbaut, K. Demeyere, L. Vandaele, E. Meyer, V. Fievez, J. Leroy, G. Opsomer

17:40 – 18:00 "The vascular and perivascular morphometric features and their correlations in equine endometrium affected by endometrosis" **T. Jasiński**, Ł. Zdrojkowski, K. Siewruk, B. Pawliński, M. Domino

18:00-18:20 "Inflammation effect on the endometrial percentage of reproductive hormone receptors and the height of the superficial and glandular epithelium in anestrus type II dairy cows" **M. Trela**, Ł. Zdrojkowski, D. Domańska, O. Witkowska-Piłaszewicz, K. Siewruk, B. Pawliński, M. Domino

20:00 – 23:00 Gala dinner

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09:00 – 09:45 Plenary lecture Prof. Hans Nauwynck “Equine herpesvirus type 1 is misusing leukocytes to reach the pregnant uterus in mares”

09:45 – 10:15 Coffee break

10:15 – 13:00 Session III: The role of bacteria and viruses for the pathogenesis of uterine disorders

Chairman: Prof. Rodolfo de la Sota

Chairman: Prof. Marc Drillich

10:15 – 10:45 Invited Lecture: **Prof. Rodolfo de la Sota** “Carryover effect of uterine diseases on subsequent pregnancy losses in lactation” R. Luzbel de la Sota, Santiago Corva, German Dominguez, Javier Sanchez

10:45 – 11:15 Invited Lecture: **Prof. Marc Drillich** “Research in bovine endometritis – are we asking the best questions?” M. Drillich, K. Wagener

11:15 – 11:30 Coffee break

11:30 – 11:50 “The most common pathogens isolated from the uterus in mares before the breeding season in 2018-2020 in the Mazovia region of Poland” **D. Domańska**, O. Witkowska-Piłaszewicz, M. Trela, B. Podeszewski, M. Domino

11:50 – 12:10 “Growth characteristics of *Trueperella pyogenes* in an uterine in vitro model” **M. Ibrahim**, K. Wagener, M. Drillich, M. Ehling-Schulz, C. Gabler

12:10 – 12:30 “Relationship between cultivable aerobic microbiota in the uterus and oviduct of postpartum dairy cows” **K. Wagener**, L. Neubrand, H. Awwad, M. Tekin, H. Pothmann, V. Havlicek, U. Besenfelder, M. Ehling-Schulz, M. Drillich

12:30– 12:50 “The effect of uterine lavage on the isolation of bacteria in mares with subclinical endometritis” **M. Sikora**, J. Buczkowska, R. Kozdrowski, J. Król, M. Marcinek

12:50 – 13:10 “Isolation and host range determination of bacteriophages specific to selected equine uterine pathogen” **M. Köhne**, S. Kittler, M. Plötz, H. Sieme (online presentation)

13:10 – 14:10 Lunch

14:30 – 15:00 Around Animal Reproduction 2 - Poster session - Flash Talk

14:30-14:35 “Endometrial miRNA expression profile during pre-implantation period of pregnancy in the mare” **A. Sadowska**, T. Molcan, A. Wójtowicz, K. Łukasik, K. Pawlina-Tyszko,

A. Gurgul, T. Szmatoła, M. Bugno-Poniewierska, G. Ferreira-Dias, D. J. Skarzynski, A. Szóstek-Mioduchowska

14:35-14:40 "IL-6 induced STAT3 activation increases VEGF expression and capillary formation in porcine endometrial endothelial cell" **B. M. Jalali**, K. Lukasik

14:40-14:45 "ADAMTS metalloproteases and their regulation by transforming growth factor- β 1 in mare endometrium" **M. Słyszewska**, E. Żebrowska, A. Wójtowicz, A. Sadowska, G. Ferreira-Dias, A. Szóstek-Mioduchowska

14:45-14:50 "New insight into pregnancy maintenance in she-camel: Molecular interaction among ovulatory site, uterine body and uterine horns" **O. Adel**, S. Ibrahimb, K. Mahmoudb, S.M Galal, M. Fathi, A.A.M. Seida

14:50-14:55 "Mammary gland carcinoma in a dog caused the hypertrophic osteopathy" **O. Witkowska-Piłaszewicz**, D. Domańska, M. Trela, B. Pawliński

14:55-15:00 „Genotyping of *NOTCH2* gene in fertile and anestrus cows" **K. Gh. M. Mahmoud**, A. S.A. Sosa, H. R. H. Darwish, S. Ibrahim, M. H. Hasanain, A. M. Sakr, A. Sh. E. Shams, D. E. Ilie and Y.F. Ahmed

15:00 – 18:00 Session IV: Methods of diagnosis and therapy of uterine disorders in farm animals

Chairman: Prof. Igor Canisso

Chairman: Prof. Geert Opsomer

15:00 – 15:30 Invited lecture **Prof. Igor Canisso** "Persistent Breeding-Induced Endometritis in Mares — A Multifaceted Challenge: From Clinical Aspects to Immunopathogenesis and Pathobiology"

15:30 – 16:00 Invited lecture **Prof. Geert Opsomer** "An overview of diagnosis and treatment protocols for uterine diseases in cattle"

16:00 – 16:20 Coffee break

16:20 – 16:40 "Comparison of cytological, microbiological and histopathological findings of genital canal in healthy cows and cows with vestibulo-vaginal sphincter dysfunction" **E.S. Özdemir-Salcı**, Ö.Yavaş, Ö.Yılmaz, G.Sönmez, S.Kahya-Demirbilek, K.Seyrek-İntaş

16:40 – 17:00 "The role of microRNAs in endometritis and their potential as a diagnostic biomarker" **S. Ibrahim** , M. O. Taqi , K. Gh. M. Mahmoud , M. F. Nawito (online presentation)

17:00 – 17:20 "A new method of cytological sampling from the endometrium of dairy cows" **Dawid Tobolski** (online presentation)

17:20-17:40 "Endometritis in breeding mares from Spain: Microbial prevalence and antimicrobial susceptibility: A. Dorrego, M. Pérez-Sancho, M. Ugarte Ruiz, P. Gago, E. Camino, A. Buendía, L. de Juan, F. Cruz-López (online presentation)

17:40 – 18:00 “Cows with subclinical endometritis show lower IL1RA / IL1B ratio in uterine secretions detectable in vivo and at the abattoir” A. Kneidl, S. Kirsch, F. Weber, A. Helfrich, S. Schabmeyer, J. Schneider, W. Petzl, H. Zerbe and **M. M. Meyerholz** (online presentation)

18:00 Closing Ceremony, Awarding of best presentation and poster.