2022 Hambletonian Continuing Education Seminar*
Hilton Meadowlands Hotel, E. Rutherford, NJ
Friday, August 5,2022
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 Neogen, Platinum Performance and Triple Crown Nutrition)***

Trade Show Opens

7:45 - 8:00 AM

Exhibit Area **Welcome to Seminar Participants**

8:05 – 9:05 AM

Derby West **Update: Research Studies of Clinical Interest You May Have Missed *(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 Univ. 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, Section Chief of Equine Medicine and Surgery, and Director of the Molecular Diagnostics lab. Dr. Crisman is widely published with his primary research interests including immunology and pharmacology. In 2010, Dr. Crisman joined Veterinary Operations with Zoetis where he currently serves as Senior Veterinarian, Equine Technical Services and supports the Northeast region.

This discussion will focus on recent publications that may have clinical application including: Respiratory Disease with a focus on recent studies from Gluck Equine Research Center, Acute Phase Proteins with emphasis on Serum Amyloid A, and therapeutic intervention in an EHV-1 Outbreak.

Derby East **Nutrition You Can Use in Your Practice *(sponsored by Triple Crown Nutrition)***

Carey A. Williams, MS, PhD

Dr. Williams earned her PhD in 2003 from Virginia Polytechnic Institute and State University. In 2003 she joined Rutgers as its Equine Extension Specialist, and Associate Director of Outreach for the Equine Science Center taking an active role in teaching, conducting research and working with the equine and academic communities to ensure the viability of the horse industry in New Jersey. At Rutgers, she maintains a herd of Standardbred mares for nutrition, pasture and exercise physiology research. The focus of her research is on antioxidant supplementation and decreasing the stress of exercise and competition in performance horses, and pasture management and metabolism of the grazing horse. She was recently promoted to full professor.

This talk will cover a variety of "hot topic" areas that seem to come up most by veterinary clients. Topics covered will include selecting a feed and forage appropriate for specific horses and how to go about taking and reading a forage analysis, what to do

nutritionally for horses on lay-up, what supplements are effective and which ones are a waste of money, equine nutrition diet fad, myths and more! Bring your most burning questions, there will also be time for open Q&A.

9:10 – 10:10 AM

Derby West

Emergency Stabilization of Fractures and Lacerations in the Field *(sponsored by Mid-Atlantic Equine Medical Center)*

Singen Elliott, DVM

Dr. Singen Elliott graduated from Cornell University in 2010 with a BS in Animal Science. He continued his studies at the University of Wisconsin School of Veterinary Medicine for a year as a research intern, where he developed protocols and assays for coincubation of primary cell lines of bovine keratinocytes and treponema bacteria for studying bovine digital dermatitis. He returned to Cornell University for veterinary school where he was awarded the ACVS Student Surgeon award. Throughout his undergraduate and veterinary degree, Dr. Elliott worked at Cornell's Equine Performance Testing Center assisting in upper airway research and clinical evaluation of patient airways. In 2017, he began a one-year specialty internship in surgery and emergency and critical care at the University of Georgia Veterinary Teaching Hospital and completed his surgical residency in 2021. Dr. Elliott is interested in fracture repair, upper airway surgery, and GI surgery along with sports medicine and general emergency and critical care.

From pain and visually disturbing damage to loss of limb function, fractures and lacerations are traumatizing to horse and owner alike. Cases of fracture, non-weight bearing lameness, suspected synovial contamination and uncontrollable hemorrhage should receive immediate veterinary attention. Prompt stabilization and rapid initiation of appropriate therapy improve prognosis and decrease complications and cost. Proper coaptation saves lives at the barn and during transport. The principles of triage and stabilization will be discussed, with time for questions and group discussion of specific cases seen by the members of the audience.

Derby East

Principles of Sports Rehabilitation and Conditioning of the Equine Athlete *(sponsored by Platinum Performance)*

Sarah Gold, DVM, DACVSMR

Dr. Gold earned her DVM from Cornell University in 2004. She joined B.W. Furlong & Associates in 2005, with a special focus on regenerative medicine, lameness, and diagnostic imaging. During her time at the practice, she has served as assistant team veterinarian to the United States Eventing Team in numerous national and international competitions, including the 2008 Olympics and 2010 World Equestrian Games. Given her experience and strong interest in imaging, Dr. Gold manages both Equine MRI of NJ and Advanced Equine Imaging of Wellington, FL She also currently serves as the Medical Director of B.W. Furlong's Soundness Center.

Veterinary rehabilitation is a rapidly growing field and offers the practitioner many opportunities to positively affect the outcome of a case. Patients that are in active competition may also undergo physiotherapy and rehabilitation treatments as a sole therapeutic plan when competing under competition guidelines that preclude the use of other medications or treatment techniques. This talk will focus on principles the veterinary practitioner should utilize when developing a rehabilitation program for the equine patient, be it for injury recovery, post-operative care, or general conditioning. The goal of any rehabilitation program is to return the patient to its previous level of fitness and function with minimal down time.

Conf. Rm F-G **<u>USDA Module # 31: High Impact Diseases in the USA & NJ Update (*sponsored by USDA APHIS)*</u>**

Linda Detwiler, DVM & Sandra Strilec, DVM

Dr. Detwiler received her DVM from Ohio State University in 1984. From 1984 to 1985, she worked in a private large animal practice. She is currently employed as a field Veterinary Medical Officer with USDA's Animal and Plant Health (APHIS), Veterinary Services in New Jersey. Previously, she served as Senior Staff Veterinarian, Emergency Programs Staff and as Veterinarian in Charge of New Jersey for APHIS.

Dr. Strilec earned her DVM from Atlantic Veterinary College. After seven years in private practice, she joined the NJDA Division of Animal Health as a staff veterinarian. Her role there focuses on animal emergency preparedness as well as regulatory veterinary work.

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

The role USDA Accredited Veterinarians play in high impact equine diseases will be reviewed. Veterinarians will gain an understanding of how equine disease outbreaks can impact economics, trade, and the US equine Industry. In addition, there will be an update on the equine industry in New Jersey.

<u>10:10 – 10:40 AM</u>

Exhibit Area **Morning Break/Refreshments *(sponsored by American Regent, Digatherm and MWI Animal Health)***

<u>10:45 – 11:45 AM</u>

Derby West **<u>Equine Laminitis: A Bright Future of Prevention & Treatment Options! (*sponsored by Wedgewood Pharmacy)*</u>**

James A. Orsini, DVM, DACVS

Dr. Orsini is an Associate Professor of Surgery, School of Veterinary Medicine, UPenn. He received his DVM from Cornell University in 1977 and completed his internship and surgery residency training and a 2-year fellowship/lectureship at Penn's New Bolton Center before becoming a member of the standing faculty. Dr. Orsini has published extensively on multiple equine subjects including pediatric surgery, antimicrobials, laminitis, gastric ulcers, pain and anti-inflammatory medications and related fields. He is co-editor of Equine Emergencies: Treatment and Procedures, with Dr. Thomas Divers, in its 4th edition. Dr. Orsini's current research interests are in pain management; understanding the pathophysiology of laminitis, prevention and treatments; pharmacokinetics; and sports medicine related problems.

Laminitis research continues to guide the diagnosis, prevention and treatment of this crippling and life-threatening disease. Reviewing and deciphering the literature in what works and not works in clinical practice makes this even more challenging. The top 10 clinical and research papers will be reviewed, summarized and translated into clinical applications for your equine practice.

Derby East **<u>Utilization of Infrared Thermal Imaging in Equine Practice *(sponsored by Digatherm)*</u>**

Ronald J. Riegel DVM, FASLMS

Dr. Riegel received his DVM in 1979 from the University of Illinois. He has authored more than a dozen papers and books on companion animal and equine anatomy and therapy modalities. He owned a multi-doctor, private veterinary practice for 26 years. He

co-founded the American Institute of Medical Laser Applications (AIMLA) in 2009 to provide education on all types of medical lasers in both veterinary medicine and the healthcare professions. This educational entity has now expanded to include infrared thermography and regenerative medicine. His background in these technologies encompasses human (chiropractic, physical therapist, and athletic trainers,) companion animals, and all the equine disciplines.

This class will include:

- Definition of IR thermal imaging (IRTI).
- How IRTI provides a physiological exam in real time.
- The scientific evidence in the veterinary field supporting IRTI.
- The benefits IRTI brings to an equine practice.
- Imaging techniques required to capture a physiological screen.
- Interpretation of IR thermal images
- Equipment required to meet the Veterinary Guidelines established by the American Academy of Thermology (AAT)
- Integration of IRTI into the veterinary practice
- Return on investment
- Case examples will be used within all subtopics to illustrate expected findings

11:50 AM – 12:50 PM

Derby West

Corticosteroids in Equine Practice: When to Use and What Dose? *(sponsored by Merck Animal Health)*

Tom Divers, DVM, DACVIM, DACVECC

Dr. Divers earned his DVM from the University of Georgia, where he completed his residency and served as an assistant professor in the large animal medicine and ambulatory practice. He then moved to UPenn for 9 years where he was Associate Professor of Large Animal Medicine and Chief of the Section of Medicine at New Bolton Center. Currently, Dr. Divers is the Rudolph and Katharine Steffen Professor of Medicine in the Section of Large Animal Medicine at Cornell University. He has been the recipient of numerous prestigious teaching awards, including Educator of the Year from both the AAEP and ACVECC. In 2018, Dr. Divers was inducted into the University of Kentucky Equine Research Hall of Fame.

This presentation will discuss the common uses of corticosteroids in equine practice and the level of evidence for their use in specific diseases. Corticosteroid doses, adverse effects and alternative drug treatments for immune disorders will be reviewed.

Derby East

Back Disease in the Horse: Kissing Spines Disease and Other Back Pathologies *(sponsored by Mid-Atlantic Equine Medical Center)*

Jesse Tyma, DVM, DACVS-LA

Dr. Tyma received her DVM from Cornell University in 2014. She completed an internship at Rhinebeck Equine followed by a large animal surgical residency and clinical instructorship in surgery and emergency and critical care at the University of Georgia. She joined Mid-Atlantic Equine Medical Center in 2019 as a board-certified surgeon. Dr. Tyma's clinical interests include surgical management of the acute abdomen, wound treatment, minimally invasive surgical techniques, back disease, and lameness and imaging.

Over the past 10, years imaging modalities of the axial skeleton have become more readily accessible to equine practitioners, and, with advancements in imaging technology, these optimized techniques have significantly improved the diagnostic

quality of images obtained for both the neck and back. Investigation of the axial skeleton is now routine practice for many lameness diagnosticians. Thus, abnormalities of dorsal spinous processes and, more generally, back disease, have emerged as hot topics garnering a variety of opinions and a small, but growing body of evidence-based science. This presentation will review the pathophysiology of Kissing Spines and other back diseases, the diagnostics involved in achieving an accurate diagnosis, and the medical and surgical treatment options available with discussion of prognosis and outcome expectations.

12:50 – 2:50 PM

Exhibit Area **Exhibitor Displays and Buffet Lunch *(sponsored by Boehringer Ingelheim, Mid-Atlantic Equine, Patterson Veterinary and Vita Flex)***

2:50 – 3:50 PM

Derby West **Update on Equine Infectious Diseases *(sponsored by Merck Animal Health)***

Tom Divers, DVM, DACVIM, DACVECC

(see bio above with Dr. Divers' 11:50 AM – 12:50 PM lecture)

This presentation will review recent findings on equine infectious diseases that are important in our management of those diseases. Several infectious diseases will be discussed such as equine coronavirus, EHV-1 and EHV-5, equine hepatitis viruses, Influenza, Potomac horse fever, leptospirosis, strangles, tick-borne diseases and other diseases as time permits.

Derby East **Polyacrylamide Hydrogels for Intra-Articular Therapy: How They Work and How They Fit In *(sponsored by Nucleus ProVets)***

Lauren Schnabel, DVM, PhD, DACVS, DACVSMR

Dr. Schnabel is an Associate Professor of Equine Orthopedic Surgery and an Associate Director of the Comparative Medicine Institute at NC State University. She completed her DVM at Cornell University in 2004, her internship at Rood & Riddle Equine Hospital in 2005, and her surgical residency at Cornell University in 2009. She completed her Ph.D. at Cornell in 2013. Dr. Schnabel's clinical and research work are focused on the treatment of musculoskeletal injuries and advancing equine rehabilitation protocols. In 2019, Dr. Schnabel was named an NC State University Faculty Scholar and was recently awarded the Zoetis Award for Veterinary Research Excellence.

Polyacrylamide hydrogels are gaining popularity as a new treatment modality for managing intra-articular pathology. Once considered a choice of last resort, this modality is now more commonly being used throughout the career of the equine athlete. New research and greater clinical experience have added to our knowledge base. An update with information regarding method of action, practical use and decision making will be presented.

3:55 – 4:55PM

Derby West **Equine Ophthalmology for Road Warriors: Case Studies in Equine Eyelid Blepharoplasty *(sponsored by Patterson Veterinary)***

Ann Dwyer, DVM

Dr. Dwyer received her DVM from Cornell University in 1983. She has been in general equine practice with the Genesee Valley Equine Clinic near Rochester, NY for over 35 years. During her career she has published numerous papers and book chapters on eye

disease and is a frequent speaker at national and international conferences. Dr. Dwyer was granted honorary membership in the American College of Veterinary Ophthalmology in 2011. She also has been active in organized veterinary medicine, serving as president of the AAEP in 2013.

Horses often present with acute injury or tumors of the eyelid region. Surgical treatment of eyelid tears or neoplasia is challenging as the eyelids move constantly and must function well to protect the globe and preserve vision. Case studies will be used to demonstrate practical principles of blepharoplasty in field conditions. Tips for restraint, local anesthesia, instruments and supplies as well as surgical techniques that can be performed by any practitioner will be explained. "Before" and "after" photographs will illustrate both the presenting challenge and the long-term cosmetic and functional outcome.

Derby East **Updates on Equine Asthma *(sponsored by Boehringer Ingelheim)***

Julie Settlage, DVM, MSc Vet Ed, DACVS-LA

Dr. Settlage graduated from the Virginia Maryland College of Veterinary Medicine in 2000. After her internship at Equine Medical Associates in Edmond, OK, she completed an equine surgical residency at Marion Dupont Scott Equine Medical Center in Leesburg, VA. Julie returned to her alma mater in 2009 as a Clinical Assistant Professor in Large Animal Surgery and served as the Section Chief of the Large Animal Medicine and Surgery Service. In 2020, she left academic practice to join Boehringer Ingelheim Animal Health as a Professional Services Veterinarian.

Asthma can affect up to 80% of horses causing a range of symptoms from poor performance and occasional coughing to horses that struggle to breathe at rest. Using a case-based approach, this session will discuss current research on equine asthma, including pathophysiology and treatment.

4:55 – 5:05 PM

Exhibit Area **Afternoon Break/Refreshments**

5:05 – 6:05 PM

Derby West **The New Normal: Equine Biosecurity in the Post-Pandemic World *(sponsored by Neogen)***

Joe Lyman, DVM, MS

Dr. Lyman received his DVM and MS from the University of Illinois in 2003. His graduate research in animal reproduction led him to a standardbred breeding practice in Lexington, KY before entering private ambulatory practice at Lexington Equine Surgery & Sports Medicine, focusing on reproduction and herd health. He joined Neogen Corporation in 2014 as a Professional Services Veterinarian. He currently serves as Neogen's Director of Product Development & Professional Services and for Neogen where he leads development groups in pharmaceuticals, biosecurity tools and diagnostics.

Equine practitioners faced unique challenges during the pandemic, particularly ambulatory practitioners who had to find new ways to practice while minimizing person-to-person contact. Referral centers were not off the hook either, as procedures to limit interaction between teams needed to be development. In the face of this, new methods of communication and practice were developed, some of which point to better ways to practice medicine. Biosecurity became a primary focus, and the baseline for biosecurity measures moved up. This talk examines survey and interview information

related to biosecurity and practice measures during COVID by varying types of equine practices and which of those measures will likely remain standards of practice as we move forward.

Derby East

20+ Years of Measuring Lameness in Horses *(sponsored by Equinosis)*

Kevin Keegan, DVM, MS DACVS

Dr. Keegan earned his DVM in 1983 from the Univ. of Missouri. He then joined a private equine practice for 2 years. He completed an equine surgery residency and MS degree at the Univ. of Illinois in 1988, studying biomechanics and bioengineering. He returned to the Univ. of Missouri in 1990, where he currently serves as Director of the E. Paige Laurie Endowed Program in Equine Lameness. In 2008, he founded Equinosis, a faculty-startup company. Research in kinematics and lameness led to the development of a body-mounted inertial sensor system, now called Lameness Locator. Dr. Keegan now retains a 50% clinical, 50% research appointment at the Univ. of Missouri.

Lameness is a clinical sign. The history of the development of an inertial sensor-based method of lameness detection and evaluation for equine veterinarians will be briefly presented. Analysis of data from the measurement of lameness in thousands of equine cases over the years has provided information relevant to the diagnostic workup of horses with lameness. Lameness variability, significance of change in lameness after blocking, and using inertial sensors to help predict primary source of lameness will be presented. Special considerations for using body-mounted inertial sensors on harness horses will be presented.