**Wednesday, July 21**

Opening Session Abstracts  
Opening Session Reception  
Reproductive Pathology Symposium (additional registration required)  
Zoological Species Theriogenology Symposium (additional registration required)  
Student Seminar: Critical Thinking in Practice: What does it look like?

### Reproductive Pathology Symposium  
(additional registration required)
8:00 am - 5:00 pm

**Introduction**
*Christopher Premanandan, DVM, PhD, DACVP, DACT*

General concepts in failure of pregnancy  
*Christopher Premanandan, DVM, PhD, DACVP, DACT*

Equine/Camelid failure of pregnancy  
*Robert A. Foster, BVSc, PhD, MANZCVS, DACVP*

Ruminant failure of pregnancy  
*Dalen Agnew, DVM, PhD, DACVP*

Canine/Feline failure of pregnancy  
*Robert A. Foster, BVSc, PhD, MANZCVS, DACVP*

Round table Q/A session  
*Drs. Agnew, Foster, and Premanandan*

General concepts in perinatal mortality  
*Christopher Premanandan, DVM, PhD, DACVP, DACT*

Ruminant perinatal mortality  
*Robert A. Foster, BVSc, PhD, MANZCVS, DACVP*

Equine/Camelid perinatal mortality  
*Dalen Agnew, DVM, PhD, DACVP*

Canine/Feline perinatal mortality  
*Drs. Agnew and Premanandan*

Case based roundtable/discussion  
*Drs. Agnew, Foster, and Premanandan*

### Zoological Species Theriogenology Symposium  
(additional registration required)
7:30 am - 4:30 pm

**Welcome**

Overview of traditional and novel approaches to amphibian reproduction in zoological institution  
*Jessi Krebs, OHDZA Curator of Reptiles and Amphibians*

**Birds-** General husbandry as it pertains to reproduction  
*M. Scott Echols, DVM, DABVP (Avian Practice)*

**Birds-** Common reproduction problems and diseases  
*M. Scott Echols, DVM, DABVP (Avian Practice)*

Overcoming reproductive disorders in female greater one-horned rhinoceros (Rhinoceros unicornis) to improve artificial insemination and natural breeding success  
*Monica Stoops, MS, PhD Lead Scientist, Comparative Endocrinology OHDZA*

Assisted reproductive technologies for endangered felids  
*Jason Herrick, PhD, Director of Reproductive Services*

Zoo Clinical Challenge- Gorilla infertility  
*Anneke Moresco, DVM, PhD, Zoo Reproductive Specialist*

Current understanding of elephant reproduction  
*Dennis Schmitt, DVM, PhD, DACT*

Application of domestic dog theriogenology practice in wild canids  
*Bruce Christensen, DVM, MS, DACT*

Avian reproductive tract diseases  
*M. Scott Echols, DVM, DABVP (Avian Practice)*

Developing assisted reproduction for reptiles, what’s next?  
*Sean Perry, DVM, PhD*
Attendees will have the options of attending a seminar by Drs. Echols and Perry discussing “Advanced topics in reptile and avian reproduction” or traveling to the Henry Doorly Zoo and Aquarium for a behind the scenes tour.

**Student Seminar**
1:00 pm - 5:00 pm

Critical Thinking in Practice: What does it look like?
*Juan Samper, DVM, PhD, DACT*

**Opening Session Abstracts**

Luteinizing hormone receptor activation stimulates endothelial adhesion of neoplastic canine T-lymphocytes
*Alexa Dietz*

Suitability of non-cycling recipient mares for in vitro produced equine embryos
*Charles Scoggin, DVM, MS, DACT*

The temporal associations of B-mode, Power doppler, and ovarian steroid changes of the periovulatory follicle and corpus luteum during luteogenesis and luteolysis in jennies
*Humberto Magalhaes, DVM, MSc*

Cholesterol-loaded cyclodextrin improves cooling and fertility of donkey semen
*Lorenzo Segabinazzi, DVM, MS*

Characterization of reproductive parameters from Pennsylvania bull elk (Cervus canadensis)
*Luisa Ramirez-Agamez, DVM*

Serum prostaglandin E metabolite (PGEM) in diestrus and pregnant mares
*Mariana Diel de Amorim, DVM, DVSc, PhD, DACT*

Expression and abundance of prostaglandins in the healthy and fibrotic mare endometrium
*Michael Byron, MSc*

Umbilical vein catheterization as an option for intravenous access in neonatal puppies
*Soon Hon Cheong, DVM, PhD*

**Student/Mentor Reception**
Opening Reception in the Exhibit Hall sponsored by Vetoquinol, Inc.

**Dr. Jerry Rains Memorial Abstract Competition sponsored by Merck Animal Health**

Comparison of nanoparticles and single-layer centrifugation for separation of dead from live stallion spermatozoa
*Christian Bisiau, DVM*

No adverse effect of air exposure on stallion sperm motility after 48 hours of cooled storage
*Emily May, DVM*

Epididymal sperm granulomas are associated with antisperm antibodies in frozen-thawed donkey semen
*Giorgia Podico, DVM, MSc*

Laser ablation of the equine oviductal papilla as a novel contraceptive technique
*Grace Edwards*

Clinical and physiological ultrasonography of normal and abnormal donkey pregnancies
*Humberto Magalhaes, DVM, MSc*

Comparing serum progesterone measurements by a point-of-care analyzer with a chemiluminescent immunoassay in breeding management of the bitch
*Julia Zuercher*

Mammary gland electrolytes and pH to detect impending parturition in jennies
*Lucas Canuto, DVM, MSc*

The effects of Kisspeptin-10 on equine chorionic girdle trophoblast cell in vitro migration
*Viviane Gomes, DVM, DACT*

**Student Case and Research Presentations sponsored by Bovine Services, LLC.**

Incidence of and factors affecting congenital defects in miniature Dachshunds
*Colleen Kutzler*

Electroejaculation and breeding soundness exam on a clouded leopard
*Taylor Lashlee*

Preputial prolapse and injury in a Brahman bull
*Maryanna Hudson*

Atypical mammary mass in an intact geriatric female Labrador retriever
*Colleen Kutzler*
Abnormal mobility in neonatal Labrador Retrievers
Jordan Farrell

Recurrent uterine torsion in an Arabian mare
Vaiva Palunas

Dystocia and diaphragmatic hernia in a Quarter Horse mare carrying twins
Vaiva Palunas

Vulvar discharge associated with exogenous estrogen exposure in a spayed Weimaraner bitch
Camille Ogdon

Phimosis and preputial abscessation with draining tract in an Angus bull
Rachael Doenges

Spermatic cord torsion in an Arabian stallion
Hannah Neer

Friday, July 23
Plenary Session
Scientific Abstract Presentations
Scientific Abstract Poster Presentations
Species Tracks
Awards Dinner Reception
Awards Dinner, Veterinary Story Night, & Live Auction
sponsored by Merck Animal Health

Plenary Session
sponsored by the American College of Theriogenologists
History of the ACT: Celebrating 50 Years
John Kastelic, DVM, MS, PhD, DACT

Surrogate sires: A next generation breeding tool in livestock production
Jon Oatley, MS, PhD

Case Abstracts
Reduction of equine monozygotic twins using craniocervical dislocation via colpotomy
Adam Bassett, DVM, MS

Proteomic analysis of sperm from a subfertile stallion with impaired acrosomal exocytosis
Camilo Hernandez-Aviles, DVM

Anaphylactic reaction following intrauterine application of misoprostol in a Friesian mare
Jordan Kiviniemi-Moore, DVM

Polled intersex syndrome in a four month old Finnish Landrace lamb
Katelyn Waters, DVM

Chronic seminal vesiculitis and blocked ampullae in a Gypsy Vanner stallion
Lauren Huggins, VMD, MS

Thoraco-omphalopagus conjoined twins in a Standardbred mare
Matthew Cochran, DVM

Next-Generation Sequencing to aid decision making for when to discontinue antibiotic treatment in a Stallion with Actinomyces spp. in semen
Soon Hon Cheong, DVM PhD

Thromboembolic disorder in a post-cesarean section bitch
Yamilka Lago-Alvarez, DVM

Equine Abstracts
Low volume uterine lavage: advantages for use in problem mares
Christina Divine, DVM

Pre-partum amniotic rupture in a Thoroughbred mare
David Alexander, DVM

Daily sperm out, spermatogenic efficiency, and sexual behavior of donkey jacks mounting jennies in estrus
Humberto Magalhaes, DVM, MSc

Pregnancy rates and ovarian activity following uterotubal infusion of n-butyl cyanoacrylate via a hysteroscopic approach in mares: a pilot study
Irwin Liu, BSc, DVM, PhD

Oocyte collection rate and in vitro embryonic development in the mare with administration of low-dose deslorelin
Jennifer Hatzel, DVM, MS, DACT

Evaluation of passively acquired rabies antibody titers and immune responses in healthy foals vaccinated against at 4 or 6 months of age
Karen Wolfsdorf, DVM, DACT

Prospective ultrasonographic evaluation of the caudal placenta and cervix in pregnant mares in relationship to foaling outcomes and placental abnormalities
Kristina Lu, VMD, DACT

The use of progesterone and estradiol-17-beta prior to transvaginal aspiration of oocytes
Peyton Draheim, DVM
Mixed Species Abstracts
Using reflection to optimise student engagement during theriogenology practical classes; the benefits of mentoring and peer support in teaching
Allan Gunn, BVM&S, DACT, FRCVS
Screening canine sera for smooth Brucella strain antibodies via Brucella abortus Fluorescent Polarization Assay
Alyssa Helms, DVM
Sperm acrosome associated 3 protein expression in the feline ovary decreases with age
Ann Ramsey
Infertility, pregnancy, and concurrent pyometra in a Greater Swiss Mountain Dog
Brittany Shumack, DVM
Fetal loss at time of elective cesarean section in a Greater Swiss Mountain Dog
Brittany Shumack, DVM
The agreement level among four techniques for analysis of stallion sperm morphology
Camilo Hernandez-Aviles, DVM
Factors affecting survival and future foaling rates in thoroughbred mares with hydrops
Louise Lemonnier, DVM
Vaginal vault diverticulum causing functional urinary obstruction in a maiden bitch
Marthina Greer, DVM
Comparison of 2D and 3D ultrasonography for gestational aging in dogs
Sabina Pestelacci, DVM

Production Animal Abstracts
Melatonin and l-arginine mitigate heat stress-induced reductions in quality of frozen-thawed ram sperm
Abdallah Mohamed, BVSc, MSc
An example of incorrect storage of bull semen samples on spermiogram assessment
Allan Gunn, BVM&S, DACT, FRCVS
Association of metabolic status with uterine diseases and reproductive outcomes in lactating Holstein dairy cows
Andrew Hubner, DVM
Effect of GnRH administered at the time of AI for dairy cows detected in estrus by an activity monitoring system or by conventional estrus detection
Andrew Hubner, DVM
Evaluation of ovarian response to PG600 in alpacas
Eduardo Arroyo, DVM
Morphometric characteristics, testicular histology, and semen parameters of two mature hybrid bucks born from white-tailed deer dams sired by a mule deer buck
Giorgia Podico, DVM, MSc
A preliminary study on bovine prenatal sex determination using PCR on maternal peripheral blood
Navgeet Singh, BVSc & AH, MVSc
Obstructive urolithiasis in a Dromedary camel
Yatta Boakari, DVM, MS, PhD

Abstract Poster Presentations
Ovine male pseudohermaphrodite (Katahdin) with testes adjacent to the mammary gland
Alyssa Ball, DVM, MS
Reproductive tract findings in a Thoroughbred filly with non-patent uterus, considered congenital failure of a normal uterine lumen
Christine Bartley, DVM
Identification of fetal bones in the uterus of a Thoroughbred mare
Ethan Sutherland, DVM
Respective pregnancy rates and subsequent pregnancy losses of in-vitro produced embryos from oocytes aspirated at two facilities, transported to 3 commercial ICSI labs and resulting embryos transported and transferred at two commercial recipient herds
Etta Bradecamp, DVM, DACT, DABVP
Luteal blood flow and side effects of luteolytic doses of dinoprost tromethamine and cloprostenol sodium in jennies
Humberto Magalhaes, DVM, MSc
Induction of parturition in a late gestation Thoroughbred broodmare with colon displacement
Lauren Pasch, DVM, DACT
Methods to prepare platelet-rich plasma for use in mare practice
Lorenzo Segabinazzi, DVM, MS
Sperm-filter enhanced semen parameters and fertility of stallion poor cooled semen
Lorenzo Segabinazzi, DVM, MS
Intra-uterine injection of amnion-derived acellular bioscaffold product in mares, a description of systemic and intra-uterine effects over 21 days
Nathaniel Newton, DVM,
Incidence rate of reproductive problems in non-pregnant mares
Patrick McCue, DVM, PhD, DACT

Effect of Hytryl on fresh-cooled semen motility in two semen extenders when stored at 5 degrees Celsius for 72 hours
Rachel Fladung, DVM

Uterus unicornis in a maiden Standardbred mare
Stephanie Walbornn, DVM, DACT

Small Animal Track
sponsored by IDEXX

Reproductive biology and assisted reproductive technologies in felids
Nucharin Songsasen, DVM, PhD

Current and future perspective of reproductive technologies in domestic and wild canids
Nucharin Songsasen, DVM, PhD

Comparison of OFA and PennHIP results for canine hip dysplasia screening
Robyn Wilborn, DVM, DACT
sponsored by Purina

Production Animal Track
sponsored by Lane Manufacturing, Inc.

Single cell transcriptomics to understand germ cell function in livestock
Jon Oatley, MS, PhD

Pregnancy loss in ruminants
Andres de la Concha, DVM, PhD

Bovine trichomoniasis
Jeff Ondrak, DVM, MS

Equine Track
sponsored by Rood & Riddle Equine Hospital and Sonosite, A Fujifilm Company

Examination of fresh, cooled and frozen semen
sponsored by the Michelle LeBlanc Equine Memorial Lectures
Charles Love, DVM, PhD

The use of immunomodulators in equine reproduction:
How do they work and when should they be used
Carleigh Fedorka, PhD

Use of nonantibiotic therapies for endometritis: What, when, and why
Kristina Lu, VMD, DACT

Saturday, July 24

So you want to become a Diplomate?
Species Tracks
Small Animal Track

Small Animal Track
sponsored by IDEXX

Medical control of reproduction in the bitch: an update
Alain Fontbonne, DVM, PhD, DECAR

Medical control of reproduction in the male dog: the experience of Alfort Veterinary College
Alain Fontbonne, DVM, PhD, DECAR

Medical control of reproduction in the cat: old and new drugs
Cindy Maenhoudt, DVM, DACT, DECAR

Use of anti-progestins in Europe
Cindy Maenhoudt, DVM, DACT, DECAR

Is there a future for surgical contraception in the dog
Alain Fontbonne, DVM, PhD, DECAR

Small animal neonatology I
sponsored by Purina
Robyn Wilborn, DVM, DACT

Small animal neonatology II
sponsored by Purina
Robyn Wilborn, DVM, DACT

Production Animal Track
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Pregnancy loss in cattle
Andres de la Concha, DVM, PhD

Pregnancy loss in small ruminants
Andres de la Concha, DVM, PhD

The use of laboratory in pregnancy loss
Andres de la Concha, DVM, PhD

A review of bovine trichomoniasis
Jeff Ondrak, DVM, MS

Diagnosis in bovine trichomoniasis
Jeff Ondrak, DVM, MS

Management and control of bovine trichomoniasis
Jeff Ondrak, DVM, MS

Pharmacokinetic of antibiotics on plasma and semen in beef bulls
Juan Romano, DVM, MS, PhD
Equine Track

sponsored by Rood & Riddle Equine Hospital
and Sonosite, A Fujifilm Company

Breeding the aged mare: Which management plans are best and what are the downfalls
David Scofield, DVM, MS, DACT

Management and considerations of the post-partum mare and foal
Justin McNaughten, BVMS, DACT

Prebreeding season/prepurchase examination of the stallion: U/S testes, semen evaluation and considerations
sponsored by the Michelle LeBlanc Equine Memorial Lectures
Charles Love, DVM, PhD

Extending cooled semen: How and what?
David Scofield, DVM, MS, DACT

Reinforced breeding: What and How?
David Scofield, DVM, MS, DACT

Use of progestins in the mare
Carleigh Fedorka, PhD

Reproductive surgeries: Why are they necessary and which ones are best for the specific problem
Justin McNaughten, BVMS, DACT

Acupuncture and Chinese herbal medicine in equine reproduction
Kristina Lu, VMD, DACT