



January-February 2018

# Update for Veterinarians



## Equine Sports Medicine: At Your Service

When your equine patients are experiencing performance issues and are in need of an advanced level of specialty care, consider the Galbreath Equine Center's Orthopedic/Sports Medicine service as an extension of your practice.

That's the message Veterinary Medical Center (VMC) board-certified equine surgeon and sports medicine specialist **Matthew Brokken, DVM**, has for veterinarians who need access to advanced diagnostics and/or treatment plans for equine patients with lameness.

Dr. Brokken, who is also a clinical assistant professor in the Department of Veterinary Clinical Sciences at the College of Veterinary Medicine, notes the VMC offers state-of-the-art facilities, a full range of advanced diagnostic imaging tools, in-depth lameness examinations, and board-certified specialists in surgery, sports medicine, internal medicine and cardiology who can address the most minor to the most complex equine performance issues.

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Columbus, OH 43210

*Hospital for Companion Animals:*  
**614-292-3551**

*Hospital for Farm Animals and  
Galbreath Equine Center:*  
**614-292-6661**

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**614-889-8070**

**[vet.osu.edu/vmc](http://vet.osu.edu/vmc)**

## From the Director

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Happy New Year! I hope you enjoyed a wonderful holiday with family and friends.

In this issue of *Update for Veterinarians*, our Veterinary Medical Center (VMC) service highlights include companion animal orthopedic care and equine sports medicine. **Dr. Matthew Brokken**, board certified in equine surgery and sports medicine, describes

the use of advanced diagnostic imaging to uncover the source of a patient's lameness, and why lameness treatment plans are a unique collaboration between VMC specialists, referring veterinarians and the client.

In companion animal orthopedics, board-certified surgeon **Dr. Stephen Jones** discusses the use of an external fixator to successfully treat a future show dog's leg deformity. We are also pleased to note that we now offer comprehensive orthopedic care for companion animals through both of our newly renovated campus and Dublin facilities.

Finally, we are excited to announce the construction of the Clinical and Professional Skills Lab. The lab will use state-of-the-art technology and hands on training to help ensure practice-ready graduates of the Ohio State College of Veterinary Medicine.

As always, we thank you for your partnership and welcome your comments and suggestions.

Karin Zuckerman, MHS, MBA  
VMC Director

## Equine Sports Medicine *continued from page 1*

“With advanced diagnostic imaging, we can help local veterinarians and owners who are trying to determine the source of lameness and how to treat it,” he said.

He cites a recent case in which Dr. Ron Genovese, a Cleveland veterinarian, had a performance horse he was working up for lameness in a forelimb. Dr. Genovese performed nerve blocks, but the lameness could not be localized.

Dr. Genovese called Dr. Brokken and referred the horse to the VMC, where specialists performed a nuclear scintigraphy scan (bone scan).

“We found some abnormalities in the bone adjacent to the elbow,” said Dr. Brokken. “Soft tissue had pulled off the bone and it caused a lot of uptake on the bone scan where the soft tissue attached. That allowed us to clue in on the problem.” Dr. Brokken relayed the findings to Dr. Genovese to discuss the best treatment options.

The client and horse returned home, where Dr. Genovese followed up with the treatment.

“This case is an example of how we’re an extension for referring veterinarians, trying to help them fill in the pieces of the puzzle,” said Dr. Brokken. “Each case is unique,” he said. In some cases, the referring veterinarian seeks the VMC’s advanced imaging and treatment options. In other cases, referring veterinarians seek only the imaging and work with the VMC and the client to determine the best treatment plan.

“My relationship with the referring veterinarian is one of the most critical aspects,” Dr. Brokken said. “Each referral is different.”

“More than 50 percent of the equine cases at Galbreath are related to lameness,” said Dr. Brokken, who treats at least 90 percent of such cases.

For more information, contact **614-292-6661** or [equineoffice@osu.edu](mailto:equineoffice@osu.edu) or visit [vet.osu.edu/vmc/equine](http://vet.osu.edu/vmc/equine).



### Clinical Trials Office

We always have a need for participants in veterinary clinical trials. If you have a patient that might be eligible, please contact our Blue Buffalo Veterinary Clinical Trials Office at [cvm-clinicaltrials@osu.edu](mailto:cvm-clinicaltrials@osu.edu) or **614-247-8706**.



**Pet** Heroes

### Current Trials

**Cats with bladder stones:** This study will evaluate the efficacy of a new diet specially formulated to dissolve struvite stones.

**Vitamin D in dogs with kidney disease:** The purpose of this study is to determine how supplementation with vitamin D affects serum concentration and parathyroid hormone (PTH) concentrations in dogs with chronic kidney disease (CKD).

**Dogs with cancer (Solid tumors and lymphoma):** The primary objective of this study is to evaluate the activity of an investigational drug given to dogs with cancer that have not yet been treated or have failed chemotherapy.

**Dogs with dry eye:** The objective of this study is to evaluate the relative effectiveness of an investigational drug (D929) when applied topically to the eye at various dose levels under field conditions in dogs with dry eye.

To see a full list of current trials, please visit: [vet.osu.edu/vmc/clinical-trials](http://vet.osu.edu/vmc/clinical-trials).

## Fixator Device Addresses Puppy's Lameness

Board-certified orthopedic specialists in the companion animal orthopedic service at the Veterinary Medical Center (VMC) can provide your patients with an advanced level of care.

One example of this is the story of Ke'ao, a 4-month-old Great Dane puppy, bred to show, who arrived at the VMC with an abnormally angulated right hind leg that was also 3.5 centimeters shorter than the left leg.

**Dr. Stephen C. Jones**, assistant professor of Companion Animal Surgery who looked after Ke'ao, noted the case was challenging from the start.

Being a puppy, Ke'ao was growing fast and still had six months of significant growth ahead of him, almost tripling in size during the time of treatment. Although the dog was only mildly lame initially, left untreated, Ke'ao's lameness and deformity would only get worse. The client also wanted the dog to be able to show. "The challenge, then, was to straighten and also grow the leg, while making sure that we kept up with the growth of the normal left leg," said Dr. Jones. The initial diagnostics involved taking X-rays to compare the left and right tibiae, using the left tibia as a template.



A few months after initial presentation, and after consulting with Ke'ao's owners, Jim and Sandi Wikstrom, and co-owner and breeder/handler Cynthia Lutz, Dr. Jones and his team performed a surgical procedure using a circular external fixator to correct and lengthen the leg. The circular fixator is a device with pins and wires that pass through the skin, underlying tissues and into the bone. The pins are attached to three metal circular rings around the leg, with each ring attached to the other with long bars. A hinge was placed between two of these rings to allow for correction of the deformity.

"We initially corrected for angulation and rotation," said Dr. Jones, pulling the bone into straight alignment. "After correcting the angulation and rotation, we then began to lengthen the bone, in a process called distraction osteogenesis."

The procedure took about seven weeks to lengthen and solidify the bone. Ke'ao was at the VMC for the first three days post-operatively, when the fixator device was placed, and was given antibiotics and pain medication. "With the fixator in place, the bone is stable and dogs tolerate this remarkably well," said Dr. Jones.

Sandi received instructions on how to turn small nuts on the fixator device twice daily, in order to continue the angulation correction and bone elongation at home. The apparatus was set up to allow the bone to grow 1 mm per day. Ke'ao returned to the VMC four additional times for post-surgery check-ups.

By the time the fixator was removed, Ke'ao was deemed completely healed, with right and left hind legs now the same length, and with no abnormal limb angulation or rotation.



Post-fixator recovery time took two-to-four weeks with leash walking only. Just a few months later, Ke'ao entered the show ring for the first time and soon went on to beat three Champions. He later took Best of Breed at one year of age, a mere nine months post-surgery. This year Ke'ao will head to the Great Dane Nationals. "Our sincerest thanks and gratitude to the great team at the VMC for making Ke'ao's outcome the absolute best and for their dedication," said Sandi. "We are amazed at where Ke'ao is today."

To schedule orthopedic services please call our Columbus facility at **614-292-3551** or Dublin at **614-889-8070**, or visit [vet.osu.edu/vmc](http://vet.osu.edu/vmc).

### What to Know about Fixator Care

- If you see a deformity and you're willing to refer, the sooner the better
- No matter what the issue or how complex, VMC specialists can help
- Referring veterinarians can submit X-rays to the orthopedic department at VMC to review
- VMC specialists can do a pre-referral consult



## Tech Smart Clinical Skills Lab to Open August 2018

A state-of-the-art Clinical and Professional Skills lab is slated to open at The Ohio State University College of Veterinary Medicine in August 2018.

The first-ever veterinary educational lab of its kind at Ohio State, the clinical skills lab is designed to offer first- and second-year students an opportunity to start developing clinical and professional skills early in their program with interactive experiences that emphasize active learning.

“The goal is to give students hands-on clinical practice and empower students to gain mastery of their abilities at their own pace,” said **Dr. Tatiana Motta**, who is overseeing the lab’s development. Dr. Motta is assistant professor of Companion Animal Surgery in the Department of Veterinary Clinical Sciences.

“Our aim is to graduate students who are ready to practice deeper-thinking and work on all levels of complexity once they enter clinical practice,” she said.

The clinical skills lab will be housed on the second floor of the Veterinary Medical Center (VMC) and close to the VMC clinical areas. The lab will consist of two main areas: one large instructional space with simulation models and technology equipment for 80 students; and seven smaller rooms, accommodating 10-20 students, that will be used for self-directed learning with 24/7 access.

“Lab technology will support an active, collaborative and interactive “Bring Your Own Device” culture that is emerging in higher education,” said Dr. Motta, including the technology she has incorporated into her instruction: Go Pro cameras and the use of 3-D printed bone models derived from real CT scans of VMC canine patients. Other technology will include four, 360-degree live-streaming cameras and multi-touch displays. Dr. Motta is also assessing the use of an interactive wall screen technology.



## Welcome New Faculty



**Dubraska Diaz-Campos, DVM, PhD**  
Assistant Professor - Clinical Microbiology

Dr. Dubraska Diaz-Campos joins the Diagnostic and Clinical Microbiology Service at the Veterinary Medical Center. A 1997 graduate of the College of Veterinary Sciences at the University of Zulia in Maracaibo, Venezuela, Dr. Diaz-Campos received her PhD in Biomedical Sciences at Auburn University College of Veterinary Medicine in Alabama, where she trained in the clinical microbiology service. She was previously a clinical assistant professor at the College of Veterinary Medicine at Washington State University, where she directed the PhD/Microbiology residency program. Dr. Diaz-Campos was also the head of the Bacteriology/Parasitology Sections at the Washington Animal Disease Diagnostic Laboratory (WADDL). Her research interests include infectious diseases and related diagnostics, with emphasis on the development of antimicrobial resistance and antimicrobial susceptibility testing.

Find us on 

The Ohio State University College of Veterinary Medicine  
The Ohio State University Veterinary Medical Center  
The Ohio State University Veterinary Medical Center at Dublin