

KANSAS STATE
UNIVERSITY

College of Veterinary Medicine

82nd Annual Conference for Veterinarians

Sunday, May 31 – Monday, June 1, 2020

VIRTUAL CONFERENCE

WELCOME



welcome

Thank you for joining us for the 2020 Kansas State University Annual Conference for Veterinarians. We hope that you and your families, your clients, and your patients have been well during such unprecedented times. Due to the pandemic, we will be providing the entire conference in a digital/remote format, to maintain distancing and to protect the health of all veterinarians and staff involved. While nothing can replace this in-person event and we will miss interacting with you in a face-to-face setting, maintaining the health of our veterinary community is of utmost importance to us at Kansas State University. We want to thank you for joining us this year in this new arrangement for Annual Conference. We look forward to your questions and feedback, and if there is anything we can do to provide additional help for you in regards to Annual Conference, please do not hesitate to let us know.

We hope you enjoy the conference and stay healthy!

Kind Regards,

Kate KuKanich

Kate KuKanich, DVM, PhD, DACVIM
Associate Professor of Internal Medicine
Chair of Continuing Education Committee
Kansas State University College of Veterinary Medicine



CONFERENCE SPEAKERS



Dr. Warren Beard

DVM, MS, DACVS, Professor, Equine
Surgery
Kansas State University



Dr. John Davidson

DVM, Dipl. ABVP (Beef Cattle) - Sr.
Associate Director, Beef Cattle
Professional Services
Boehringer-Ingelheim



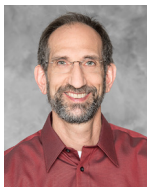
Dr. Brian Herrin

DVM, PhD, DACVM-Parasitology –
Assistant Professor
Kansas State University



Dr. Maria Jugan

DVM, MS, DACVIM, (SAIM) – Assistant
Professor, Small Animal Medicine
Kansas State University



Dr. Ray Kaplan

DVM, PhD, DACVM, DEVPC - Professor of
Parasitology
University of Georgia



Dr. Sonya Lutter

Ph.D., CFP® -Director for the School of
Family Studies and Human Services,
Professor of Personal Financial Planning
Kansas State University



Dr. Jessica Meekins

DVM, MS, DACVO, Associate Professor,
Ophthalmology
Kansas State University



Dr. Matt Miesner

DVM, MS, DACVIM - Clinical Professor &
Section Head /Livestock Services
Kansas State University



Dr. Liz Rozanski

DVM, ACVIM, ACVECC – Associate
Professor - Respiratory Disease,
Hematology, Emergency & Critical Care
Tufts University

CONFERENCE SPEAKERS



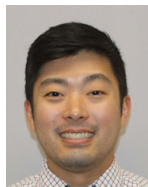
Dr. John Rush

DVM, MS, DACVIM (Cardiology),
DACVECC – Professor, Cardiology and
Critical Care
Tufts University



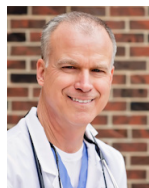
Dr. Doug Walker

MBA, PhD – Associate
Professor – Department of
Marketing
Kansas State University



Dr. William Whitehouse

DVM, DACVIM (SAIM) - Assistant Professor,
Small Animal Internal Medicine
Kansas State University



Dr. Douglas Winter

DVM, DAVDC - Dentistry and Oral
Surgery Clinician
Kansas State University



Dr. Raelene Wouda

BVSc (Hons), DACVIM (Oncology),
MANZCVS (SAIM) - Assistant Professor,
Oncology
Kansas State University

CONTINUING EDUCATION COMMITTEE

Chair: Dr. Kate KuKanich

Members: Dr. Chris Blevins,

Dr. Steve Ensley,

Dr. Gregg Hanzlicek

and Dr. Robert Larson

Small Animal

Large Animal/Equine

8:00 a.m.

Zoom room opens

8:30 a.m.

Feline Uveitis: Ocular Manifestations of Systemic Disease in the Midwestern United States

Dr. Jessica Meekins - Kansas State University

Trichomoniasis: Herd Management and Prevention Strategies - Part 1

Dr. John Davidson - Boehringer-Ingelheim

9:20 a.m.

Q & A

9:25 a.m.

Break

9:30 a.m.

A 'How-To' Guide: A Case-Based Approach to Utilization of Feeding Tubes in Small Animal Patients

Dr. Maria Jugan - Kansas State University

Trichomoniasis: Herd Management and Prevention Strategies - Part 2

Dr. John Davidson - Boehringer-Ingelheim

10:20 a.m.

Q & A

10:25 a.m.

Break

10:30 a.m.

Mitral Valve Disease in Dogs-Animal Patients

Dr. John Rush - Tufts University

The Changing Landscape of Ruminant Parasite Control: Principles and Approaches for Success and Sustainability

Dr. Ray Kaplan - University of Georgia

11:20 a.m.

Q & A

	Small Animal	Large Animal/Equine
11:30 a.m.	Lunch break <i>Large Animal Speaker – Gene Taylor,</i> <i>Small Animal Speaker – Dean Rush</i>	
12:30 p.m.	Feline Cardiomyopathy <i>Dr. John Rush - Tufts University</i>	Field Anesthesia & Surgery Techniques - Food Animal <i>Dr. Matt Meisner - Kansas State University</i>
1:20 p.m.	Q & A	
1:25 p.m.	Break	
1:30 p.m.	Get the Most of your Cardiology Friend <i>Dr. Liz Rozanski - Kansas State University and Dr. John Rush - Tufts University</i>	Marketing Considerations for Veterinarian Practices <i>Dr. Doug Walker - Kansas State University, College of Business</i>
2:20 p.m.	Q&A	
2:30 p.m.	Adjourn	

	Small Animal	Large Animal/Equine
8:00 a.m.	Zoom room opens	
8:30 a.m.	Management of Hypertension in Dogs and Cats <i>Dr. William Whitehouse</i>	Evidence-Based Parasite Control in Horses: (Part 1) <i>Dr. Ray Kaplan - University of Georgia</i>
9:20 a.m.	Q & A	
9:25 a.m.	Break	
9:30 a.m.	The emergence of Atypical and Indolent Lymphomas in Dogs <i>Dr. Raelene Wouda - Kansas State University</i>	Evidence-Based Parasite Control in Horses: (Part 2) <i>Dr. Ray Kaplan - University of Georgia</i>
10:20 a.m.	Q & A	
10:25 a.m.	Break	
10:30 a.m.	Approach to the Trauma Patient <i>Dr. Liz Rozanski - Tufts University</i>	Bovine and Equine External Parasites <i>Dr. Brian Herrin - Kansas State University</i>
11:20 a.m.	Q & A	
11:30 a.m.	Lunch break <i>Large Animal Speaker – Dean Rush, Small Animal Speaker – Gene Taylor</i>	

	Small Animal	Large Animal/Equine
12:30 p.m.	Respiratory Distress Cases <i>Dr. Liz Rozanski - Tufts University</i>	Analgesia and Standing Chemical Restraint in Horses <i>Dr. Warren Beard - Kansas State University</i>
1:20 p.m.	Q & A	
1:25 p.m.	Break	
1:30 p.m.	Pediatric Dentistry <i>Dr. Douglas Winter</i>	Financial & Emotional Reactions to COVID-19 <i>Dr. Sonya Lutter - Kansas State University</i>
2:20 p.m.	Q&A	
2:30 p.m.	Adjourn	

SMALL ANIMAL TRACK

Feline Uveitis: Ocular Manifestations of Systemic Disease in the Midwestern United States

Dr. Jessica Meekins • Sunday, May 31, 8:30 a.m.

This presentation will review select infectious diseases, including disseminated histoplasmosis and feline infectious peritonitis (FIP), that result in ocular clinical signs in feline patients. After an overview of the clinically relevant anatomy and physiology of the uveal tract, we will focus on recognizing clinical signs of uveitis before discussing specific ocular lesions resulting from various infectious (fungal, viral) and other systemic causes of uveitis.

A 'How-To' Guide: A Case-Based Approach to Utilization of Feeding Tubes in Small Animal Patients

Dr. Maria Jugan • Sunday, May 31, 9:30 a.m.

A case-based approach to choosing types of feeding tubes, diet types, and disease-specific feeding complications in small animal patients.

Mitral Valve Disease in Dogs

Dr. John Rush • Sunday, May 31, 10:30 a.m.

Mitral Valve Disease in Dogs: Myxomatous mitral valve disease is the most common cause of congestive heart failure in dogs. Newer recommendations are available on the updated ACVIM consensus statement, and these recommendations plus personal preferences for diagnosis and management of congestive heart failure will be discussed. Many dogs can live for a long time with mitral valve disease when attention is paid to drug and dietary management.

Feline Cardiomyopathy

Dr. John Rush • Sunday, May 31, 12:30 p.m.

Feline cardiomyopathy: Feline cardiomyopathy is often difficult to identify, and even more challenging to manage. Forms of cardiomyopathy include hypertrophic, dilated, restrictive and arrhythmogenic right ventricular cardiomyopathy. Cats with heart disease can present with asymptomatic disease, congestive heart failure, or with signs of arterial thromboembolism. Diagnostic tests to be discussed include the cardiac exam, ECG, echocardiography, laboratory testing including NT-proBNP and cardiac troponin I, and thoracic radiographs. Therapeutic approaches for various stages of feline cardiomyopathy will be discussed.

Get the Most of your Cardiology Friend

Dr. Liz Rozanski , Dr. John Rush • Sunday, May 31, 1:30 p.m.

This presentation will focus on questions to ask when you refer or think of referring a patient to a cardiologist. Not all murmurs need echoes, and some animals with murmurs need fluids! In this lively session, we will try to highlight how to approach these problems.

Management of Hypertension in Dogs and Cats

Dr. William Whitehouse • Monday, June 1, 8:30 a.m.

This lecture will provide an overview of the management of systemic hypertension in small animal patients. We will review recommendations on which blood pressure devices to use, best practices for obtaining an accurate blood pressure measurement, diagnosis of systemic hypertension, and treatment strategies. We will also evaluate the clinical use of telmisartan which was recently approved by the Food and Drug Administration for the treatment of systemic hypertension in cats.

The emergence of Atypical and Indolent Lymphomas in Dogs

Dr. Raelene Wouda • Monday, June 1, 9:30 a.m.

Whilst diffuse large B-cell lymphoma remains the most commonly diagnosed form of the disease in dogs, several less common forms of lymphoma are being recognized with increasing frequency, and account for up to 30% of canine lymphoma cases in some studies. These atypical subtypes of lymphoma warrant a unique diagnostic perspective and approach to case management, which will be discussed during this presentation.

Approach to the Trauma Patient

Dr. Liz Rozanski • Monday, June 1, 10:30 a.m.

This presentation will focus on the first hour after trauma, including the primary and secondary survey. Additionally, wound management and identification of the delay or missed injury. Finally, methods for injury prevention will be discussed.

Respiratory Distress Cases

Dr. Liz Rozanski • Monday, June 1, 12:30 p.m.

This presentation will use case examples of common and not so common problems. We will focus on localization, differential diagnosis and treatment recommendations.

Pediatric Dentistry

Dr. Douglas Winter • Monday, June 1, 1:30 p.m.

This presentation will focus on the most common pediatric dental conditions encountered in the veterinary practice. Pediatric dentistry generally refers to issues encountered in the first 12 months of life. During the time of development of the dental structures, there are many problems that can occur which will lead to significant pain and disease. As with most other oral conditions, our patients rarely show outward signs of disease. It is the responsibility of the veterinarian and support staff to recognize normal versus abnormal development and be able to offer appropriate treatment to resolve these issues.

LARGE ANIMAL/EQUINE/PRACTICE MANAGEMENT

Trichomoniasis: Herd Management and Prevention Strategies

Dr. John Davidson • Sunday, May 31, 8:30 a.m.

This presentation will review Bovine Trichomoniasis, an economically important reproductive disease of cattle. The increasing awareness of this reproductive pathogen's financial impact has resulted in regulations affecting the movement of cattle both within and in between states. Discoveries regarding the pathogen and the host have been made as well as improvements in diagnostic testing strategies to properly identify *Tritrichomonas foetus* infected herds. This presentation addresses the biology, prevalence, economic impact, management and control techniques for this important reproductive pathogen.

The Changing Landscape of Ruminant Parasite Control: Principles and Approaches for Success and Sustainability

Dr. Ray Kaplan • Sunday, May 31, 10:30 a.m.

Recommendations and strategies for the control of gastrointestinal nematode (GIN) parasites in ruminants have undergone major changes over the past two decades. Key to these changes is the escalation of anthelmintic resistance, which is now a major problem not only in small ruminants, but also in cattle. The problem of anthelmintic resistance is further magnified as no new classes of anthelmintics have been introduced for ruminants in the United States since the avermectin/milbemycins (macrocyclic lactones) almost 40 years ago. On many goat and sheep farms, resistance in *Haemonchus contortus* to most if not all available anthelmintics now exists, and on cattle farms, anthelmintic resistance in multiple parasite species

including *Ostertagia ostertagi* is an increasing problem. As a result, parasite control practices of the past based almost exclusively on relatively frequent or calendar-based whole-herd anthelmintic treatments are no longer viable or sustainable. Consequently, recommendations for parasite control have evolved from those of the past, and in many respects are fundamentally different from those that served as the basis for parasite control for the past few decades. Several approaches have proven effective in both controlling parasites while also reducing the rate with which resistance develops in sheep nematodes. These include: (1) not treating the ewes and only treating the lambs, (2) leaving a percentage of the flock untreated (e.g., the heaviest 10%), (3) treating selectively based on some measure of parasitism or growth rate, and (4) using drug combinations (2 or more active compounds from different drug classes administered at the same time). However, cattle are not sheep; thus, some practices are more difficult to implement on cattle farms, and some may be less effective in cattle. Nevertheless, some of these strategies are adapted easily for cattle and are likely to be effective. In this presentation we will discuss the biology and epidemiology involved with parasite drug resistance, and will present strategies that can be used both in small ruminants and cattle to help delay and mitigate the problem of anthelmintic resistance.

Field Anesthesia & Surgery Techniques - Food Animal

Dr. Matt Miesner • Sunday, May 31, 12:30 p.m.

Restraint through low stress handling, secure physical restraint, local/regional anesthesia, and “chemical reasoning” share role. Addressing pain and stress management, reducing risk and increasing safety in both patients and handlers help us get our treatments done. We can look at this as multimodal restraint. Environment, situation, breed, etc., necessitate adjustments. This discussion will provide situations encountered by the author requiring restraint and how they are addressed.

Marketing Considerations for Veterinarian Practices

Dr. Doug Walker • Sunday, May 31, 1:30 p.m..

The session will investigate the valuation of each new patient and how that information can be used to guide your marketing efforts. Examples will be provided that can be readily implemented in your practice.

Evidence-Based Parasite Control in Horses Part 1 & 2

Dr. Ray Kaplan • Monday, June 1, 8:30 a.m., 9:30 a.m.

In 1966, a groundbreaking publication by Drudge and Lyons led to the interval dose program, where horses are treated with anthelmintic every two months throughout the year. This program was designed primarily to control the highly pathogenic *Strongylus vulgaris*, and was extremely successful in reducing parasite-related morbidity and mortality. This strategy rapidly became adopted worldwide, and in the 1970's and 1980's with the introduction of new classes of anthelmintics, the practice of rotating drugs at each treatment also became commonplace. Also during this time, anthelmintics became available as easy to administer pastes, eliminating the need for veterinary administration via nasogastric tube. As a result, veterinary involvement in parasite control declined drastically. Without veterinary involvement, parasite control became removed from the medical scrutiny that other medical treatments receive. However, much has changed over the past 50+ years, and current 'traditional' approaches routinely fail to provide optimal or even adequate levels of parasite control. It is now becoming obvious that this approach is no longer viable, and an evidence-based approach is needed. Evidence based veterinary medicine (EBVM) is defined as the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individuals and populations. EBVM is gaining wide acceptance across the spectrum of equine veterinary practice with the exception of parasite control. But this must change given the new biological realities. *Strongylus vulgaris* now is very uncommon. In contrast, cyathostomins were historically of little pathogenic concern, but now are considered the primary nematode pathogen of horses. *Strongylus* and cyathostomin parasites have very different life cycles and host-parasite dynamics, and therefore require very different approaches for successful control. Furthermore, years of intensive anthelmintic use have led to high levels of anthelmintic resistance in both cyathostomins and *Parascaris* spp. In addition, the host-parasite relationship is characterized by an overdispersion among hosts, such that a small percent of animals harbor the majority of the total worm burden in a herd. Given these biological realities, there no longer is any reasonable medical justification for treating all horses at frequent intervals, often with drugs that are ineffective due to resistance. Rather, an evidence-based approach is required that considers the numerous medical, biological and environmental factors that should be accounted for when making anthelmintic treatment decisions. Furthermore, it is important to view parasite control on a holistic level, where the host-parasite dynamic and the ecology/epidemiology of both the parasite and pasture are taken into account. This then leads to viewing parasite control in a new way, where anthelmintics are used within the context of an integrated parasite control program, rather than serving as the only component.

Bovine and Equine External Parasites

Dr. Brian Herrin • Monday, June 1, 10:30 a.m.

In this session, we will discuss the challenges of ectoparasite control on our large animals. We will go through some of the efficacy, regulatory, and health precaution issues that you or your clientele may face when using common insecticides and acaricides. Additionally, we will cover some of the management practices that are necessary for successful ectoparasite control. After this presentation, you should be able to develop a plan for controlling ectoparasites that includes proper product selection, timing and duration of treatment, and safe handling of product.

Analgesia and Standing Chemical Restraint in Horses

Dr. Warren Beard • Monday, June 1, 12:30 p.m.

In this session we will review common drugs and techniques for chemical restraint in ambulatory patients with clinical case examples

Financial & Emotional Reactions to COVID-19

Dr. Sonya Lutter • Monday, June 1, 1:30 p.m.

Financial stress has long been associated with relationship stress which both correlate with reduced work productivity. The financial and emotional stress of a financial recession topped with a global pandemic can feel insurmountable at times.

This session will review strategies for reducing financial stress and talking about stress with clients and partners. By increasing awareness of financial and emotional stress, veterinarians stand to have more productive practices.

The following seminars, in addition to the live K-State lectures, will be available free of cost for the months of June and July by using our on-line Continuing Education portal, which can be accessed at <http://www.vet.ksu.edu/onlinece/index.aspx> or scan here to watch:



A 'How-To' Guide: A Case-Based Approach to Utilization of Feeding Tubes in Small Animal Patients

Dr. Maria Jugan • Sunday, May 31, 9:30 a.m.

A case-based approach to choosing types of feeding tubes, diet types, and disease-specific feeding complications in small animal patients.

Immunotherapy for Veterinary Cancer Patients

Dr. Raelene Wouda

This presentation will address the spectrum of immunotherapeutic options commercially available, or advancing along the R&D pipeline, for the management of cancer in our companion animals. The emphasis will be on dogs, given the majority of therapeutics are intended for use in this species, but with mention of our equine and feline friends.

Recognizing and Treating Corneal Ulcers in Horses

Dr. Jordan Roberts

This session outlines how to perform an effective equine ophthalmic examination, and describes the types of corneal ulcers encountered in equine patients, as well as treatment recommendations.

Update on Proteinuria in Dogs and Cats

Dr. William Whitehouse

This lecture will review the identification, assessment, and management of proteinuria in dogs and cats. We will cover etiologies of proteinuria and current recommendations for management including renal biopsies, standard therapy, and immunosuppressive therapy.

Feline Oral Pathology

Dr. Douglas Winter

This presentation will cover basic feline oral pathology, including how to correctly identify, treat and manage issues that are commonly encountered; specifically, caudal mucositis (feline chronic gingivostomatitis), juvenile periodontitis/hyperplastic gingivitis, periodontal disease, common dentition and soft tissue problems like tooth resorption (Types 1 and 2) and neoplasia.

Standing Oral Proceedings

Dr. Chris Blevins

This presentation will cover basic feline oral pathology, including how to correctly identify, treat and manage issues that are commonly encountered; specifically, caudal mucositis (feline chronic gingivostomatitis), juvenile periodontitis/hyperplastic gingivitis, periodontal disease, common dentition and soft tissue problems like tooth resorption (Types 1 and 2) and neoplasia.

Thank you, Sponsors!



Kansas State Veterinary
DIAGNOSTIC LABORATORY

TO DISCOVER. TO TEACH. TO HEAL.



Thank you sponsors for helping make this event possible during uncertain and unfamiliar times.