

THERIO 2016

ANNUAL CONFERENCE

July 27-30 | Omni Grove Park Inn

Asheville

SOCIETY FOR THERIOGENOLOGY | AMERICAN COLLEGE OF THERIOGENOLOGISTS



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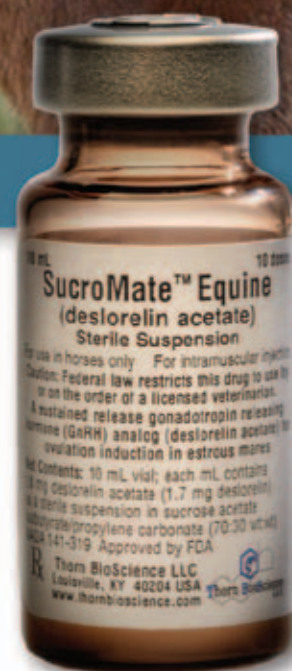
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7.27 WED

8:00 am - 5:00 pm

Canine Seminar

Grand Ballroom B

5:00 pm - 7:00 pm

Opening Session Abstracts

Grand Ballroom A

7:00 pm - 8:30 pm

Opening Session Abstract

Reception

Vanderbilt Terrace

A huge thank you to the following individuals for all their efforts in planning the 2016 Therio Conference.

Annual Conference Program Chair

Dr. Peter Sheerin

Equine Track

Program Chair

Dr. Maria Schnobrich

Small Animal Track Program and Small Animal Seminar Chair

Dr. Jane Barber

Production Animal Track Program Chair

Dr. Colin Palmer

Educator's Forum Chair

Dr. John Dascanio

Live Auction Chair

Dr. Carol McLeod

Silent Auction Chair

Dr. Dwight Wolfe

Small Animal Seminar Program

Dr. Jane Barber, Dr. Katherine Settle and Dr. C. Scott Bailey



therionology foundation
The Future of Animal Reproduction

Society for
Therionology
Veterinarians Dedicated to Animal Reproduction

7.28 THUR

7:30 am - 9:00 am

David E. Bartlett Award for

Lifetime Achievement in

Therionology

Therionologist of the Year Award

Sponsored by **Universal Imaging**

Grand Ballroom A

9:00 am - 11:00 am

Dr. Jerry Rains Memorial Abstract Competition

Sponsored by **Merck Animal Health**

Grand Ballroom A

11:00 am - 12:00 pm

SFT Business Meeting

Hoover

1:00 pm - 3:00 pm

ACT Business Meeting

Hoover

3:00 pm - 3:30 pm

Student/Mentor Reception

Grand Ballroom A

3:30 pm - 5:00 pm

Student Case Presentations

Grand Ballroom A

5:00 pm - 8:00 pm

Exhibit Hall Opening Reception

Sponsored by **Merck Animal Health, Universal Imaging and Omni Grove Park Inn**

Grand Ballroom BC

5:30 pm - 7:30 pm

Craft Beer Tasting*

Grand Ballroom BC

5:45 pm - 8:00 pm

Student Quiz Bowl

Sponsored by **Merck Animal Health and Current Conceptions**

Grand Ballroom A

*Additional registration required. See registration desk for details.

Video and audio recording is strictly prohibited during any session.

7.29 FRI

7:00 am - 8:00 am

Continental Breakfast

in the Exhibit Hall

Grand Ballroom BC

8:00 am - 10:00 am

Plenary Speaker Joseph Dalton

Sponsored by the **American College of Therionologists**

Grand Ballroom A

10:00 am - 10:30 am

Break in the Exhibit Hall

Sponsored by **Lane Manufacturing**

Grand Ballroom BC

10:30 am - 12:30 pm

Small Animal Abstracts

Heritage Ballroom B

Food and Fiber Animal Abstracts

Roosevelt

Case Reports

Hoover

Equine Abstracts

Grand Ballroom A

12:30 pm - 1:30 pm

Lunch in the Exhibit Hall

Grand Ballroom BC

1:30 pm - 5:00 pm

Breakout Sessions:

Small Animal Track

Heritage Ballroom B

Production Animal Track

Roosevelt

Equine Track

Sponsored by **Rood & Riddle Equine Hospital & Veterinary Pharmacy**

Grand Ballroom A

3:30 pm - 4:00 pm

Break in the Exhibit Hall

Grand Ballroom BC

6:00 pm - 7:00 pm

Awards Dinner Reception*

Mountain View Terrace

7:00 pm - 10:30 pm

Therio Awards Dinner*

& Live Auction

Sponsored by **Merck Animal Health and Universal Imaging**

Heritage Ballroom AB

7.30 SAT

7:00 am - 8:00 am

Continental Breakfast

in the Exhibit Hall

Sponsored by **Professional Embryo Transfer Supply**

Grand Ballroom BC

7:00 am - 8:00 am

Christian Veterinary Mission

Breakfast

Sponsored by **Nutramax**

Eisenhower

7:00 am - 8:00 am

So you want to become a diplomate?

Taft

7:00 am - 10:00 am

ACT Educator's Forum

Sponsored by the **Therionology Foundation**

Heritage A

8:00 am - 5:00 pm

Breakout Sessions:

Small Animal Track

Hoover

Production Animal

Roosevelt

Equine Track

Sponsored by **Rood & Riddle Equine Hospital & Veterinary Pharmacy**

Grand Ballroom A

10:00 am - 10:30 am

Break in the Exhibit Hall

Sponsored by **Patterson Veterinary Supply**

Grand Ballroom BC

10:30 am

Silent Auction Ends

Grand Ballroom BC

10:30 am - 12:30 pm

Practice Management

Taft

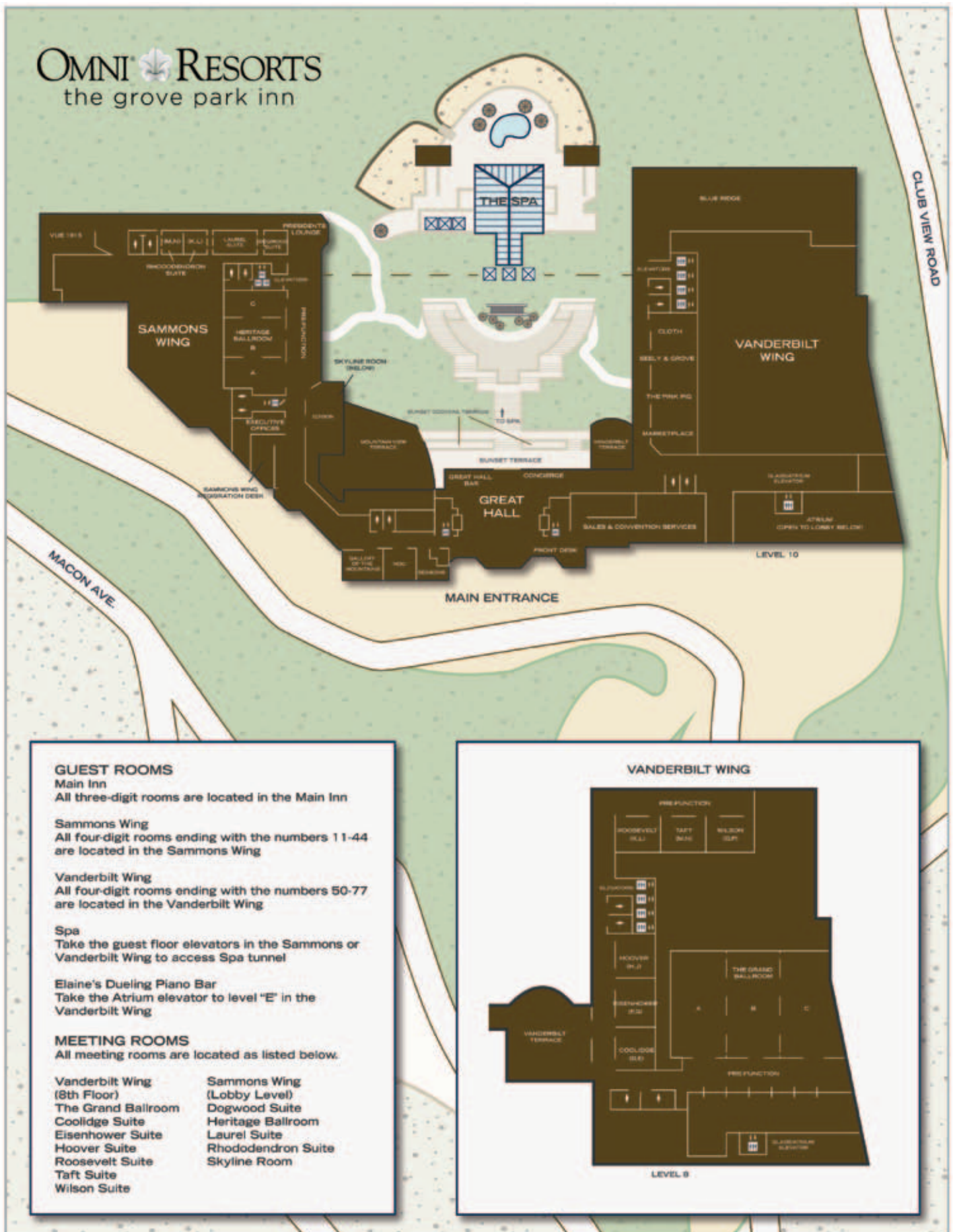
12:30 pm - 1:30 pm

Lunch in the Exhibit Hall

Grand Ballroom BC

OMNI RESORTS

the grove park inn



Cover photos courtesy of Explore Asheville and the Omni Grove Park Inn

Canine Seminar



COME ONE, COME ALL . . . to the Canine Seminar & Wet Lab to be held Wednesday, July 27 as part of the Therio Conference (separate registration required). In keeping with this year's "something for everyone" theme, the day-long event promises to be of benefit to both experienced and novice theriogenology practitioners.

WE INVITE YOU to roll up your sleeves and learn by doing as our team of experts, headed up by Drs. Magi Casal and Cheryl Lopate, combines classroom instruction with hands-on guidance at practicum stations for a variety of reproductive procedures. You will have the opportunity to acquire the skills and confidence you need to perform these procedures in your own practice.

The format for the day will consist of two hours of lecture followed by two hours of practicum station instruction in the morning, a break for lunch, and then the same to be repeated in the afternoon

Morning Classroom Sessions:

1. Endometrial cytology, biopsy and testicular cytology and biopsy: Procedures and tips
2. Semen handling for fresh, fresh-chilled and frozen semen: Procedures and tips

Afternoon Classroom Sessions:

1. Neonatal emergency stabilization
2. Neonatology - Practical tips and test your knowledge

Procedures to be covered during the wet lab at practicum stations include (but are not limited to):

Morning Wet Lab Session:

- ▶ Handling frozen semen and working with liquid nitrogen
 - Safety precautions when working with liquid nitrogen
 - Placing straws in goblets and loading goblets and vials onto canes
 - Thawing straws and vials of frozen semen
 - Retrieving yolk from eggs for addition into extender media
- ▶ Reviving (apparently) DOA spermatozoa
- ▶ Tips for handling agglutinated spermatozoa
- ▶ Motility assessment of spermatozoa - training your eye
- ▶ Use of extenders and Percoll gradients
- ▶ HOST evaluation of sperm cells
- ▶ Uterine and testicular biopsy techniques (including endoscopic techniques)

- ▶ Honing ultrasound skills (pregnant and non pregnant female reproductive tracts, testicles, an anasarca puppy and hopefully other interesting specimens)

Afternoon Wet Lab Session (morning practicum stations will still be available):

- ▶ Neonatal resuscitative techniques, including CPR
- ▶ Tube feeding neonates
- ▶ IV access and interosseous fluid administration in neonates
- ▶ Dee Lee mucus trap use
- ▶ Rewarming techniques for hypothermic neonates
- ▶ Use of accupressure/accupuncture (stimulate neonate to breathe, milk let down)
- ▶ Necropsy of neonates and sample collection for laboratory analysis
- ▶ And much more . . .

In addition to the classroom and wet lab instruction, participants will receive useful handouts. Resource materials include:

- ▶ A list of where to obtain supplies
- ▶ Legal aspects of reproduction practice. Generously provided by Dr. Marty Greer who holds a law degree in addition to her veterinary credentials
- ▶ International semen shipment - removing the travail and angst. Generously provided by Kim Hesler of Zoetis.
- ▶ Necropsy of fetuses and neonates - collection, processing and submission of samples. Generously provided by Dr. Dalen Agnew (reproductive pathologist who spoke at our 2015 meeting)

DON'T MISS OUT on this opportunity to meet and mingle with our colleagues, rub elbows with some of our most respected theriogenologists, and gain knowledge and skills that you will be able to take back and put into immediate use in your practices.

ABSTRACT PRESENTATIONS

OPENING SESSION ABSTRACTS

Wednesday, July 27 | Grand Ballroom A
 Moderator: Drs. Fernando Campos - Chillon and Maria Soledad Ferrer

- 5:00 pm Roberto A. Palomares, DVM, MS, PhD, DACT**
 Characterization of serum, uterine and vaginal IgG response against *Trichostrongylus axei* surface antigen after administration of a commercial killed whole *T. axei* vaccine in beef cows
- 5:15 pm Kelly London, BS**
***Dr. Ghislaine Dujovne to present**
 The effects of EC-Oxyrase® and coconut water on equine sperm cryopreservation
- 5:30 pm Kim Gleason, PhD**
 Do differences in maternal Immunoglobulin G influence passive transfer and subsequent cria growth in alpacas?
- 5:45 pm Claire Card, BSc, DVM, PhD, DACT**
 Prevalence of *Brucella melitensis* Seropositive goats in rural Uganda
- 6:00 pm Seth Bynum, BS**
 Gene expression and changes in biological function in placenta and uterus of ewes with subclinical pregnancy toxemia
- 6:15 pm Kristine Gonzales, DVM, DACT**
 Evaluation of oral folic acid supplementation on the incidence of cleft palates in Labrador retrievers, Golden retrievers, and Lab/Golden cross puppies in the Guide Dogs for the Blind breeding colony
- 6:30 pm Candace Lyman, DVM, DACT**
 16S rDNA-based profiling of canine reproductive tract microbiota reveals a complex microbial ecosystem
- 6:45 pm Jennifer Roberts, DVM, DACT**
 Time-dependent changes in pregnancy-associated glycoproteins and serum progesterone in a commercial crossbred sheep during pregnancy and the postpartum period
- 7:00 pm - 8:30 pm** - Opening Session Abstract Reception | [Vanderbilt Terrace](#)

REGISTRATION DESK HOURS

Tuesday	4:00 pm - 6:00 pm
Wednesday	7:00 am - 4:30 pm
Thursday	7:00 am - 4:30 pm
Friday	7:00 am - 4:30 pm
Saturday	7:00 am - 2:30 pm

EXHIBIT HALL HOURS

Thursday	5:00 pm - 8:00 pm
Friday	7:00 am - 4:30 pm
Saturday	7:00 am - 1:30 pm

STUDENT CASE PRESENTATIONS

Thursday, July 28 | Grand Ballroom A
 Moderator: Dr. James Alexander

- 3:30 pm Lindsey Rothrock (University of Illinois)**
 Estradiol-17 β and alfa-fetoprotein as diagnostic markers for ascending placentitis in a Quarter Horse broodmare
- 3:45 pm Christine Garrett (Auburn University)**
 Unilateral Ovariohysterectomy in a 3-year old German Shepherd dog
- 4:00 pm Jennine Llection (North Carolina State University)**
 Does maternal adrenocorticotrophic hormone (ACTH) administration hasten the onset of parturition in the dog?
- 4:15 pm Rachel Shutter (Washington State University)**
 Poor reproductive performance on a beef operation – a population based approach
- 4:30 pm Kelsey DiMiceli (Louisiana State University)**
 Cystic ovarian disease with inappropriate lactation in a doe
- 4:45 pm Kaitlyn McCombs (Auburn University)**
 Successful medical management of Pregnancy Toxemia in a 2-year old Katahdin ewe

DR. JERRY RAINS MEMORIAL ABSTRACT COMPETITION

Thursday, July 28 | Grand Ballroom A
 Moderator: Dr. Fernando Campos - Chillon
 Sponsored by [Merck Animal Health](#)

- 9:00 am Firdous A. Khan, BVSc, MVSc**
 Nitric oxide's dose-dependent inhibition of uterine contractility: a potential mechanism underlying persistent breeding-induced endometritis in the mare
- 9:15 am Viviane C. L. Gomes, DVM**
 The significance of eosinophils in equine uterine cytology: a retrospective study
- 9:30 am Kristy Meadows, BS**
 A rodent model for non-surgical sterilization using an antibody-guided lipid nanoparticle cytotoxin delivery system
- 9:45 am Stephanie White, BS, DVM**
 Fertility following control of follicular wave emergence with GnRH and timing of insemination in 14-day CIDR protocol in Angus cross beef heifers
- 10:00 am Jamie Stewart, DVM, MS**
 Evaluation of post-thaw semen parameters for different extenders in white-tailed deer
- 10:15 am Alyssa Cornelius, BS**
 Risk factors for canine dystocia and stillbirths
- 10:30 am Melissa Ann Roberts, BS**
 Evaluation of lipid content, mitochondrial polarity, and cryotolerance of Holstein in vitro-produced embryos following culture with Vitamin K2, Forskolin, and conditioned medium
- 10:45 am Margo L. Hennet, BA**
 Role of biofilm in infectious endometritis in the horse

SMALL ANIMAL ABSTRACTS

Friday, July 29 | Heritage Ballroom B

Moderator: Dr. Carlos Pinto

- 10:30 am Matthew Krecic, DVM, MS, MBA, DACVIM(SAIM)**
Performance of a rapid slide agglutination test for *Brucella canis* with canine sera containing antibodies to *Leptospira spp.*
- 10:45 am Ajadi Temitope Ayisat, DVM**
Effect of methanolic extract of *Spondias mombin* on oestrous cycle, conception rate and gestation in rabbits
- 11:00 am David Best, BSc**
Mammary hyperplasia in a Main Coon queen
- 11:15 am Eleas Wu, BS, DVM**
Treatment of clitoral hypertrophy by urethral transposition in an intersex dog
- 11:30 am Khawla Zwida, BS**
***Dr. Michelle Kutzler to present**
Canine thyroid gland expresses Luteinizing hormone receptors
- 11:45 am Ellie Bohrer**
Early onset of reproductive capacity in free-roaming unowned queens
- 12:00 pm Ajadi Temitope Ayisat, DVM**
Hormonal, biochemical and haematological changes during gestation in rabbit does synchronized with prostaglandin f2 alpha
- 12:15 pm Vanmathy Kasimanickam, DVM, MS, DACVPM**
Expression of retinoic acid synthesizing enzymes, ALDH1A1, ALDH1A2, and ALDH1A3 in canine testis during post-natal development

CASE REPORTS

Friday, July 29 | Hoover

Moderator: Dr. Maria Soledad Ferrer

- 10:30 am Allison P. Drexler, BS**
Fecal contamination of the vagina and vestibule caused infertility of a Toggenburg doe due to a third-degree perineal laceration
- 10:45 am Maria Schnobrich, VMD, DACT**
Reproductive tract findings in two Trisomy X (65,XXX) Thoroughbred mares
- 11:00 am Erin P Cambier, BSc**
Diprosopia, cerebral, cerebellar and pituitary aplasia in a Charolais-cross fetus
- 11:15 am Audrey A. Kelleman, DVM, DACT**
Endocrinological evaluation of a granulosa theca cell tumor arising during pregnancy in a mare
- 11:30 am Lindsey Rothrock, BS**
Outcomes on four mares undergoing perineal body reconstruction
- 11:45 am Nicholas Jenkins, DVM**
***Allison P. Drexler to present**
Mucometra of the uterus and vagina in a La Mancha doe caused by vestibular and vaginal stricture secondary to dystocia
- 12:00 pm Robert Causey, DVM, PhD, MRCVS, DACT**
Examination of the equine cervix by high magnification video-endoscopy
- 12:15 pm Maria Schnobrich, VMD, DACT**
Creatinine measurements of accumulated intro-uterine fluid can be used to objectively diagnose urometra in mares

EQUINE ABSTRACTS

Friday, July 29 | Grand Ballroom A

Moderator: Dr. Celina Checura

- 10:30 AM Etta Bradecamp, DVM, DACT, DABVP**
Results of hysteroscopic examinations performed as part of breeding soundness evaluations on mares presented for infertility - a retrospective study
- 10:45 AM Robyn Ellerbrock, DVM**
Endocrinologic and somatic changes during the peripubertal period in Standardbred colts
- 11:00 AM Chelsey Leisinger, BS, MS**
In vivo embryo production during induced aluteal cycles in the mare
- 11:15 AM Jennifer K. Morrissey, DVM**
Pathogenicity of *Escherichia coli* isolated from the equine uterus
- 11:30 AM Jason B. Andrews, BSc(Hons), BVSc(Hons)**
What can UCH-L1 tell us about idiopathic testicular degeneration (ITD) in the stallion?
- 11:45 AM Melissa Prell, DVM**
Alpha-fetoprotein as a marker for equine neonatal disease
- 12:00 PM Etta Bradecamp, DVM, DACT, DABVP**
Hysteroscopic hydrotubation of the oviducts as a treatment for idiopathic infertility in the mare - a retrospective study
- 12:15 PM Young Ho Choi, DVM, PhD, DACT**
Update on foal production using oocytes collected from ovaries shipped post mortem in a clinical program

FOOD & FIBER ANIMAL ABSTRACTS

Friday, July 29 | Roosevelt

Moderator: Dr. Juan Romano

- 10:30 AM Vanmathy Kasimanickam, DVM, MS, DACVPM**
Fusion of boar sperm with nanoliposomes prepared from synthetic phospholids
- 10:45 AM Vanmathy Kasimanickam, DVM, MS, DACVPM**
Do sperm and seminal plasma microRNAs have similar pattern of expression in boar semen
- 11:00 AM John Roberts, DVM, BS**
Morphological characteristics of Ovarian Follicular Dysplasia (OFD) observed by ultrasound in four Florida beef herds
- 11:15 AM Ramanathan Kasimanickam, BVSc, DVSc, DACT**
Sperm and seminal plasma proteomics of bulls with differing fertility
- 11:30 AM Jasmin Hyatt, BVSc (Hons)**
The effect of early post-partum intervention on the reproductive performance of anovulatory anestrous New Zealand dairy cows
- 11:45 AM Jamie Stewart, DVM, MS**
Corynebacterium pseudotuberculosis as a cause of bilateral orchitis in a Boer buck
- 12:00 PM Jennifer H. Koziol, DVM, DACT**
In vitro efficacy of novel anti-protozoal compounds against *Tritrichomonas foetus*
- 12:15 PM Hilari M French, DVM, PhD, DACT, DABVP(FA)**
Bovine reproductive palpation training: What methods make a difference and do our skills really transfer?



**Christian
Veterinary
Mission**

Please join the Christian Veterinary Mission at the 2016 Therio Conference!

Saturday, July 30

CVM Fellowship Breakfast

7:00 am - 8:00 am | Eisenhower

Sponsored by Nutramax

Join us for this special time of fellowship with guest speaker Mr. Ron McDaniel. He will be speaking on "What Makes Us Different."



CRAFT BEER TASTING FUNDRAISER FOR THE THERIOGENOLOGY FOUNDATION

During the Opening Reception in the Exhibit hall on Thursday, July 28, attendees will have the chance to experience some Asheville brewed craft beers, and help the Theriogenology Foundation at the same time. For \$40 you will receive four samples of beer, once you have sampled and chosen your favorite, you will get a full serving of that beer.

EXTRA CONFERENCE SESSIONS

CANINE SEMINAR

Wednesday, July 27 | 8:00 am - 5:00 pm

Grand Ballroom B

Cheryl Lopate, DVM, MS, DACT

Margret Casal, Dr med vet, PhD, Dipl. ECAR

We invite you to roll up your sleeves at the SFT Canine Seminar. Learn by doing as our team of experts combines classroom instruction with hands-on guidance at practicum stations for a variety of reproductive procedures. You will have the opportunity to acquire the skills and confidence you need to perform these procedures in your own practice. The seminar will be of benefit to both experienced and novice theriogenology practitioners. Turn to page 5 for more details.

Procedures to be covered include (but are not limited to):

- ▶ Semen processing and diagnostic evaluation (extenders, stains, gradients, etc.)
- ▶ Handling frozen semen and working with liquid nitrogen
- ▶ Uterine and testicular biopsy techniques
- ▶ Neonatal resuscitative techniques
- ▶ Tube feeding neonates
- ▶ IV access and interosseous fluid administration in neonates
- ▶ And much more . . .

SO YOU WANT TO BE A DIPLOMATE?

Saturday, July 30 | 7:00 am - 8:00 am

Taft

Marco da Silva DVM, DACT, 2016 Exam committee chair

Meet with the exam committee to find out the details of what it takes to become an ACT diplomate. Have your questions answered right there on the spot.

ACT EDUCATOR'S FORUM

Saturday, July 30 | 7:00 am - 10:00 am

Heritage Ballroom A

Sponsored by the Theriogenology Foundation

Julie Williamson DVM, MSc

1. Lecture on "Clinical skills learning theory and how to provide effective feedback"
2. Reproductive model potpourri mini presentations – three minute talks by those willing to share their use of models in the curriculum - what they have, what they use it for, learning objectives, etc
3. Display of reproductive models – those willing to bring their models with them can display them and show other educators the model along with instructions for building and use

PRACTICE MANAGEMENT

Saturday, July 30 | 10:30 am - 12:30 pm





Taft

William Schultz, DVM, Joann Randall, DVM, DACT and Jane Barber, DVM, DACT

Adding theriogenology to your small animal practice: a round table discussion

CONFERENCE SCHEDULE

THURSDAY, July 28

7:30 am - 9:00 am	David E. Bartlett Award for Lifetime Achievement in Theriogenology Grand Ballroom A Theriogenologist of the Year Award Grand Ballroom A Sponsored by Universal Imaging  UNIVERSAL IMAGING SEE THE DIFFERENCE
9:00 am - 11:00 am	Dr. Jerry Rains Memorial Abstract Competition Grand Ballroom A Moderator: Dr. Fernando Campos - Chillon Sponsored by Merck Animal Health 
11:00 am - 12:00 pm	SFT Business Meeting Hoover
12:00 pm - 1:00 pm	Lunch on your own
1:00 pm - 3:00 pm	ACT Business Meeting Hoover
3:30 pm - 5:00 pm	Student Case Presentations Grand Ballroom A Moderator: Dr. James Alexander
3:00 pm - 3:30 pm	Student/Mentor Reception Grand Ballroom A
5:00 pm - 8:00 pm	Exhibit Hall Opening Reception Grand Ballroom BC Sponsored by Merck Animal Health , Universal Imaging , Omni Grove Park Inn   UNIVERSAL IMAGING SEE THE DIFFERENCE 
5:30 pm - 7:30 pm	Craft Beer Tasting* Grand Ballroom BC
5:45 pm - 8:00 pm	Student Quiz Bowl Grand Ballroom A Sponsored by Merck Animal Health , Current Conceptions  

*Additional registration/tickets required. See registration desk for details.
Video and audio recording is strictly prohibited during any session.

POSTER SESSION

[Exhibit Hall](#) | [Grand Ballroom BC](#)

Madonna Jayne Wilda Morrison (Atlantic Veterinary College)
Hydroallantois and Prepubic Tendon Rupture in a Standardbred mare

Brittany Shumack (Auburn University)
Use of Progesterone levels to determine due date in a 1.5-year old English Bulldog bitch

Kristina S. Baltutis (North Carolina State University)
Short gestation length in Cavalier King Charles spaniels

Elizabeth Hyde (North Carolina State University)
Estrus staging via vaginal cytology and behavior in Aye-Ayes (*Daubentonia madagascariensis*)

Kayla Nielsen (Western College of Veterinary Medicine)
Bilateral Testicular Sertoli cell tumors in an American Paint horse

David Best (Atlantic Veterinary College)
Pyometra in a Standardbred mare

Rebecca Cooper (University of Missouri)
Intentional Superfecundation through Surgical Insemination with cooled, shipped semen in the bitch

Lillian P. Baker (Tuskegee University)
Hydrops Allantois in a mare with twin pregnancy

Hannah Lynaugh (University of Illinois)
Use of midazolam to enhance copulatory behavior in a maiden Standardbred stallion during semen collection

Adeline R. Noger (North Carolina State University)
A rare case of Ovarian Leiomyoma in a lion (*panthera leo*)

Devin Gardner (University of Missouri)
An unusual case of Fetal Maceration in a cow

Erin Patricia Cambier (Atlantic Veterinary College)
Intermittent Hemospermia and pregnancy rate in a Quarter Horse stallion

CONFERENCE SCHEDULE

FRIDAY, JULY 29

7:00 - 8:00 am Continental Breakfast | Exhibit Hall | [Grand Ballroom BC](#)

8:00 - 9:00 am **Plenary Speaker:** Joseph Dalton, PhD – Genetics and Genomics: An Introduction | [Grand Ballroom A](#)

9:00 - 10:00 am **Plenary Speaker:** Joseph Dalton, PhD – Genomics and Fertility:
Where are we going and when will we get there? | [Grand Ballroom A](#) | Sponsored by



10:00 am - 10:30 am 30 Minute Break Sponsored by  | Visit the Exhibit Hall | [Grand Ballroom BC](#)

10:30 am - 12:30 pm **SMALL ANIMAL ABSTRACTS**
[Heritage Ballroom B](#)
Moderator: Dr. Carlos Pinto

FOOD & FIBER ANIMAL ABSTRACTS
[Roosevelt](#)
Moderator: Dr. Juan Romano

CASE REPORTS
Hoover
Moderator: Dr. Maria Soledad Ferrer

EQUINE ABSTRACTS
[Grand Ballroom A](#)
Moderator: Dr. Patricia Sertich

For abstract presentation details, please see page 7 in this program.

12:30 pm - 1:30 pm Lunch in the Exhibit Hall | [Grand Ballroom BC](#) | Ticket Required

SMALL ANIMAL TRACK
[Heritage Ballroom B](#)
Moderator: Dr. Jane Barber

1:30 pm - 2:30 pm “Squeaks, snorts, grunts and poots - music to our ears” - the top 10 things you can do to improve neonatal and pediatric outcomes, part 1
Marty Greer, DVM, JD

2:30 pm - 3:30 pm “Squeaks, snorts, grunts and poots - music to our ears” - the top 10 things you can do to improve neonatal and pediatric outcomes, part 2
Marty Greer, DVM, JD

PRODUCTION ANIMAL TRACK
[Roosevelt](#)
Moderator: Dr. Colin Palmer

Abortion diagnosis
David Pugh, DVM, MS, MAG, DACT, DACVN, DACVM

Abortion management
David Pugh, DVM, MS, MAG, DACT, DACVN, DACVM

EQUINE TRACK 
[Grand Ballroom A](#)
Moderator: Dr. Patricia Sertich

Current understanding of latent bacteria and bacterial biofilms in endometritis
Ryan Ferris, DVM, MS, DACT

Treatment for latent infections, bacterial biofilms and fungal endometritis
Ryan Ferris, DVM, MS, DACT

3:30 pm - 4:00 pm 30 Minute Break | Visit the Exhibit Hall | [Grand Ballroom BC](#)

4:00 pm - 5:00 pm “It’s time, past time, or is it?” - Caesarian section and managed whelping in the bitch
C. Scott Bailey, DVM, DACT

Male breeding soundness evaluation
Cliff Shipley, DVM, DACT

New diagnostic biomarkers to evaluate late term pregnancy in mares
Barry Ball, DVM, PhD, DACT

Video and audio recording is strictly prohibited during any session.

6:00 pm - 7:00 pm **Theriogenology Foundation Awards Dinner Reception*** | [Mountain View Terrace](#)

7:00 pm - 10:30 pm **Theriogenology Awards Dinner* & Live Auction** | [Heritage Ballroom AB](#)

*Ticket required for Awards Dinner, but not for Live Auction.



CONFERENCE SCHEDULE

SATURDAY, JULY 30

7:00 am - 8:00 am CVM Breakfast/Outreach | [Eisenhower](#) | Sponsored by [Nutramax](#)
7:00 am - 8:00 am So you want to be a diplomate? | [Taft](#)
7:00 am - 8:00 am Continental Breakfast Exhibit Hall | [Grand Ballroom BC](#) | Sponsored by [PETS](#)
7:00 am - 10:00 am ACT Educator's Forum | [Heritage Ballroom A](#) | Sponsored by [theriogenology foundation](#)
10:30 am - 12:30 pm Practice Management | Adding theriogenology to your small animal practice: a round table discussion | [Taft](#)



theriogenology foundation
The Future of Animal Reproduction

SMALL ANIMAL TRACK

Hoover

Moderator: Dr. Katherine Settle

8:00 am - 9:00 am "From taboo to touted – a mythbuster's report – Analgesia for Caesarian section delivery and post-operative recovery
 Steve Escobar, DVM

9:00 am - 10:00 am "Tubes, timing and temperature – what does it matter?" – factors influencing results in progesterone measurement
 William Schultz, DVM

PRODUCTION ANIMAL TRACK

Roosevelt

Moderator: Dr. Colin Palmer

Understanding follicular waves and breeding management
 Gregg Adams, DVM, MS, PhD, DACT

Ovulation inducing agents
 Gregg Adams, DVM, MS, PhD, DACT

EQUINE TRACK

Grand Ballroom A

Moderator: Drs. Charley Love and Rob Foss

Review of biosecurity, disinfectants to use in the breeding shed and on equipment (pros/cons)
 David Scofield, DVM, MS, DACT

Improvements of handling/processing techniques to optimize fertility
 David Scofield, DVM, MS, DACT



10:00 am - 10:30 am

Break Sponsored by



| Exhibit Hall | Grand Ballroom BC | Silent Auction Ends at 10:30

10:30 am - 11:30 am "Wading into controversy – what we are learning about sterilization in dogs" – Part 1 – Non-cancerous conditions associated with spay/neuter status in the canine
 C. Scott Bailey, DVM, DACT

11:30 am - 12:30 pm "Wading into controversy – what we are learning about sterilization in dogs" – Part 2 – Neoplastic diseases associated with spay/neuter status in the canine
 C. Scott Bailey, DVM, DACT

Pregnancy specific protein B and other pregnancy diagnostic tools
 Juan Romano, DVM, MS, PhD

Diagnostics of endometritis
 Réjean Lefebvre, DVM, PhD, DACT

Applications of anti-Mullerian hormone (AMH) in equine reproduction
 Barry Ball, DVM, PhD, DACT

Sexually transmitted disease monitoring, surveillance, and impact on Thoroughbred stud farms in central Kentucky
 Charlie Scoggin, DVM, MS, DACT

12:30 pm - 1:30 pm

Lunch Provided in the Exhibit Hall | Grand Ballroom BC | Ticket Required

1:30 pm - 2:30 pm "When sooner is better than later" – introduction of parturition in the canine
 Frances Smith, DVM, PhD, DACT

Uterine immune function in the cow
 Réjean Lefebvre, DVM, PhD, DACT

Equine oocyte recovery and ICSI in clinical practice: What can I expect?
 Katrin Hinrichs, DVM, PhD, DACT

2:30 pm - 2:45 pm

15 Minute Break | Grand Ballroom Foyer

2:45 pm - 3:45 pm "Is it in, is it not or is it just on top?" – Use of topical medications during pregnancy and lactation
 Frances Smith, DVM, PhD, DACT

3:45 pm - 5:00 pm "How a mother and a dog changed the future for patients with a rare and deadly disease" – AAV-mediated gene replacement rescues severe muscle pathology and improves survival in the p.N155K canine model of X-linked myotubular myopathy
 David Mack, PhD

20 years of modern endometritis research - a review
 Rob Gilbert, BVSc, MMed Vet, MRCVS, DACT

New frontiers in molecular endometritis research
 Rob Gilbert, BVSc, MMed Vet, MRCVS, DACT

Update on equine embryo biopsy and vitrification
 Katrin Hinrichs, DVM, PhD, DACT

Review of placentitis update
 Igor Canisso, DVM, MSc, PhD, DACT, DECAR



EXPLORE ASHEVILLE

The Omni Grove Park Inn Historical tour

The hotel conducts a guided history tour which covers the history of E.W. Grove, the construction and early years of the resort, the Arts & Crafts style furniture, and some of their most notable guests. The tour lasts for approximately 45 minutes. The tour is offered Wednesday through Saturday and begins promptly at 10:00 a.m. each day. See a representative at the Concierge Desk to sign up.

Thomas Wolfe House – 2 miles

Considered by many to be one of the giants of 20th-century American literature, Thomas Wolfe immortalized his childhood home in his epic autobiographical novel "Look Homeward." Angel. Wolfe's colorful portrayal of "Dixieland" the Old Kentucky Home boardinghouse, earned the Victorian period house a place as one of American literature's most famous landmarks.

Biltmore Estate – 3 miles

Visit Biltmore in Asheville, NC to explore the 8,000-acre Blue Ridge Mountain backyard with exceptional field to table dining. Enjoy outdoor activities like hiking, fishing, horseback riding, and much more!

Smith-McDowell House – 5 miles

Discover Asheville's first brick mansion, now restored as the Asheville History Center at the Smith-McDowell House. Once the home of mayors, a Civil War major, and friends of the Vanderbilts, this restored property provides a glimpse of life in the 19th century.

Blue Ridge Parkway – 5 miles

A slow-paced and relaxing drive revealing stunning long-range vistas and close-up views of the rugged mountains and pastoral landscapes of the Appalachian Highlands.

NC Arboretum – 12 miles

The North Carolina Arboretum is a 434-acre public garden that offers a wealth of activities for families and kids of all ages. The Asheville gardens feature one of the most renowned bonsai collections in the country, as well as a diversity of flower and botanical exhibits all year round.

Grovewood Gallery – adjacent to the resort

Enter the rustic iron gates of Grovewood and discover a magical experience of art, craft, history, and Old World charm. Stroll the beautifully landscaped sculpture gardens, visit a working artist's studio, marvel at a fine collection of rare automobiles from yesteryear, discover a bit of Asheville's early history, and feast your eyes on an expansive collection of fine American craft at one of the nation's premier galleries.

The Orange Peel (live music) – 2 miles

The Orange Peel Social Aid & Pleasure Club is one of the Southeast's preeminent concert venues. The club features state-of-the-art sound and lighting equipment rarely found in a club of its size. The smoke-free facility has a beautiful interior, creating a fabulous setting for enjoying the premier musicians who perform here.

River Arts District – 4.5 miles

The River Arts District consists of a vast array of artists and working studios in 22 former factories and historical buildings nestled along the French Broad River. More than 180 working studios, many with showrooms and galleries, are open every day, all year round. Artists work in paint, pencil, pottery, metal, fiber, glass, wax, paper and more. Be inspired, shop, meet the artists and watch live demonstrations!

VISIT OUR EXHIBITORS

THEY CAME TO SEE YOU ...

American Kennel Club
Animal Cell Therapies, Inc.
Animal Reproduction Systems, Inc.
BCF Technology
BET LABS/ BET PHARM
bioMerieux
ChemoMetec A/S
Christian Veterinary Mission
Cryoport
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E. I. Medical Imaging
eVetPractice.com
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Hagyard Pharmacy
Hamilton BioVet LLC
IMV Technologies USA
IVF Bioscience
Jorgensen Laboratories/LW Scientific
KARL STORZ Veterinary Endoscopy
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THE THERIOGENOLOGY FOUNDATION 8TH ANNUAL AUCTION



Silent Auction | Grand Ballroom BC | Thurs 5:00 pm - 8:00 pm | Fri 7:00 am - 4:30 pm | Sat 7:00 am - 10:30 am
Awards Dinner* & Live Auction | Heritage Ballroom AB | Fri 7:00 pm - 10:30 pm

*Additional registration is required. See registration desk for details.

SAMPLES OF 2016 LIVE AUCTION ITEMS



2016 Breeders Cup package for two

Donated by Tom Riddle

Dates of the 2016 Breeders Cup are Nov. 4 & 5

Includes airfare to Los Angeles from anywhere in the Continental US serviced by Delta, tickets to sponsor seating both days of Breeders Cup, which includes the best seats at the track (Santa Anita), all the food and drink in the sponsor chalet, and three nights lodging at a 4 star hotel. With sponsor tickets they would have some other perks like tickets to the Breeders Cup after party.



High Mountain Luxury Home in Greensprings, Oregon

Donated by Gail Colbern

Four-night stay in the Greensprings, a lovely mountain community east of Ashland, OR. The Greensprings is located in Southern Oregon, at an altitude

of 3,000 - 5,000 ft. It is known for its history (the Applegate Trail and homesteading), logging, hunting, fishing and the independent character of its residents. Recreation includes fishing, hunting, boating, river rafting, hiking (the Pacific Crest Trail runs adjacent to the Colbern property) and horseback riding. Stay will occur on a mutually agreed date and includes a signed photograph of a Greensprings sunrise by Dr. Colbern. Also includes \$100 Gift voucher to the Oregon Shakespeare Festival in Ashland. For more information on the plays, please see the Oregon Shakespeare Festival website at www.osfashland.org. Also includes a one-day wine tour in the Rogue and Applegate Valleys.



Pulsator IV complete electronic ejaculator unit

Donated by Lane Manufacturing, Inc

Electronic Ejaculator complete unit; The Pulsator IV is the only machine on the market with a five-year warranty! It has three programs, manual, program, and learn, that

allows the operator complete control during the ejaculation process. The complete package comes with the Pulsator IV, charger, power supply, one probe (your choice of size), two probe cords, scrotal tape, semen collection handle, 100 disposable cones, carrying case, and instructions.



One-week stay at Seabrook House

Donated by Tom Riddle

Private island community featuring two championship golf courses, tennis center, horseback riding, new beach club, fitness and aquatic center. Amenity passes for four. Classic Southern beach house with 4 bedrooms,

3.5 baths. Near historic Charleston, SC named #1 tourist destination in US by Conde Nast. Choice of greens fee, dolphin watching boat, or horseback riding for two included.

More info at www.discoverseabrook.com and www.charlestoncvb.com.

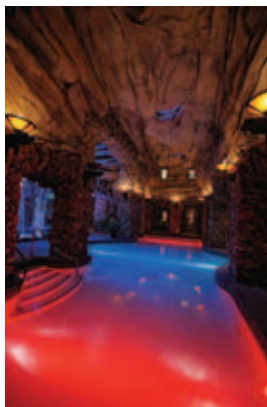


Navajo Fetish Necklace & Earrings

Donated by Anonymous

Navajo five strand fetish necklace by Corrine Ramirez. Rarely worn so condition is excellent. Animals include turquoise Thunderbird in center of fifth strand along with 59 other animals including horse, fox, fish, squirrel, rabbit,

bison, duck, pig, badger, mole, mountain lion and others with two large foxes as stretchers for the five strands. Delicate Penn shell heishi beads between the fetishes with a sterling silver clasp. Top strand 23 inches, bottom strand 28 inches with other 3 equally spaced. Stones include turquoise, pipestone, marble, serpentine, jet, and others. Pink mother of pearl horse earrings included.



Blue Ridge Symphony Massage

Donated by Mike Thompson

Grove Park Inn Spa scheduled for 7/31/16 at 10:15 AM. After a brief conversation concerning your specific needs, your therapist will compose the perfect treatment, blending any combination of Swedish, Reflexology, Deep Tissue or Stone massage. A symphony of soothing healing. 80 minutes

Any spa package allows all day use of the spa facilities, including all the pools, saunas, etc. Great way to relax after the meeting!



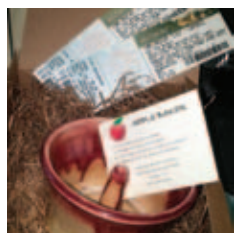
Current Conceptions Wine Trio

Donated by Current Conceptions

Epididymal Reserve, Sertoli Syrah and Melatonin Merlot wine package. Always an auction favorite.

Thanks to the following companies for their generous donations to the TF Live Auction: Lane Manufacturing, Rood & Riddle Equine Hospital & Veterinary Pharmacy, MOFA, and Current Conceptions.

SAMPLE OF 2016 SILENT AUCTION ITEMS



Apple/Onion Baker (with recipe card) and two complimentary tickets to Biltmore Estate.

Donated by Accents on
Asheville



Pottery Beverage Warmer with
Cups

Heirloom pottery pitcher with
warming stand. Comes with
three large pottery mugs.

Donated by Dwight Wolfe



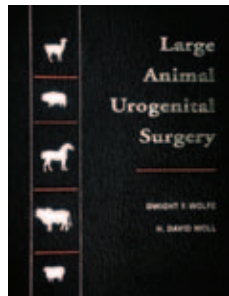
Mad Cow Company Customized
Spyderco Arrow Knife

Donated by Chance Armstrong



"The Innocent Never Perish"
by Kareen Amarothis. This is
a signed limited edition print.
There are intriguing ghost
images in the picture.

Donated by Dwight Wolfe



"Large Animal Urogenital
Surgery". New surgery text,
signed by the author.

Donated by Dwight Wolfe



1 Medium Quick Muzzle for
Dogs, 1 Large Quick Muzzle
for Dogs and 1 Large Quick Cat
Muzzle

Donated by Four Flags Over
Aspen, Inc

2016 Silent and Live Auctions

The 8th Theriogenology Foundation Silent Auction will be held this year at the 2016 Therio Conference. Books, textbooks, photographs, paintings, gift baskets, jewelry, novelty items, specialty wine and prized one-of-a-kind collectibles can all be purchased.

The Foundation's Live Auction will be held immediately following the Awards Dinner on Friday, July 29. Take a moment and review the items listed on these two pages; you can place a sealed bid if you are unable to attend. Proceeds from the auction will go to benefit students, residents, student chapters and others with travel grants, research projects and outreach.

Can't make it to the auction? - you can still place a silent bid on auction items

Take advantage of the silent bid form for 2016 auction items. Just visit the conference registration desk to complete a form. Your silent bid will be presented during the auction and you will be notified if you are the winner.

Raffle Tickets

How would you like
to donate \$100 and
possibly have your 2017
conference package paid
for? Purchase a raffle
ticket and you may be the
lucky winner.



Raffle tickets are on sale to raise money for the Theriogenology Foundation and the winner will receive a free conference registration for 2017 (in Ft. Collins, CO, August 2-5). Three nights of the winner's hotel at the beautiful Hilton in Ft. Collins will be paid for, along with a travel stipend. Plus the winner will receive one Fun Night ticket and one Awards Dinner ticket, and the investment could be tax deductible. Only 100 tickets will be sold, get yours before they disappear! Tickets are available at the conference registration desk.

2016 Therio Conference plenary speaker

Joseph C. Dalton, Ph.D.



Dr. Joseph C. Dalton is a Professor and Extension Dairy Specialist in Animal and Veterinary Science at the University of Idaho. He received his Ph.D. degree from Virginia Tech. Dalton is currently a co-project director of a multi-institutional, 5-year USDA-NIFA-AFRI grant focused on "Improving the Fertility of Dairy Cattle using Translational Genomics."

Overall, Dalton's research in applied
male and female reproductive physiology

focuses on factors important to increasing the efficiency of artificial insemination in cattle. Dalton's extension program emphasizes the enhancement of reproductive efficiency in cattle. He has given presentations at conferences throughout the United States, Canada, Poland, Czech Republic, Slovakia, Hungary, Mexico, Brazil, Argentina, Ireland and the Philippines. Dalton serves as the past president of the Dairy Cattle Reproduction Council.

GUIDE TO 2016 EXHIBITORS & SPONSORS

American Kennel Club Veterinary Outreach Program

The AKC Veterinary Outreach Program serves as a bridge between the American Kennel Club and the veterinary community. Our goal is to provide the most up-to-date information on purebred dogs and to be the go-to resource for all aspects of dog training, clubs and activities for people and all dogs

Animal Cell Therapies, Inc.

Animal Cell Therapies, Inc. was founded by Dr. Kathy Petrucci on the belief that, through the best science and innovation, we can take better care of our whole family. As scientists and doctors, pet lovers and pet owners, Animal Cell Therapies, Inc. is devoted to giving animals the best life that science can provide. Millions of people worldwide want to give their pets the long, healthy lives they deserve. Our mission is simple: to deliver a new frontier of stem cell therapies and make that hope a reality. Man's best science for man's best friend.

Animal Reproduction Systems

Artificial reproduction products for equine, bovine, porcine and canine professions.

B.E.T. Labs/B.E.T. Pharm

Equine practitioners constantly face the challenge of patients with unique needs. In the area of endocrine disorders and reproduction this is especially true, creating the desire for custom-made medications. BET PHARM is an established, stand-alone pharmacy specializing in the area of endocrine and reproductive prescription medications. Our modern pharmacy can provide both standard and custom prescription medications. These include sterile injectables and state of the art controlled release formulations such as biodegradable microparticles or long acting sterile solutions.

BET PHARM maintains strict quality control. All injectables undergo rigorous sterility testing. We have external quality control monitoring by independent labs, such as Analytical Research Laboratories for stability, pyrogens, purity and verification of prescribed potency. We adhere to standards set forth in the 797 guidelines. Our quality assurance program is designed to ensure every prescription meets your specifications. Our pharmacists have extensive training in compounding procedures and utilize a class 100/ ISO 5 cleanroom to prepare our compounds in our state-licensed facility. When you choose BET Pharm you can be confident your patients will receive medications of the highest quality.

BET LAB has over 6000 veterinary and University clients for which it performs endocrine assays both for clinical and research applications. Special research discounts are available. BET LAB is CLIA certified and has been in operation for 31 years. Free consultation is part of our service. We have operated a similar lab in Rio de Janeiro, Brazil for 15 years.

BCF Technology

BCF are leaders in innovative ultrasound, specifically developed for on-farm conditions. BCF design and manufacture the Easi-Scan bovine ultrasound scanner and BUG ultrasound goggles for use all over the world.

bioMerieux

bioMerieux is a world leader in automated microbiology solutions, such as automated Identification/susceptibility testing with VITEK solutions, manual solutions such as API, ETEST and full range of lab automation equipment.

ChemoMetec A/S

ChemoMetec A/S displays NucleoCounter SP-100. It provides fast and accurate counting of sperm cells in ejaculates and extended doses from all mammals in 30 seconds. It also measures %Viability in raw semen

and extended doses with no interference from extender. It requires no calibration, no maintenance and is easily operated

Christian Veterinary Mission

CVM is a fellowship of Christian veterinarians, veterinary students, technicians and those of allied interest who are committed to living their faith out through their profession. CVM staff and volunteers serve in developing countries around the world as well as here in the United States.

Cryoport

Cryoport is the premier provider of cold chain logistics solutions to the life sciences industry through our purpose-built proprietary packaging, information technology and specialized cold chain logistics expertise. We provide industry-leading shipping and storage logistics solutions for biologic materials, such as immunotherapies, stem cells, CAR T-cells and reproductive cells, for biopharmaceutical, IVF and animal health organizations around the world.

The Duzan Agency, Inc.

The Duzan Agency, Inc. is a livestock insurance agency with over 20 years of experience, we offer live animal import and export, domestic transit, mortality, and semen and embryo storage and shipping. We write coverage with four domestic carriers as well Lloyds of London. All carrier are rated A or higher by A.M. Best. Please contact us for more information.

E. I. Medical Imaging

E.I. Medical Imaging® is a world leader and the only US manufacturer of portable ultrasound solutions specifically engineered for veterinary use. For the past 31 years, the Company's core values have remained intact: putting the customer first and delivering solid, effective ultrasound solutions. EIMI provides the Ibex® portable ultrasound systems.

eVetPractice.com

Cloud based practice management system; to transform how you handle your business. We will help bring you to the next level of client communication and management. Our goal is to help you become more efficient, allowing you to focus more time and energy toward what you do, providing the best Veterinary medicine.

Fertility Technology Resources, Inc

Fertility Technology Resources: serving the fertility/breeder market since 1987. Our premiere line includes: Sperm Class Analyzer® CASA (software for automated semen analysis including Morphology, Motility-Concentration, DNA Fragmentation, Viability and Production modules), microscopes, counting chambers, slides, coverslips and Morphology slides and stains. We carry an extensive line of disposables.

Hagyard Pharmacy

PCAB accredited Hagyard Pharmacy was founded by equine veterinarians to fulfill the needs of their equine clients. We are a full service pharmacy offering prescription compounding services and specialty equine veterinary products. Our Reputation is as important as yours. Put your trust in Hagyard Pharmacy to provide quality, service and Value.

Hamilton BioVet

INTRODUCING THE EQUOCYTE!

Hamilton BioVet introduces the first cost effective method for shipping equine oocytes. The reliability of the Equitainer coupled with a dependable temperature of 22C° (+/-1) makes it the perfect choice for shipping oocytes. Stop by booth number 9 and see the EquoCyte.

IMV Technologies USA

IMV Technologies has provided the equine industry with artificial

insemination products for over 25 years. In collaboration with many researchers and organizations (INRA, veterinary schools, universities, and French National Studs), IMV Technologies has designed solutions welcomed by equine breeders for their novelty and quality. Heading the list of these products is INRA 96®, a medium used all over the world for the long-term preservation of fresh semen. Every year, more than 250,000 mares are fertilized using our company's technology. The IMV team stands ready to assist horse breeders from start to finish with all their reproductive needs, including training in the latest semen preservation techniques.

IVF Bioscience

Bringing a new approach to the animal ART market, IVF Bioscience's new IVP media range for bovine, caprine, and ovine will help to produce an increased number of higher quality embryos. Alongside our ready-to-use and serum-free media, we aim to provide exceptional service levels to help create a more productive world.

Jorgensen Laboratories

Jorgensen Laboratories is known for high quality veterinary surgical suture, instruments and equipment. See the Jorvet range of capital equipment including electrosurge units, the VetCam video otoscope, the Tononvet, centrifuges, microscopes, anesthesia machines, monitoring devices and the latest in laser therapy.

KARL STORZ Veterinary Endoscopy

KARL STORZ offers a wide range of rigid and flexible endoscopes, instruments and imaging systems for animals of all sizes. Eliminating the need for multiple systems, our high quality rigid and flexible scopes use the same video processor and light source. KARL STORZ veterinary products, customer service and hands-on training seminars are the best available.

Lane Manufacturing

Lane Manufacturing, Inc has been manufacturing semen evaluation equipment for over 40 years. The Pulsator IV electronic ejaculator is known around the world as the gentlest and the most user friendly of all ejaculators commercially manufactured. We strive to be the best in manufacturing quality, durable and efficient semen collection equipment, because this is our only business!

Merck Animal Health

As a global healthcare leader, Merck works to help the world be well. Merck Animal Health, known as MSD Animal Health outside the United States and Canada, is the global animal health business unit of Merck. We offer one of the industry's most innovative portfolios – not only of products, but also of services and technologies – to prevent, treat and control diseases across all major farm and companion animal species. Our mission – The Science of Healthier Animals – guides our work. Healthier animals mean a sustainable food supply, protection for humans against diseases passed from animals, and longer, healthier lives for pets.

For more information, visit www.merck-animal-health.com.

Minitube USA

Minitube USA, a subsidiary of Minitube International, offers a comprehensive, multi species product line and a fully staffed equipment service center to meet any theriogenologist's needs. Our continued collaboration with leading reproductive physiologists, universities and institutes around the world enables us to be on the leading edge of industry development.

MOFA Global

MOFA Global provides innovative technologies for animal reproduction. Products include semen extenders, embryo media, AI and ET catheters, diagnostic and processing equipment, shipping and storage containers, specialized procedural tools and more. VitaeCell stem cells, a division

MOFA Global, provides 100% Mesenchymal Stem Cells for Veterinary procedures. MOFA Global's pursuit of advanced research, technical services and AAASB accredited continuing education courses is provided through parent company CRI, at the International Center for Biotechnology.

Multimin USA, Inc.

Multimin®90 is an injectable fast acting chelated trace mineral treatment containing copper, zinc, manganese, selenium. University studies indicated that Multimin®90 benefits conception and embryo survival in breeding heifers and cows. Multimin® 90 supplies trace minerals critical for spermatogenesis and it is recommended that bulls are treated 45-60 days before BSE or breeding.

Neogen Corporation

Neogen's Animal Safety Division manufactures and markets genomic solutions, reproductive products, rodenticides and pharmaceuticals, vaccines, topicals, disinfectants, and diagnostic products to the professional animal care market.

Partnar Animal Health

Please stop the Partnar Animal Health booth to see the latest in Ovum Pick-up Equipment and Supplies, and get a copy of our latest embryo transfer supply catalog.

Professional Embryo Transfer Supply, Inc.

For a quarter century, PETS, Inc. has been a world leader in the embryo transfer community. Our goal has been and remains your success through excellent customer service. We strive to keep the best quality products in stock for same day shipping.

Royal Canin

Our mission is to bring out the magnificence in every cat and dog by pushing the boundaries of innovation to strengthen the link between pet health and nutrition. Royal Canin offers 200 specific cat and dog formulas based on size, age, breed, lifestyle and special needs. Stop by our booth and see the "NEXT GENERATION" of new formulas.

Seroclinix Corporation

Seroclinix is focused on specialized laboratory services for animal health, wellness and reproduction. Our labs employ the latest technology found in clinical reference laboratories to achieve the highest degree of precision and accuracy.

Together with our partners' PharosDX and AccuLab, Seroclinix provides a convenient, cost-effective lab service across the US and Canada that delivers the most reliable results to help our customers diagnose and treat patients. By combining our experience and technical expertise in Clinical Reference Laboratories, we can support our customers with leading edge animal testing solutions.

SonoSite, A FujiFilm Company

From behind-the-scenes experimental work for the U.S. Department of Defense to today's highly advanced ultrasound systems used around the globe; SonoSite has been defining and redefining next-generation point-of-care ultrasound. Musculoskeletal, internal medicine and reproductive transducers with specialized software that can meet all of your practice needs.

ServetUSA

Servet publishes about twenty technical books annually, with the collaboration of the most distinguished professionals. The works published by Servet are considered the best reference books for veterinarians worldwide.

Servet offers specialized books with a unique design. While Servet books are beautiful to look at, they are also accurate. All work is submitted to a

(continued on following page)

technical and thorough process of revision, checking and analysis. Servet works with the most internationally renowned authors who specialize in the topics most demanded by vets. Browse our complete Servet books and feel free to contact us with any questions you may have.

Spectrum Labs

Spectrum Labs, one of the leading allergy testing laboratories, is also the importer of the OM3 Gold products from Brazil. Containing some of the highest concentrations of Omega 3 and Omega 6 fatty acids, this supplement will: increase the spermatoc motility, the density, the number of healthy sperm produced, and will reduce prevent the degenerative abnormalities that sperm can suffer.

Tosoh Bioscience, Inc.

Tosoh Bioscience, Inc., based in South San Francisco, CA is a U.S. subsidiary of Tosoh Corporation's Bioscience Division, headquartered in Tokyo, Japan. Established in the United States in 1989, Tosoh Bioscience has become known throughout the Americas for providing sophisticated diagnostic systems to doctor's offices, hospitals, reference laboratories, and veterinary practices. Tosoh's versatile analyzers include the AIA-360 for low volume testing and the AIA-900 for mid-high volume laboratories. All AIA analyzers utilize the Unit Dose Test Cup reagent format.

Universal Imaging

Ultrasound and Digital Radiography Equine Veterinary Solutions—Universal Imaging has been setting the standard for veterinary imaging for over 37 years. Over 16,000 veterinarians have trusted us to supply superior imaging diagnostic equipment and training. Universal Imaging offers the largest variety of ultrasound and digital radiography packages featuring all-digital technology, portability, veterinary-specific applications, complete connectivity and PACS. Our technology partners include Toshiba, Exago, Fuji, Canon and SonoScape. Universal is proud to be named both Canon and S8 Dealers of the Year. Visit our booth or website to learn how we can help you provide the best veterinary care. www.universalmaginginc.com

Vetoquinol USA

Vétoquinol is a family-owned, independent company devoted exclusively to animal health. Our product portfolio is divided between livestock and companion animals with a wide range of products. Vétoquinol trades throughout Europe, the Americas, Africa, the Middle East and Asia Pacific.

Zoetis

Zoetis (zÅ-EH-tis) is the leading animal health company, dedicated to supporting its customers and their businesses. Building on more than 60 years of experience in animal health, Zoetis discovers, develops, manufactures and markets veterinary vaccines and medicines, complemented by diagnostic products and genetic tests and supported by a range of services.

JULY 31, 2016

Therio group rafting trip



This is one of the favorite activities for those visiting the Western North Carolina Mountains. No other sport combines teamwork, fun and outdoor adventure like a trip down the river. If you are looking for a scenic and exhilarating adventure, this is the trip for you! The river boasts Class I – II rapids for the half-day tour and for the full-day tour you can eat lunch on the river and enjoy a Class IV rapid at the very end! Children must be eight years old to participate (parent or guardian will be required to sign waivers for youths under the age of 18 years). Your tour includes luxury motor coach transportation, Accents on Asheville coordination, professional guide, deli lunch on the river, safety briefing, PFD and all equipment, taxes and gratuity. Visit the registration desk if you are interested in joining us.

Full day - Cost is \$145 per person with lunch on the river and Class I-IV rapids (9:00 AM – 3:30 PM approx)

Half-day - Cost is \$129 per person with lunch on the river and Class I-III rapids (9:00 AM – 2:00 PM approx)

Itinerary

- 8:45 AM Transportation arrives at the Omni Grove Park Inn, Vanderbilt Wing Atrium, 7th level
- 9:00 AM Depart for transportation to White Water River Rafters Outpost
- 9:40 AM Approximate time of arrival at the River Outpost
- 1:00 PM Approximate time of completion of rafting trip
- 1:15 PM Depart Outpost for return transportation to Omni Grove Park Inn (Half-day trip)
- 2:45 PM Approximate time of departure from Outpost for return to Omni Grove Park Inn (Full-day trip)
- 2:00 PM Approximate time of return to the Omni Grove Park Inn (Half-day trip)
- 3:30 PM Approximate time of return to the Omni Grove Park Inn (Full-day trip).

THANK YOU!

Without the support of our exhibitors and sponsors this conference would not be possible. Make sure to visit them in the Exhibit Hall to show your appreciation!

SAVE THE DATE!



Therio Conference

2017 Ft. Collins | August 2-5



SAVE THE DATE - AUGUST 2 - 5, 2017!

Make plans now to join us for next year's Therio Conference in beautiful Ft. Collins, CO

A day in Fort Collins can be filled with lots of things to do and see. Get a feel for settler life in the well-preserved Old Town, which is designated both a national and local-historic district with 28 historical buildings.

Fort Collins continues to rate highly on lists of towns that offer exceptional outdoor adventures and access to excellent recreational facilities. Pick a spot to relax in one of the city's 50 parks, or head out on some of the 280-plus miles of trails, including paved and unpaved walking and biking trails. Fort Collins is also home to four recreation centers and swimming pools, three public golf courses, a racquet sport complex and numerous other facilities. Take to the water and cool off on a paddle board, in a kayak or enjoy a whitewater rafting adventure.

Enjoy the 2017 Therio Conference at the fabulous Hilton in Ft. Collins. The 2017 conference will focus on the Equine Program, along with Small Animal, Food and Fiber, and Production Animal tracks. Make plans to join us next year in this fabulous setting.

Come Visit Us! 2016 Therio Conference:

Booth 7



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Congratulations!

Theriogenologist of the Year

Sponsored by Universal Imaging



Dr. Richard Hopper

Dr. Richard Hopper received his DVM from Auburn University in 1978. He then operated a private mixed practice for 15 years in Oneonta, Alabama before joining the faculty at Mississippi State University CVM in 1993 as Assistant Professor. He achieved Diplomate status in the American College of Theriogenologists via the alternate route in 1995. Dr. Hopper is currently Professor and Program Leader of the Food

Animal Medicine, Theriogenology, & Ambulatory

Section at the CVM. He has served as President of both the Mississippi VMA and the Society for Theriogenology. He was named Veterinarian of the Year for Mississippi in 2008 and received the El Toro Award for Excellence in Food Animal Medicine from the Auburn University CVM in 2014.

Dr. Hopper has contributed nearly 40 years of professional career service in the area of reproductive veterinary medicine. He was pivotal in establishing the theriogenology section at Mississippi State University, which has grown to have a substantial multispecies caseload and has maintained a successful resident training program. He has been a requested speaker on theriogenology topics at numerous meetings across the U.S., including the annual Therio Conference. Dr. Hopper has contributed to numerous publications in lay as well as veterinary literature. Most notably, he assembled 98 scholars internationally as lead editor for the book "Bovine Reproduction" (Wiley-Blackwell; November 2014). He has made tremendous contributions to the college and animal owners of the state through extension veterinary medicine, as well as in the clinical arena of the college. Dr. Hopper has mentored several into membership in the ACT and continues to guide and teach while promoting the importance of theriogenology.

Dr. David E. Bartlett Award for Lifetime Achievement in Theriogenology



Dr. Dickson Varner

Dr. Dickson Varner received his DVM Degree from the University of Missouri (1978) and master's degree from Texas A&M University (1990). Following graduation from the veterinary school, Dr. Varner was employed by Castleton Farms in Lexington, Kentucky for three years. He then completed a residency in

theriogenology at the University of Pennsylvania and served as a lecturer in large animal reproduction at the same institution until 1985. Dr. Varner has been on the faculty at Texas A&M University since 1986, where he is presently Professor of Theriogenology and Pin Oak Stud Chair of Stallion Reproductive Studies. He is also a Diplomate of the American College of Theriogenologists (1984). Since earning his Diplomate status, he has been heavily involved with the ACT having served as the examination committee chair and as the College's Secretary (1992-1994) and President (1999).

Dr. Varner has been a leader in stallion reproduction for over 30 years, traveling throughout the world evaluating and treating fertility problems in stallion. His primary research interests are in the areas of semen preservation, testicular function, and subfertility in stallions. He has developed several clinical applications in examining and preserving sperm. Dr. Varner played a pivotal role starting the stallion reproductive studies program at Texas A&M University CVM and his innovative research has helped position the CVM as one of the top research and clinical facilities for stallion reproduction in the world. In 2002, he was honored by the ACT as the Theriogenologist of the Year recognizing his outstanding achievement in the field of animal reproduction research.

TF Sympathy cards now available

Three versions of sympathy cards are now available for purchase at the Therio Conference registration desk or through the TF website online store (under the Giving tab) at www.theriofoundation.org. Packets of 10 cards and envelopes can be purchased for \$100. All proceeds benefit the Theriogenology Foundation.



Small animal sympathy card

Inside message reads, "Our sweet animal friends enrich our lives, and leave us better than before. Forever in your heart will remain the good times you enjoyed with your beloved pet. Our sympathy is with you in your loss."



Equine sympathy card

Inside message reads, "Our sweet animal friends enrich our lives, and leave us better than before. Forever in your heart will remain the good times you enjoyed with your beloved pet. Our sympathy is with you in your loss."



Bovine sympathy card

Inside message reads, "In your time of loss, we would like to extend our sympathy and understanding."