

**2017 Hambletonian Continuing Education Seminar\***

**Hilton Meadowlands Hotel, E. Rutherford, NJ**

**Friday, August 4, 2017**

**7:00 AM – 6:05 PM**

**\*Approved for CE credit by the NJ Veterinary Medical Association and the NJAEP**

**7:00 – 7:45 AM**

**Exhibit Area**

**Registration & Continental Breakfast (*sponsored by Purina Animal Nutrition & Triple Crown Nutrition/Kemin Industries*)**

**Trade Show Opens**

**7:45 - 8:00 AM**

**Exhibit Area**

**Welcome to Seminar Participants**

**8:05 – 9:05 AM**

**Derby West**

**Nutritional & Management Factors Contributing to Equine Gastric Ulcer Syndrome: What the heck can we do about them? (*sponsored by Purina Animal Nutrition*)**

**Anna Pesta, PhD**

*Dr. Pesta received both her MS and PhD in Animal Nutrition from the University of Nebraska. Her graduate research focused on the use of high fat diets and manipulating the microbial community in the gut. Dr. Pesta is a Nutritionist on the Equine Technical Services Team at Purina Animal Nutrition, responsible for helping to bring innovative solutions from the research team out to the field. She spends most of her time providing technical consultations and support to the sales team, as well as speaking on equine nutrition. She actively competes in three-day eventing, and has a special interest in the nutrition and development of the future sport horse.*

Gastric health is of increasing interest and sometimes frustration to both horse owners and equine practitioners. There are a number of nutritional and management factors that contribute to the development of equine gastric ulcer syndrome. Practical strategies for mitigating EGUS as well as current research in this area will be discussed.

**Derby East**

**Update on Tick Borne Diseases: Focus on Lyme and Anaplasmosis (*sponsored by Zoetis*)**

**Mark Crisman, DVM, MS, DACVIM**

*Dr. Crisman received his DVM from the University of Warsaw, Poland in 1984. He earned an MS in Veterinary Medicine in 1987 from Washington State University. From 1987 – 2010 Dr. Crisman served on the faculty of the VA-MD RCVM where he was a Professor in the Department of Large Animal Clinical Sciences and Section Chief of Equine Medicine and Surgery. Dr. Crisman's primary research interests include immunology, pharmacology, and inflammation associated with equine metabolic syndrome. In 2010, Dr. Crisman joined Veterinary Operations with Zoetis where he currently serves as Senior Veterinarian, Equine Technical Services.*

Exposure to ticks parasitizing both animals and humans is becoming an increasingly prevalent issue worldwide. Several factors may be involved including populations living in closer proximity to wildlife, changing wildlife populations and more temperate winter months. Tick involvement in transmission of zoonotic diseases from animal reservoirs is well known as both clients and practitioners are increasingly well informed due in large part to the internet. This discussion will focus on Lyme disease and Anaplasmosis.

**9:10 – 10:10 AM**

**Derby West**

**Treatment and Rehabilitation of Tendons and Ligaments (*sponsored by Merck Animal Health*)**

**Steve Adair, MS, DVM, DACVS, DACVSMR**

*Dr. Adair earned his DVM from Auburn University. He then spent two years in private equine practice and completed a surgery residency at the University of TN. He is presently an Associate Professor of Equine Surgery, Department of Large Animal Clinical Sciences, College of Veterinary Medicine at the University of TN-Knoxville and is Director of the Equine Performance Medicine*

and Rehabilitation Center. He is certified in Animal Chiropractic by the AVCA and is a Certified Equine Rehabilitation Practitioner. Dr. Adair's primary research areas include equine musculoskeletal conditions, lameness, regenerative medicine and rehabilitation.

This presentation will cover the current treatments available for equine tendon and ligament injury. It will also cover the different rehabilitation modalities available for treating equine tendon and ligament injuries.

## Derby East

### **Recurrent Colic: Epidemiology, Current Research and Treatment Options (sponsored by Arenus)**

#### **Jay Altman, DVM**

*Dr. Altman received his DVM from Colorado State University in 1996. He then spent the next 12 years as an equine practitioner and multi-doctor practice owner/manager. As a practitioner, he sought a better way of treating digestive upset, and began researching, developing, and testing an equine digestive support aid. In 2008, after development of the Assure digestive aids, he went to work with Novus International as a consulting veterinarian, researching and developing numerous health products for the equine athlete. In 2010, he moved away from clinical practice to focus fully on research and development. Today he serves as President and CEO of Arenus.*

Recurrent colic cases are troublesome for the equine practitioner. Pathophysiology and management issues combine to challenge the equine veterinarian to diagnose and treat this multifactorial disease. A review of epidemiology studies highlighting recurrent colic and current research into recurrent colic will be presented. The multiple pathological and disease processes that may contribute to recurrent and chronic colic patients will be explored and then a review of current treatment and management options will be discussed.

## **10:10 – 10:40 AM**

### **Exhibit Area**

### **Morning Break/Refreshments (sponsored by 3M Animal Care Products, Boehringer Ingelheim, Centaur Animal Health & Patterson Veterinary)**

## **10:45 – 11:45 AM**

### **Derby West**

### **Nonulcerative Keratopathies (sponsored by Patterson Veterinary)**

#### **Dennis Brooks, DVM PhD DACVO**

*Dr. Brooks received his DVM from the Univ. of Illinois. He received a PhD in glaucoma-induced optic nerve damage from the Univ. of Florida College of Veterinary Medicine, where he is a Professor Emeritus. Dr. Brooks has written many scientific publications, given lectures both nationally and internationally, and written a book, Equine Ophthalmology, published in 2002 and 2008. He has received numerous teaching and research awards, including the Frank J. Milne State of the Art Award of the AAEP in 2010. He is past President of the ACVO. Dr. Brooks has extensive experience in glaucoma, corneal transplantation, corneal amnion grafting, and infectious keratitis.*

A new group of four types of immune mediated keratitis will be discussed regarding diagnosis, therapy and prognosis. Diagnosis and therapy of nonulcerative keratopathies including corneal stromal abscesses, linear keratopathy, endothelial detachment and eosinophilic keratitis will also be presented.

## Derby East

### **Benefits of Low Level Laser Therapy on Tendons and Ligaments<sup>[1][2]</sup>~ Equine Research Evidence (sponsored by Multi Radiance Medical)**

#### **Kenneth Kopp, DVM**

*Dr. Kopp completed his DVM in 1981 at the Univ. of Missouri. He was the owner for many years of The Missouri Equine Hospital, where he was the attending veterinarian for the Anheuser Busch Clydesdale Breeding Farm. For the past 25 years, his career has been focused on the animal health industry: consulting with feed manufacturers, ingredient suppliers, medical device manufacturers, and veterinarians in the US and abroad. He has served on several industry and university animal advisory boards. Currently, he is a consulting veterinarian for Brakke Animal Health, Kemin, Fresenius Kabi, and Multi Radiance Medical. His lecture will provide published evidence to support implementing Low Level Laser Therapy (LLLT) as a new treatment option in treating*

tendons and ligaments. Depth of penetration research will also be shared showing advantages of super pulsing lasers and multiple wavelengths.

**11:50 AM – 12:50 PM**

**Derby West**

**Pituitary Pars Intermedia Dysfunction: The Low-down on PPID (Equine Cushing's Disease) (sponsored by Boehringer Ingelheim)**

**Sarah Reuss, VMD, DACVIM**

*Dr. Reuss received her VMD degree from the University of Pennsylvania. After an internship at Equine Medical Center of Ocala, she completed a residency in Large Animal Internal Medicine at Texas A&M. She then practiced at McKinlay & Peters Equine Hospital in Spokane, WA. In 2010, Dr. Reuss joined the faculty at the University of Florida serving as a Clinical Assistant Professor and Chief of the Large Animal Medicine Service. She joined Merial in 2016, and currently serves on the equine professional services veterinary team at Boehringer Ingelheim.*

With increasing focus on keeping horses healthy and active into their later years, recognition and management of pituitary pars intermedia dysfunction (equine Cushing's disease) has become a common part of practice. A brief review of the pathophysiology and clinical signs will be followed by updates on diagnostic and treatment options with a focus on practical applications.

**Derby East**

**Field Based Critical Care: Decisions, Actions and Case Discussion (sponsored by Merck Animal Health)**

**Fairfield Bain, DVM, MBA, DACVIM, DACVP, DACVECC**

*Dr. Bain earned his DVM from Auburn University in 1983. His academic experience includes serving as a clinical professor of equine internal medicine and equine section head at the Washington State University College of Veterinary Medicine. Dr. Bain gained significant clinical experience at several equine referral hospitals, including Peterson & Smith Equine Hospital and Hagyard Equine Medical Institute. He also spent 12 years as co-owner and VP of a worldwide manufacturer and distributor of hyperbaric oxygen chambers for veterinary applications. He joined Merck Animal Health in 2016, and currently serves as a Technical Services Veterinarian.*

Front line examination and decision-making can be critical to success when evaluating horses with various emergency occurrences. Having a well-conceived plan can assist good decision-making and timely treatment. Different cases can often be similarly addressed, even when different specific treatment courses are ultimately determined.

**12:50 – 2:30 PM**

**Exhibit Area**

**Exhibitor Displays and Buffet Lunch (sponsored by Merck Animal Health)**

**2:30 – 3:30 PM**

**Derby West**

**Lessons Learned from 36 Years of Arthroscopy (sponsored by Wedgewood Pharmacy)**

**Michael Ross, DVM, DACVS**

*Dr. Ross received his DVM from Cornell University. He completed a surgical residency program at New Bolton Center, UPenn, and was appointed to the faculty. He currently serves at New Bolton as Professor of Surgery and Director of the Nuclear Medicine Program, which he developed. His clinical interests include equine lameness diagnosis and management; equine gastrointestinal, respiratory and musculoskeletal surgery, with concentration on orthopedic surgery; and arthroscopic surgical techniques. The 2<sup>nd</sup> edition of Drs. Ross and Dyson's comprehensive *Diagnosis and Management of Lameness in the Horse* was published in 2010, with a companion website [www.rossandyson.com](http://www.rossandyson.com)*

Arthroscopic (endoscopic) surgery is arguably one of the most important advances in management of equine orthopedic injuries over the last many years. Minimally invasive surgery of joints, tendon sheaths and bursae has answered many questions, such as, what is cartilage damage and what is the prognostic importance; why doesn't "articular pain" block out when I put local anesthetic solution into a joint; how can I explain the complex communications of the stifle joint; what about meniscal and other soft tissue lesions of the stifle joint; why should I opt for surgical management of tenosynovitis of the digital flexor tendon or carpal sheaths; should I recommend surgery in horses with navicular or other lesions of bursae? These and other questions including those from you will

be answered when we see the inside of these fascinating structures.

## Derby East

### **Quality Forage – The Key to Equine Health (sponsored by Standlee Premium Western Forage)**

#### **Tania Cubitt, PhD**

*Dr. Cubitt received her MS in Equine Nutrition and Growth from Virginia Tech. This work focused on environmental influences on hormonal and growth characteristics in Thoroughbred fillies. She received her PhD in Equine Nutrition and Reproduction also from Virginia Tech, focusing on nutritional effects on ovarian function. Dr. Cubitt currently holds a position as a nutrition consultant with Performance Horse Nutrition, an international equine nutrition consulting company. Her interests are focused on developing feeding strategies for horses with special needs including metabolic syndrome, developmental orthopedic disease, gastric ulcers, and senior horses, as well as feeding the broodmare.*

Topics to include:

- Digestive function
- Forage requirements
- Forage analysis
- Sample diets including good forage and low grain vs. poor hay and high grain
- High grain and increased risk of digestive disturbance

## **3:35 – 4:35PM**

## Derby West

### **Equine Metabolic Syndrome – Diagnosis and Management of Insulin Dysregulation to Prevent Laminitis (sponsored by Boehringer Ingelheim)**

#### **Nicholas Frank, DVM, PhD, DACVIM**

*Dr. Frank grew up in the UK and then trained in the US. He received his DVM degree from Purdue University in 1993 and then worked for 2 years in private equine practice. He then returned to Purdue to complete a clinical residency in Large Animal Internal Medicine and a PhD in Endocrinology and Nutrition. In 2002, Dr. Frank joined the faculty of the University of TN as a clinician and developed research programs in equine endocrinology, metabolism, and laminitis. In 2006, he also became affiliated with the School of Vet. Medicine & Science at the Univ. of Nottingham. Dr. Frank moved to Tufts University in 2011 to serve as a Professor and Department Chair. He continues to consult on internal medicine cases and conduct clinical research.*

Laminitis threatens every horse in our care and it is imperative that we recognize and address the risk factors for this devastating disease. Insulin dysregulation is a known risk factor for endocrinopathic laminitis and greater emphasis should be placed on identifying and managing horses affected by this medical problem. We also recognize a clinical syndrome of increased adiposity, insulin dysregulation, dyslipidemia, and altered adipokine expression in horses and ponies. This is referred to as equine metabolic syndrome (EMS) and affected horses have a high risk of developing laminitis. Genetics play an important role in EMS and the risk of laminitis increases when insulin dysregulation is exacerbated by environmental factors, diet, or concurrent disease. Updates on the diagnosis and management of insulin dysregulation in horses will be discussed in this presentation.

## Derby East

### **Animal Health Emergency Response: Module 19 (sponsored by USDA)**

#### **Anna C. Welsch, DVM, MS**

*Dr. “AC” Welsch received her DVM from Oklahoma State University in 1990. After practicing in a small animal hospital and a fiber animal practice, she moved to Paris to complete a Master’s in Tropical Veterinary Medicine. Her studies took her to as far as Zimbabwe. She returned to the US and began working with the USDA APHIS Veterinary Services, where she has been for 20+ years. In addition to endemic disease programs, Dr. Welsch oversees equine international imports and exports including for the 1996 Olympic Games in Atlanta, GA, the 1993 International World Pairs Driving Championships in Gladstone, NJ, and the 2007 Breeders Cup in Monmouth Park, NJ.*

This module has been approved expressly to serve as one unit of supplemental training for participants in USDA's National Veterinary Accreditation Program. The module is intended to:

- Familiarize accredited veterinarians with animal health regulatory concepts and activities.
- Identify the various roles and organizations or agencies in which veterinarians may assist in animal health emergency responses
- Describe the basics of response planning and coordination, including the National Incident Management System (NIMS) and the Incident Command System (ICS)
- Provide additional training resources pertaining to animal health emergency response

**4:35 – 5:05 PM**

**Exhibit Area**

***Afternoon Break/Refreshments (sponsored by Luitpold Animal Health, Mid-Atlantic Equine Medical Center & Vet-Ray Technology by Sedecal)***

**5:05 – 6:05 PM**

**Derby West**

**It Looks Like a Lameness – Trots Like a Lameness – Where is the Lameness?**

**Challenging Sports Medicine Cases**

**James Orsini, DVM, DACVS**

*Dr. Orsini received his DVM from Cornell University in 1977. He completed his internship and surgery residency at Penn's New Bolton Center, where he currently serves as Associate Professor of Surgery. He has published extensively on multiple equine subjects including pediatric surgery, antimicrobials, laminitis, gastric ulcers, pain and anti-inflammatory medications and related fields. Dr. Orsini is co-editor of Equine Emergencies: Treatment and Procedures, which is in its 4th edition and published in 6 languages. His current research interests are in pain management, understanding the pathophysiology of laminitis, prevention and improved treatments and the equine athlete.*

Lameness is the primary reason for an equine athlete's poor performance in countless sport events. A complete lameness examination - palpation, watching, diagnostic analgesia and routine imaging - coupled with a common sense approach in assessing one's results generally ends in isolating the problem. A small number of cases escape diagnosis and in these special situations understanding the benefits of different imaging modalities assists the clinician in the science and art of lameness diagnosis. Fasten your seatbelts – we're taking-off for an in-depth study of puzzling sport medicine cases and discovering the answers.

**Derby East**

**Leaky Gut: Symptoms, Causes & Nutritional Approaches to Ameliorating (sponsored by Triple Crown Feed)**

**Bill Vandergrift, PhD**

*Dr. Vandergrift received his PhD in Animal Nutrition from Texas A&M University in 1980. He held a faculty position in the animal science department at the University of GA from 1980–1984, where he taught courses in animal nutrition, feeds and feeding, vitamin nutrition and horse production. From 1984–1991 he directed equine nutrition programs for local and national feed companies. In 1992, he founded EquiVision, Inc. to provide consulting services to equine breeders, trainers and riders in the areas of nutrition, management and exercise physiology. Through these consulting services EquiVision develops specialized supplements to address the specific needs of its clients.*

Leaky gut in horses has recently been recognized as a possible cause for abnormal immune function, gastric and intestinal ulcers, off behavior, poor performance, metabolic syndrome and several other physiological anomalies. Current knowledge of causes, assessment and dietary approaches to improving tight junction function and reducing intestinal permeability will be discussed.