KANSAS STATE
 College of Veterinary Medicine

 U N I V E R S I T Y
 Kansas





86TH ANNUAL CONFERENCE

SUNDAY

9:00 - 9:50 am	Session 1: Small Animal, Large Animal, Equine
9:50 - 10:30 am	Break
10:30 -11:20 am	Session 2: Small Animal, Large Animal, Equine
11:30 - 12:20 pm	Session 3: Small Animal, Large Animal, Equine
12:30 - 1:30 pm	Lunch - Awards Presentation & CVM Update by Hodes
	Family Dean, Dr. Bonnie Rush
1:30 - 2:20 pm	Session 4: Small Animal, Large Animal, Equine
2:30 - 3:00 pm	Break
3:00 -3:50 pm	Session 5: Small Animal, Large Animal, Equine
4:00 - 4:50 pm	Session 6: Small Animal, Large Animal, Equine
5:00 - 7:00 pm	VTPRK Reunion - Konza Praire Room

MONDAY

8:00 - 8:50 am	Session 7: Small Animal, Large Animal, Equine
9:00 - 9:50 am	Session 8: Small Animal, Large Animal, Equine
9:50 - 10:30 am	Break
10:30 -11:20 am	Session 9: Small Animal, Large Animal, Equine
11:30 - 12:20 pm	Session 10: Small Animal, Large Animal, Equine
12:30 - 1:30 pm	Lunch - KVMA Director Megan Kilgore
1:30 - 2:20 pm	Session 11: Small Animal, Large Animal, Equine
2:30 - 3:00 pm	Break
3:00 -3:50 pm	Session 12: Small Animal, Large Animal, Equine
4:00 - 4:50 pm	Session 13: Small Animal, Large Animal, Equine
5:30 - 7:30 pm	Family Night at the Sunset Zoo

TUESDAY

8:00 - 8:50 am	Session 14: Practice Management, Disaster Response
9:00 - 9:50 am	Session 15: Practice Management, Disaster Response
9:50 - 10:30 am	Break
10:30 -11:20 am	Session 16: Practice Management, Exotics
11:30 - 12:20 pm	Session 17: Practice Management, Exotics
1:00 - 4:00 pm	Ultrasound Wetlab - Fort Riley Room

 $2 \mid {\sf Kansas}$ State University College of Veterinary Medicine

Welcome to the 86th Annual Conference for Veterinarians hosted by the Kansas State University College of Veterinary Medicine.

We're thrilled to gather once again to foster personal growth, share insights and advance our collective knowledge in veterinary medicine.

Our planning committee is excited for an incredible line-up of speakers! Experts in their field, they will be covering timely topics in production animal, equine, small animal, exotics, disaster-response, and practice management.

Prepare for a great weekend filled with informative sessions and networking opportunities! Additionally, we hope you'll join us Monday evening for a family night at the Sunset Zoo.

Enjoy the conference!

DR. GREGG HANZLICEK, BD, DVM, PhD, Kansas State University Veterinary Diagnostic Laboratory College of Veterinary Medicine

Join us Next Year! Kansas State University 87th Annual Conference

June 1st - 3rd, 2025



Ann Dwyer DVM, DACVS Genesee Valley Equine Clinic

Dr. Dwyer is a Cornell graduate who worked as an equine practitioner at the Genesee Valley Equine Clinic in Rochester, NY for over 35 years. She lectures widely on equine ophthalmology at regional national and international conferences, and was named an Honorary Diplomat of the ACVO in 2011. She also has been active in organized veterinary medicine, and served as President of the American Association of Equine Practitioners in 2013. She currently sits on the AVMA Council on Education as the member representing equine practice.



Mark Epstein

BS, DVM, DABVP (Canine & Feline) Medical Director TotalBond Veterinary Hospitals, PC

Veterinary Hospitals, PC Dr. Epstein received his DVM from University of Georgia & is the Senior Partner & Médical Director of TotalBond Veterinary Hospitals, a small group of AAHA-accredited practices in the Charlotte & Gastonia NC. He is a Diplomate of the American Board of Veterinary Practitioners (Canine/Feline) & is a past-president of ABVP. He is recognized as a Certified Veterinary Pain Practitioner (CVPP) by the International Veterinary Academy of Pain Management, & is a past-president of IVAPM; he is currently President of the IVAPM Research & Scholarship Foundation. Dr. Epstein chaired the AAHA Senior Care Guidelines Task Force and co-Chaired the 2015 AAHA/AAFP Pain Management Guidelines Task Force. He is a recipient of the 2022 Viticus Small Animal Educator of the Year Award.



Terry Engelken DVM, MS Founder & CEO, Fera Diagnostics & Biologicals Corp.

Dr. Terry Engelken is a Kansas native & graduated with his DVM in 1987 from Kansas State University. He joined a mixed animal practice in Onaga, Kansas, before returning to KSU for a residency & master's program in Beef Cattle Production Medicine. He joined the faculty at Mississippi State in 1991. In 2007, he moved to the Iowa State University College of Veterinary Medicine to continue working with beef producers & their veterinarians. He has been married to his wife Elizabeth for 37 years and they have been blessed with four children & four grandchildren.



Scott Fritz DVM, DABVT, Veter Kansas State University

Dr. Fritz earned his DVM in 2014 from Iowa State University & spent five years in private practice before completing a residency in toxicology at Kansas State University with a focus in diagnostics. He is currently a Clinical Assistant Professor of Toxicology in the Department of A&P at KSU College of Veterinary Medicine. He is a Diplomate of the American Board of Veterinary Toxicology & primarily focuses his efforts on diagnostic service through the Kansas State Veterinary Diagnostic Laboratory as well as teaching toxicology in the veterinary curriculum.



Steve Ensley BS, DVM, MS, PhD **Kansas State University**

Dr Ensley graduated in 1981 from Kansas State University with a DVM. After 14 years in mixed practice in the Midwest he received a MS and PhD in veterinary toxicology at Iowa State University completing his PhD in 2000. Dr Ensley has worked for the University of Nebraska-Lincoln, Bayer AG, Iowa State University & Kansas State University. Dr Ensley's interests are clinical veterinary toxicology & applied veterinary toxicology research. Dr Ensley has published extensively on applied veterinary toxicology & gives numerous presentations on these topics.



Makenzie Hallman DVM,DACVR Kansas State University

Dr. Hallman is an assistant clinical professor of diagnostic imaging at K-State's Veterinary Health Center. She is a 2008 graduate of Kansas State University College of Veterinary Medicine and a diplomate of the American College of Veterinary Radiologists.



Sandy Johnson PhD **Kansas State University**

Dr. Sandy Johnson is a reproductive physiologist and extension beef specialist for K-State Research & Extension located at the NW Research and Extension Center in Colby. She was raised on a diversified livestock farm in eastern Nebraska, & received a B.S. degree in Animal Science from the University of Nebraska. Advanced degrees in Reproductive Physiology came from the University of Missouri & West Virginia University. Johnson is a founding member of the Beef Reproduction Task Force and hosted the first Applied Reproductive Strategies in Beef Cattle Workshop in 2002.



Megan MCCarthy DVM, MS

Kansas State University

Dr. McCarthy received her DVM from Ross University in 2016, completing her clinical training at Texas A&M. She completed internships at Rood & Riddle Equine Hospital in Wellington and University of Missouri before moving to Oregon to complete a fellowship and Large Animal Surgery Residency at Oregon State University. In 2023 Dr. McCarthy completed her residency and Master's of Science with research focusing on the use of botulinum toxins for osteoarthritis in horses. Currently she is a Clinical Assistant Professor of Large Animal Emergency at Kansas State University.



Robert Larson DVM, PhD, DACT, DACVPM (Epidemiology) ACAN

Kansas State University

Dr. Larson received his DVM from Kansas State in 1987 and a Ph.D from the KSU Department of Animal Sciences in 1992. He spent five years in private practice and then 10 years at the University of Missouri. In 2006 he returned to Kansas State University as the Coleman Chair of Food Animal Production Medicine where his teaching and research focuses on beef cattle production and health. Dr. Larson's primary area of interest is the integration of animal health, production efficiency, and economic considerations in beef cattle production. He is board certified by the American College of Theriogenologists, the American College of Animal Nutrition, and the American College of Veterinary Preventive Medicine -Epidemiology specialty.



Jenifer Loewen DVM, DACVECC Western College of Veterinary Medicine

in Saskatchewan

Dr. Jen Loewen is presently Assistant Professor of Small Animal Emergency Medicine & Critical Care at the Western College of Veterinary Medicine in Saskatchewan. After completing a rotating internship at Iowa State University & a residency in Small Animal Emergency & Critical Care at the University of Wisconsin-Madison, she became board certified in small animal emergency & critical care in 2018. She is currently working on a Master's of Education in Health Profession Education.



Morgan Murphy DVM, DACVAA

Kansas State University

Dr. Murphy received her Bachelor of Science in Mathematics from KSU. She received her DVM from Kansas State University & completed internships at Oklahoma State University & Gulf Coast Veterinary Specialists in Houston, Texas before returning to KSU for a residency in Anesthesia & Analgesia. She then worked as an anesthesia faculty member at Iowa State University's CVM before returning to Kansas State where she is currently a Clinical Assistant Professor of Anesthesia. Her clinical interests include methods to reduce morbidity and mortality in veterinary patients in the perioperative period.



Ron Orchard DVM, MPH, CAWA, PhD

Kansas State University

Dr. Ron Orchard is a dual DVM/MPH and is currently a fellow with the Kansas State University's Shelter Medicine & Community Outreach program. He teaches shelter medicine and surgical practice through a series of community partnerships. His work not only involves developing veterinarians that have technical surgical expertise but also includes an element intended to support the exercise leadership through One Health and "reflective practitioner" frames.



Drew Ricketts BS, PhD Kansas State University

Drew Ricketts is the Wildlife Specialist for K-State Research and Extension and an Associate Professor in the Wildlife and Outdoor Enterprise Management at K-State. As the Extension Wildlife Specialist, his responsibilities include conducting a statewide program in wildlife damage control, wildlife enhancement on private lands, and youth outdoor programs. Drew works with producers throughout Kansas who are experiencing property damage caused by wildlife, with an emphasis on identifying and managing livestock losses to predators.



James K. Roush DVM, MS, DACVS Kansas State University

Dr. Roush is the current Associate Dean of Academic Programs and Student Success in the College of Veterinary Medicine, Kansas State University, and Professor of Small Animal Surgery. He has been a faculty member at Kansas State University since 1989



Thomas Schermerhorn VMD, DACVIM, (SAIM) Kansas State University

Dr. Thomas Schermerhorn is a professor of small animal medicine & holds the Jarvis Chair in Veterinary Medicine at Kansas State University. His clinical interests include all aspects of canine & feline endocrinology, with an emphasis on diabetes. His research focuses on cellular and molecular endocrinology, especially the study of diabetes mellitus & related metabolic disorders in dogs and cats. He earned his veterinary degree at the University of Pennsylvania. He also completed a medical internship at South Shore Veterinary Associates in South Weymouth, Massachusetts, & a residency in SAIM at Cornell University, where he also received research training as a graduate fellow in the Department of Molecular Medicine.



Trenton Shrader

DVM

Kansas State University

Trent is a 2015 graduate of Kansas State's Veterinary College, after which he completed a specialty internship at the University of Saskatchewan in zoo, exotic, & wildlife medicine followed by a zoological medicine & surgery internship at the Omaha Zoo. After time as an associate at the Omaha zoo, he was hired as Medical Director of the Lincoln Zoo from 2017-2022. While there, he opened his own practice, the only urgent care in the Omaha, NE metro area that serves exotic pets. In 2023, he joined KSU as assistant clinical professor of zoo, exotics, & wildlife.

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Christine Staten DVM, MBA Veterinary MBA

Dr. Christine Staten graduated in 1999 & owns an 11-doctor mixed animal practice in Tucson, Arizona that she grew from a solo-ambulatory practice. Desiring to learn more about entrepreneurship & business management, she earned her MBA last year. With her company Veterinary MBA, she is helping other practice owners & managers create more sustainable business models while gaining more time, money, & freedom in their lives. She is also passionate about encouraging & mentoring the next generation of veterinarians into the greatest profession in the world.



Jocelyn Stedman DVM

Kansas State University

Dr. Stedman is originally from British Columbia, Canada where she grew up riding hunter & jumper horses. She completed her undergraduate degree in biology at Cornell University where she studied stress hormones in song birds & then went on to graduate from the Cornell University CVM in 2019. Following graduation, she completed internships at the Equine Medical Center of Ocala and Cornell Ruffian Equine Specialists. She is currently the third-year equine surgery resident at KSU & is completing her master's degree where her research has focused on the use of magnetic resonance imaging to evaluate the equine stifle.

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Maureen Sutter

Kanas Equine Practitioners Group

Dr. Maureen Sutter graduated from Kansas State College of Veterinary Medicine in 2007. She is an active member of AAEP, AVMA, KVMA, and IVCA. Her service to KVMA involves being on the Board of Directors as a District Director of Equine from 2019 to present. Furthermore, she is on the Board of Directors for the Kansas Equine Practitioner's Group. For AAEP, Dr Sutter is on the Member Engagement Committee and Student Subcommittee within the Commission on Equine Veterinary Sustainability.



Debra Zoran DVM, PhD, DACVIM-SAIM

Texas A&M

Dr. Deb Zoran is a founding member & current Director of the Texas A&M Veterinary Emergency Team (VET). Her DVM was awarded in 1984 from Kansas State University, followed by a PhD in nutrition from Texas A&M, where she rose to Professor & taught small animal medicine & nutrition for 20 years. Since joining VET in 2009, she has been on over 25 deployments to multiple types of disasters in Texas & beyond. Since 2012, she has been one of the lead instructors for the required clinical rotation in Veterinary Emergency Management for 4th year veterinary students.



Jarrod Troy DVM, DACVS-LS, CERP Iowa State University

Dr. Troy's professional interests include general large animal/equine surgery and equine rehabilitation. Surgical interests include both orthopedic and soft tissue surgical procedures including arthroscopy, fracture repair, airway, abdominal, and urogenital surgeries. Of special interest is neurosurgical procedures such as intervertebral cervical fusion (i.e. basket surgery) or cervical vertebral fracture repair. These surgical cases also fuel his interest in equine rehabilitation to identify how we can improve outcome for our equine patients while also providing appropriate pain management. By using current and developing rehabilitation strategies we can improve outcome in surgical and non-surgical cases especially those involving neurologic deficits/disorders. Dr. Troy has spoken at both regional and national conferences on equine performance, upper airway disorders, emergency case management, wound management, and equine colic.



Frank van der Meer DVM, PhD University of Calgary

Frank van der Meer graduated from the Faculty of Veterinary Medicine at Utrecht University in the Netherlands in 1996 & completed his PhD on the activity of antiviral compounds to Retro- and Nidoviruses in 2007. In 2008 he joined the Faculty of Veterinary Medicine in Calgary. His research focuses on bovine viruses such as bovine viral diarrhea virus, bovine leukemia virus & wildlife viruses in the Canadian arctic. He collaborates with researchers in Tanzania to study animal & human pathogens, where he also led a field school in Ngorongoro & the Lake zone.

86th Annual Conference Proceedings & Virtual Access



AWARDEES



Distinguished Service Award Steven Hodes DVM **Kansas State University**



E.R. Frank Award **Rose McMurphy** DVM Kansas State University



Distinguished Service Award Megan Ehlers DVM **Kansas State University**



Young Alumnus Award **Shawna Hawkins** DVM, DACZM Kansas State University



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9:00 -9:50 AM

Dr. Mark Epstein

Pathophysiology of Pain and Maladaptive Pain Syndromes

This session will discuss normal, protective pain processing associated with tissue trauma and inflammation, and the pathways and receptors that provide therapeutic targets. Pain processing can go awry and become exaggerated, maladaptive, and even neuropathic; this session will discuss the pathophysiology of central and peripheral hypersensitization and the neuropharamcologic targets to mitigate maladaptive pain. Specific neuropathic syndromes recognized in dogs and cats will be discussed.

SMALL ANIMAL - Big Basin

10:30 - 11:20 AM

Dr. Morgan Murphy

CPR Basic Life Support (BLS) guidelines based on the RECOVER (Reassessment Campaign on Veterinary Resuscitation) Initiative

small animal CPR course This teaches essential concepts to maximize outcomes in patients with cardiopulmonary arrest. It is based on the Reassessment Campaign on Veterinary Resuscitation (RECOVER) Initiative that was launched in 2010 by a team of veterinary emergency and critical care specialists. Their goal was to develop and disseminate the first evidence-based guidelines for veterinary cardiopulmonary resuscitation.

SMALL ANIMAL - Big Basin

11:30 AM- 12:20 PM

Dr. Morgan Murphy

Sedation & Analgesia for the Emergency Critical Care Patient

The essentials of sedation and analgesia for emergency critical care patients in small animal medicine. This session will teach optimal patient comfort and management during critical situations.

LARGE ANIMAL - Kaw Nation

9:00 -9:50 AM

Dr. Frank Van Der Meer

Bovine Leukosis Virus Control, Farmers Perceptions, New Strategies and Old Remedies

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temedies.	

LARGE ANIMAL - Kaw Nation

10:30 - 11:20 AM

Dr. Frank Van Der Meer

Updates on Bovine Viral Diarrhea Virus Infections and Control, a Canadian Perspective

Updates on Bovine Viral Diarrhea Virus Infections and Control, a Canadian Perspective.

LARGE ANIMAL - Kaw Nation

11:30 AM- 12:20 PM

Dr. Frank Van Der Meer

Improvement Options and Developments in Bovine Vaccines and Vaccination Strategies

Improvement Options and Developments in Bovine Vaccines and Vaccination Strategies.

EQUINE - McDowell Tuttle Alcove

9:00 -9:50 AM

Dr. Ann Dwyer

Seeing Differently: Anatomy and Physiology of the Equine Eye.

Anatomy and physiology of the eye will be described using everyday objects as metaphors, leading to understanding of complex and often confusing conditions!

EQUINE - McDowell Tuttle Alcove

10:30 - 11:20 AM

Dr. Ann Dwyer

Equine Ophthalmology for Road Warriors

Tried and true tips for examination, diagnosis treatment, and management of common equine eye problems in the field. Will include SPL management and field surgery.

EQUINE - McDowell Tuttle Alcove

11:30 AM- 12:20 PM

Dr. Ann Dwyer

Everything is Relative: The Equine Orbit & Adnexa

Problems of the equine orbit, periorbit, haired eyelids and third eyelid will be covered including periocular trauma and neoplasia.



1:30 -2:20 PM

Dr. Mark Epstein

Osteoarthritis and other Chronic Pain Syndromes: Recognition, Assessment, Management

Chronic Pain in the form of osteo arthritis and other conditions is a ubiquitous veterinary feature of patients, however often underrecognized and therefore undermanaged. This session will discuss the prevalence of OA and other chronic pain conditions to include maladaptive to neuropathic pain conditions; the recognition and assessment of OA with validated Clinical Metrology Instruments (CMIs), and it management according to Canine Osteoarthritis Staging Tool Guidelines.

SMALL ANIMAL - Big Basin

3:00 - 3:50 PM

Dr.Mark Epstein

Pain Management for the Low-Surgical Dose Patients

This session will describe the basic pain management protocols for procedures in which post-operative pain would be expected not to be severe and/or are at low risk for sensitization and maladaptive pain. Examples include but not limited to: small, uncomplicated lumpectomy, laceration repair; arguably, spay, neuter, uncomplicated tooth extraction.

SMALL ANIMAL - Big Basin

4:00 - 4:50 PM

Dr. Mark Epstein

Pain Management for the High-Surgical Dose Patients

This session will describe the modalities & protocols deployed for those in which significant post-operative pain can be anticipated &/or the patient has or is at risk for maladaptive pain. These include but are not limited to are patients that have significant tissue trauma, are already in pain, & have chronic inflammation &/or nerve injury present. Examples include but not limited to: large soft tissue resection, trauma repair; laparotomy/abdominal Sx of any kind; significant oral surgery; orthopedic surgery, amputation (even just digit), enucleation, & so on.

LARGE ANIMAL - Kaw Nation

1:30 -2:20 PM

Dr. Drew Ricketts

Identifying and managing predator attacks on livestock

This presentation will provide information on the process of determining the predator responsible for attacks on livestock, including key differences on injuries caused by coyotes, dogs, and mountain lions. Guidance on how to help producers deal with predation issues will also be provided.

LARGE ANIMAL - Kaw Nation

3:00 - 3:50 PM

Dr. Sandy Johnson

Keeping Up with Estrus Synchronization Systems for Beef Cows and Heifers

The session will provide background and resources for implementing synchronization and AI programs for beef females to achieve optimal results. A successful breeding season begins with good management months in advance of the breeding season. A systematic approach will be illustrated to guide users through protocol selection and methods to eliminate errors in protocol compliance and improve communication to all involved.

LARGE ANIMAL - Kaw Nation

4:00 - 4:50 PM

Dr. Sandy Johnson

Heifer Management Considerations for Fertility and Longevity

Since the time that a target weight concept was established for heifer development, several industry changes have occurred that have prompted reevaluation under current conditions. Studies will be reviewed that consider implications to longevity beyond the first breeding season.

EQUINE - McDowell Tuttle Alcove

1:30 -2:20 PM

Dr. Jocelyn Stedman

Evaluation of the soft tissues of the equine stifle using magnetic resonance imaging

The recent development of high field magnetic resonance imaging (MRI) of the equine stifle has resulted in a need for more information on the normal MRI anatomy of the soft tissues of the stifle and how they change under different conditions before accurate conclusions can be drawn from clinical cases. This presentation will describe the appearance and features of the soft tissues of the equine stifle using 3 T MRI under multiple conditions and compare these results to histologic findings.

EQUINE - McDowell Tuttle Alcove

3:00 - 3:50 PM

Dr. Ann Dwyer

Tracks of My Tears: Ulcerative Keratitis

Corneal ulcers are not all the same! Discussion of the differential diagnosis for this common equine ocular emergency and explanation of appropriate treatments.

EQUINE - McDowell Tuttle Alcove

4:00 - 4:50 PM

Dr. Ann Dwyer

Cry me a River: Non-ulcerative Keratitis and Common Intraocular conditions

Discussion of the diagnosis, treatment and management of non-ulcerative keratitis and selected conditions of the lens and posterior segment in horses.

8:00 -8:50 AM

Dr. Thomas Schemerhorn

Introduction to the use of SGLT2 inhibitors in cats with diabetes

SGLT2 inhibitors are new drugs used to treat hyperglycemia due to diabetes mellitus. Two veterinary products have been recently approved for use in diabetic cats. SGLT2 inhibitors are promising new tools for effective management of feline diabetes. The current label indication for these drugs allows use in newly diagnosed diabetic cats that have not previously received insulin. This talk will provide up-todate information for veterinarians to understand and use these drugs.

SMALL ANIMAL - Big Basin

9:00 -9:50 AM

Dr. Jenifer Loewen

Transfusion Medicine: Preparing Product & Testing for Administration

Giving a transfusion to a veterinary patient can be a lifesaving procedure, however, if it is not something that you are used to performing, it can be overwhelming. This session will discuss some tips if you are collecting your own product, things to keep in mind when selecting which product to give to your patient and what to monitor for during the transfusion.

SMALL ANIMAL - Big Basin

10:30 -11:20 AM

Dr. Jenifer Loewen

A little Sweet, A little Sour: Approach to Diabetic Ketoacidosis

Diabetic ketoacidosis (DKA) is a complication of diabetes mellitus. Treating a patient with DKA, there are several things to keep in mind, what caused the DKA, what electrolytes do we need to monitor/manage during treatment & insulin therapy. This session will discuss differentials and initial tests to suggest when diagnosing a DKA, limitations of some of our bedside tests, electrolyte therapy as well as insulin protocols.

LARGE ANIMAL - Kaw Nation

8:00 -8:50 AM

Dr. Scott Fritz

The Finer Points of Diagnostic Investigations of Common Food Animal Toxins

l ike many production diseases, diagnostic workup а is often multifactorial & building supportive evidence in multiple areas will generate the most confidence in a diagnosis. Specific tests require specific sample types & there are reasons why the perfect test may or may not serve its intended purpose in all cases. This presentation will use common toxic exposures in food animals to discuss the finer points of making a definitive diagnosis of these potentially catastrophic situations. Sample selection, care, submission, and test selection will be addressed with a detailed description of the "why" that can make or break a case.

LARGE ANIMAL - Kaw Nation

9:00 -9:50 AM

Dr. Steve Ensley & Dr. Robert Larson

Beef Cattle Mineral Nutrition

Working up questions from clients about mineral nutrition involves incorporating local knowledge of soil and forage mineral considerations, a thorough history, examination of cattle, water and feed analysis, and liver biopsy results. Several faculty at KSU CVM are available to assist practitioners working up mineral nutrition questions.

LARGE ANIMAL - Kaw Nation

10:30 -11:20 AM

Dr. Terry Engelken

Diagnosing Reproductive Failure in Beef Herds and / or Assessing Reproductive Performance in Beef Herds

Reproductive efficiency remains cru-cial for cow/calf profitability. Infectious disease often disrupts reproduc-tive performance, leading to issues like early embryonic death, late-term abortion, delayed conception, and "weak calf syndrome." Regardless of the cause, the end result is that the operation will have fewer pounds of calf to market after weaning. Practitioners play a central role in understanding the relationship of infectious agents with the risk of exposure & the timing of gestational losses in order to utilize the proper diagnostics determine why reproductive losses are occurring and develop herd health protocols to mitigate future losses.

EQUINE - McDowell Tuttle Alcove

8:00 -8:50 AM

Dr. Jarrod Troy

Equine Intravenous Regional Limb Perfusion

Orthopedic infections, whether osseous or synovial, are commonplace veterinary equine practice. in Elimination of bacteria from the area is a critical component of therapy which is accomplished with antimicrobial or lavage/debridement. therapy Intravenous regional limb perfusion (IVRLP) is a technique that can be performed in horses, in a field or hospital setting, that generates high concentrations of antimicrobials in equine distal limbs. This presentation will discuss how to perform and tips for an IVRLP for distal limb orthopedic infections or penetrating synovial wounds in horses as well as technical aspects of equine IVRLP.

EQUINE - McDowell Tuttle Alcove

9:00 -9:50 AM

Dr. Jarrod Troy

Equine Emergency Surgeries in the Field

Equine emergencies happen & three emergencies often require emergency surgery in the field to stabilize/treat the horse. These three emergencies include acute wounds, upper airway distress, and urethral obstructions in male horses. This presentation will discuss treating these conditions with wound repair, tracheostomy, & perineal urethrotomy. Additionally, this presentation will provide tips and tricks regarding these surgical procedures in the field.

EQUINE - McDowell Tuttle Alcove

10:30 -11:20 AM

Dr. Jarrod Troy

Equine Fracture First Aid in the Field

A limb fracture can be a catastrophic injury in horses but many of these fractures can be repaired with appropriate fracture first aid in the field. Appropriate fracture first aid will significantly improve the prognosis of repairable equine limb fractures, reduce the risk of surgical site infection, and improve the comfort of the horse. This presentation will discuss the principles of equine limb fracture first aid, stabilization, and tips/tricks associated with fracture first aid.



11:30 AM -12:20 PM

Dr. Jenifer Loewen

Pawing Through Poisons: Management of Small Animal Toxicity

Dogs and cats love to get into things they shouldn't, whether it is their own medication, an owner's medication or things around the house or yard. Depending on what the item is, we may treat the patient with supportive care or there may be a specific antidote. This session will review the general approach that should be taken when treating all toxicities as well as highlight the treatment of a few specific toxins.



SMALL ANIMAL - Big Basin

1:30 -2:20 PM

Dr. Ron Orchard

High Volume High Quality Spay Neuter Techniques

This presentation targets the pivotal role of high-volume, high-quality (HVHQ) spay and neuter techniques in managing these surgical cases within private practice. We will cover the streamlined protocols designed to ensure both efficiency and safety, essential in any small animal veterinary where environment resources may be limited but the demand is high. Our discussion will focus on surgical techniques that have been optimized for rapid recovery, minimal complication rates, and maximum throughput without compromising the quality of veterinary care. Additionally, we will examine best practices in anesthesia, perioperative care, and pain management tailored to the unique needs of HVHQSN. The session aims to equip veterinarians and staff with the knowledge and skills necessary to implement these life-saving procedures, ultimately enhancing animal welfare and aiding in the effort to reduce overpopulation in communities. Join us to learn how these practices can transform promote healthier animal and communities.

LARGE ANIMAL - Kaw Nation

11:30 AM -12:20 PM

Dr. Terry Engelken

Managing Digital Dermatitis in Feedyards

Reports of "hairy heel warts" or digital dermatitis (DD) have been described in cattle beginning in the early- to mid-1970's. First described in dairy cows, more recent reports have centered on the development of DD in beef cattle operations. Over the years, this disease has been referred to as interdigital dermatitis, interdigital pa-pillomas, Mortellaro's disease, & strawberry foot. Called by different names, the hallmark of this disease include well defined lesions on the heel that show erosions & ulceration, protruding wartlike structures, skin bearing thickened & elongated hairs, & the skin at the border of the lesion is thickened. This presentation will detail our current understanding of the pathophysiology of lesion development & control options to consider in feedyards.

LARGE ANIMAL - Kaw Nation

1:30 -2:20 PM

Dr. Terry Engelken

Managing Health in Confined Cow/Calf Operations

Over the past decade, confined cow-calf operations have become more common in the U.S. Corn Belt. There are multiple reasons for the development of this trend, with land costs and availability being primary. As the competition for tillable acres from row crop enterprises has increased, there has been a corresponding rise in the cost of pasture ownership. Even in areas of the Corn Belt where pasture acres are available to rent, these costs have increased rapidly as well. In addition, expanding urban development also competes for pasture acres and dramatically increases land costs. At a time when the next generation of young producers are moving back to the family farm, expansion or establishment of the cow herd via traditional grazing is economically unfeasible. This has caused cow-calf producers to explore new methods of production that do not require such an extensive investment in land resources. Working with these confined units provides veterinarians with new challenges and opportunities in animal health programming, biosecurity and disease prevention, nutritional management, and animal welfare.

EQUINE - McDowell Tuttle Alcove

11:30 AM -12:20 PM

Dr. Maureen Sutter

Sustainability in Equine Veterinary Practice

Discuss the formation of the AAEP Commission on Equine Veterinary Sustainability which was formed in 2022 and programs working on improving the practice of equine medicine



1:30 -2:20 PM

Dr. Jarrod Troy

Congenital Angular & Flexural Limb Deformities

Many neonatal foals are born with congenital angular or flexural limb deformities that can affect their future athletic performance, sales prospect, or even be life threatening if the foal is unable to stand. These limb deformities can often be managed in the field especially if treated early in the process although some do require surgical intervention as the foal ages. This presentation discusses congenital limb deformities in foals, the management/treatment of these conditions, and tips/tricks associated with management.



3:00 - 3:50 PM

Dr. Makenzie Hallman

Point-of-Care Ultrasonography

This presentation will first review the basics of ultrasound equipment, physics, and terminology. Next, attendees will learn ways to integrate ultrasound into their practice as part of a complete diagnostic work-up, answering critical cage-side questions with confidence. This presentation will provide the needed background information for attendees participating in the hands-on workshop.

SMALL ANIMAL - Big Basin

4:00 - 4:50 PM

Dr. Mackenzie Hallman

Point-of-Care Ultrasonography

This presentation will first review the basics of ultrasound equipment, physics, and terminology. Next, attendees will learn ways to integrate ultrasound into their practice as part of a complete diagnostic work-up, answering critical cage-side questions with confidence. This presentation will provide the needed background information for attendees participating in the hands-on workshop.

LARGE ANIMAL - Kaw Nation

3:00 - 3:50 PM

Dr. Terry Engelken

Infectious Bovine Keratoconjunctivitis – What we Know and Don't Know about "Pinkeye"

"Pinkeye" (IBK) represents the most common ocular disease in cattle and it occurs worldwide. Clinical cases begin with inflammation and excess lacrimation and proceed to photophobia and blepharospasm. The terminal lesion results in corneal edema, ulceration, and blindness. Recent surveys of U.S. cattle producers have identified IBK as one of the top 3 diseases that they have to deal with. Economic losses are represented in decreased weaning weights and calf discounts at the time of sale. Calves suffering from IBK weighed 11-35 lbs. less at weaning and showed reduced marbling scores at a year of age. Discounts for "bad eyes "ranged from \$12-\$13.30 at the time of sale. As vaccination against IBK remains controversial, it become critical for producers to work with their veterinarians to better understand risk factors and cost-effective preventative programs.

LARGE ANIMAL - Kaw Nation

4:00 - 4:50 PM

Dr. Robert Larson

Balancing Beef Cow Diets: Introduction to BRANDS

Developing cost-effective supplements for beef cattle requires considerations of size, production potential, production phase, weather, and forage quality. Because the factors that impact nutrient needs and diet composition have multiple interactions, using a software package such as BRANDS (Beef Ration and Nutrition Decisions Software) provides veterinarians with a valuable tool to strengthen nutritional consultation services for their clients.

EQUINE - McDowell Tuttle Alcove

3:00 - 3:50 PM

Dr. Meghan McCarthy

Equine colic: improving patient outcomes and preparing owners for referral

Delve into the intricacies of equine colic management, focusing on strategies to enhance patient outcomes and effectively communicate with owners about referral options.



4:00 - 4:50 PM

Dr. Meghan McCarthy

No hoof, no horse: field approaches to common hoof injuries and disorders

Explore practical field approaches to addressing common hoof injuries and disorders in equines. Learn the essentials for maintaining hoof health

86th Annual Conference Proceedings & Virtual Access





8:00 -8:50 AM

Dr. Christine Staten

Empower Your Whole Team with Performance-Based Compensation

Most veterinarians are paid based on their performance, why do we pay our team members hourly? I find that most practice owners struggle with pay scales, starting wages, raises, & promotions. How do practice owners & managers choose which team member has more value than another? What happens when they compare paychecks, & you must answer to the discrepancies? I've been there. The solution is a performance-based compensation model with tier-based levels. We have used this model successfully in our practice for over a decade, attracting, retaining, & motivating highperforming team members. Work alongside self-motivated team members who actively pursue improvement in hard skills, soft skills, and knowledge. You will leave this presentation understanding the benefits of a performancebased compensation model & be able to create, roll out, & maintain customized tiers for your practice.

PRACTICE MANAGEMENT - Big Basin

9:00 -9:50 AM

Dr. Christine Staten

What the Heck is Culture & How do I Improve Mine?

Close your eyes and imagine your dream team. What does it look like? How does it function? Now recognize that that can be your reality. This presentation will go over what you need in place before assembling your dream team. We will discuss how to attract the right people & identify the team members you really want (& those you don't) in the interview process. Effective onboarding and orientation are critical for establishing your new hire as a successful team member. Once you get them in the place, you need to be proactive about retention. You will leave this presentation with actionable steps to create and maintain your own dream team.

PRACTICE MANAGEMENT - Big Basin

10:30 -11:20 AM

Dr. Christine Staten

Building Your Dream Team: Recruiting & Retaining the Best

If you don't get this right, nothing else matters. Everybody's talking about team culture in veterinary practices. People are attracted to "good" ones, and they are quick to leave "bad" ones. We all want a positive one, but what does that even mean? Purposeful, strategic decisions by the leaders in the practice create and maintain positive cultures. This presentation will discuss what culture is, why focusing on it is so important and the key elements necessary to create and maintain your own positive culture.

PRACTICE MANAGEMENT - Big Basin

11:30 AM -12:20 PM

Dr. James Roush

DVM Graduate Expectations for Salaries and Contracts

The most recent salary and employment data from the 2023 AVMA surveys and the 2024 K-State graduates will be presented.

DISASTER RESPONSE - Kaw Nation

8:00 -8:50 AM

Dr. Debra Zoran

The Veterinarians Role in Disaster Response

This presentation will use the deployment experiences of the presenter, along with key components of the AVMA's Veterinary First Responder Certification curriculum guidance to introduce the novice and experienced veterinary responder with keys to developing the necessary knowledge, skills and training to safely and successfully integrate into a disaster response.

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Exotics - Kaw Nation

10:30 -11:20 AM

Dr. Trenton Shrader

Emergency Stabilization of the Critical Exotic or Zoo Patient

Exotic patients may present to the general practitioner in various degrees of compromise or even in acute decompensation. Given the anatomical and physiological differences from feline and canine medicine, practitioners will be presented with the fundamental skills needed to 1. Recognize an exotic emergency & 2. Establish the ABC(& D)'s of critical stabilization in non-traditional species

Exotics - Kaw Nation

11:30 AM -12:20 PM

Dr. Trenton Shrader

Emergency Stabilization of the Critical Exotic or Zoo Patient

To identify frequent causes of emergency presentation in common exotic pet species. To establish a systematic process for triage of the exotic patient. To present special considerations for the zoological patient. To review clinical and technical approaches to stabilization of the unstable exotic patient.



























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