Happy New Year!
I hope your holidays were joyous and restful.

As we begin another year of successful partnership and collaboration, we thought it fitting to reflect upon developments over the past year that have helped the Veterinary Medical Center continue to meet your needs through our clinical, operational and administrative work.

Clinical Growth Areas

The VMC added a comprehensive Companion Animal Sports Medicine and Rehabilitation service — with multi-modal capabilities — that has enjoyed tremendous growth since launching the service. In addition, our integrated orthopedic service is operational in both our Dublin and campus facilities.

Other areas of growth resulting from our partnership include our teleradiology, mobile ultrasound and equine sports medicine services. Lastly, our Blue Buffalo Veterinary Clinical Trials continue to expand, again thanks to your support, including extensive studies related to feline and canine chronic kidney disease.

VMC Operations & Administrative Enhancements

Operationally, we continue to focus heavily on our practitioner outreach. Among our highest priorities are listening to your ideas and concerns, providing information about our extensive services and offering free, continuing education programs to help meet your practice and professional needs.

Dr. Doug Graham, VMC Practitioner Liaison, has visited more than 360 practices within Ohio and West Virginia through 2018 and has coordinated 15 CE programs, which will continue to expand in the coming year. Additionally, the implementation of our 2018 stakeholder (client and referring veterinarian) surveys have assisted Doug’s efforts in responding to your feedback and ensuring we remain connected with you.

Our administrative efforts in 2018 included welcoming faculty in strategic areas: Dr. Arielle Markley, a certified canine rehabilitation specialist; Dr. Dubraska Diaz-Campos, assistant professor of Clinical Microbiology; Dr. Georgina M. Newbold, assistant professor of Ophthalmology; Dr. Laura Selmic, in the Surgical Oncology Service; and Dr. Selena Tinga, assistant professor of Small Animal Orthopedic Surgery.

We are also in the process of converting to a new Hospital Information System, which entails moving away from VetStar and toward a paperless workflow to improve operating efficiency, and the development of a referring veterinarian portal.

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Facility Updates

Finally, in addition to our new companion animal sports medicine and rehabilitation space, we are renovating and expanding our integrated oncology space, scheduled for completion in February of 2019. The Hospital for Farm Animals and the Galbreath Equine Center also received new flooring throughout the barn and ward areas.

The college expanded teaching capabilities for second- and third-year students with the addition of a state-of-the-art Veterinary Clinical and Professional Skills Center adjacent to the Veterinary Medical Center.

Looking ahead to 2019, stay tuned to Update for announcements regarding the expansion of our companion animal emergency space and the spring launch of the ophthalmology service at our Dublin location.

Faculty Spotlight: Dr. Stephen Jones

For Dr. Stephen Jones, assistant professor and board-certified small animal orthopedic surgeon, the interest in surgery stems from his experience with Greyhound racing in his native Ireland and a desire to help these animals recover from racing related musculoskeletal injuries.

“I grew up with dogs and was also inspired by my Uncle Brian, a veterinarian who has dedicated his career to treating racing related injuries in greyhounds. I found it amazing to see dogs that ordinarily would have a career-ending injury, return to racing after surgical intervention,” he says.

One of five surgeons in the Small Animal Orthopedic Surgery service at the VMC, Dr. Jones received his veterinary degree at University College in Dublin in 2009. He completed a combined masters and residency in small animal surgery at the University of Florida in 2015 before joining the VMC.

“We see a large and varied caseload here at the VMC. The majority of orthopedic cases we see are non-emergent,” he says. “The most common cause of lameness in the dog is rupture of the cranial cruciate ligament, with surgical stabilization being the most common surgical procedure that we perform.” Other elective surgery cases include dogs with hip and elbow dysplasia and corrective surgery for dogs with angular limb deformities and other developmental diseases.

Dr. Jones also sees a significant trauma caseload. State-of-the-art facilities, including newly built operating suites, intra-operative fluoroscopy, a high-spec CT scanner and MRI all help the team with these challenging cases.

Of particular interest to referring veterinarians, says Dr. Jones, is platelet-rich plasma (PRP) therapy, an emerging treatment available at the VMC to manage patients with osteoarthritis, which affects most dogs and cats as they age. PRP involves drawing blood from the patient, then using the PRP unit to spin the blood to separate out the fluid component containing a high concentration of platelets.

“These platelets contain strong anti-inflammatory properties that can be injected into dogs with arthritis or tendon/ligament problems,” says Dr. Jones. “Platelet-rich therapy is widely used in the human and equine medicine fields, and we are starting to appreciate the benefits of this therapy in dogs, too.” The service has a high-end PRP unit at both the main-campus and Dublin locations, where Dr. Jones divides his time. The same small animal orthopedic surgery services are offered at both places. “We’re one team.”
In August 2018, Jaxx, a 4-year-old mule, presented to the Galbreath Equine Center with all the classic signs of tetanus: stiff, stilted gait, elevated tail, third eyelid prolapse, muscle weakness and pinned back ears.

A few months earlier, Jaxx was treated by his veterinarian for a puncture wound on his right hind leg, which had appeared to heal. However, one late night in August, owner Christi Ware and her husband noticed Jaxx’s sudden stiff gait and slightly prolapsed third eyelid.

“Our veterinarian was out of town, so we called Dr. Bryan McNabb (CVM ’03),” she says. “He came out and examined Jaxx. He recognized we had a serious problem and acted immediately.”

Dr. McNabb, of the Lebanon (Ohio) Equine Clinic, also noticed other indicators of possible tetanus: swelling in the hind leg wound area and splayed legs while eating. He gave Jaxx a booster for West Nile Virus and tetanus, a dose of dimethyl sulfoxide to control the inflammation, a pain medication, and referred the patient to the VMC.

While tetanus infection is preventable in horses, the symptoms are often not noticeable until they advance in severity, and diagnosis is not easy in a live horse, says Dr. Laura K. Dunbar, clinical assistant professor of Equine Internal Medicine at Galbreath.

“Sometimes you can try to culture it from a wound, which is difficult to do,” she says. “But the bacteria is also present in the environment, so the diagnosis is based on clinical signs and ruling out other things.”

Because of the granulated wound and classic clinical signs of tetanus, the Galbreath equine medicine team performed a spinal tap and conducted various tests. They then sedated Jaxx and called on the surgical team to open and explore the wound. The team didn’t find anything at that time, and continued him on antibiotics, tetanus antitoxin, muscle relaxants and analgesics.

The team used a standing sling to support Jaxx during his recovery. Dr. Ramiro Toribio, professor of Equine Internal Medicine, and his team removed the sling for short periods of time until Jaxx was able to stand on his own.

However, within two weeks, the mule developed a fever. The surgery team, led by Dr. Margaret Mudge, professor and Equine Service Head, explored the wound again. They found and removed a 4-by-1-centimeter piece of wood, which was likely the cause of the tetanus, says Dr. Dunbar. The wood piece was one of several removed that had been lodged between the muscle wall and the skin, and was responsible for the initial wound.

“When the wound closed, it created the perfect environment for the elaboration of these tetanus-causing toxins.”

Jaxx remained in the hospital for 20 days, during which he received all the core vaccinations, including tetanus toxoid. He returned home a healthy mule.

Equine patients are particularly susceptible to tetanus, so any wound management should include a tetanus booster, says Dr. Dunbar. Recommendations for vaccination of adult horses include an initial vaccination followed by a booster in four to six weeks, then annual shots. Jaxx was adopted, so his vaccination history was unknown, and this likely increased his susceptibility to the disease. Bottom line, she says: The earlier the diagnosis, the better the prognosis.

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<th>Tetanus: What to Look For</th>
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<td>• Third eyelid prolapse, a third eyelid protrusion</td>
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<td>• Pinned ears and elevated tail</td>
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<td>• Sardonic grin</td>
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<td>• Stiff gait</td>
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<th>What to Do</th>
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<tr>
<td>• Treat early with a tetanus antitoxin</td>
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<td>• Give a tetanus toxoid booster</td>
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<th>How to Prevent</th>
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<td>• Schedule regular vaccinations from birth</td>
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To reach equine internal medicine, call 614-292-6661.

For more information, please visit vet.osu.edu/vmc/equine
Welcome New Faculty

Shannon Reed, DVM, MS, DACVS-LA
Associate Professor – Equine Surgery
Dr. Reed joins the VMC Equine Surgery Service. She is a 2003 graduate of the University of Missouri College of Veterinary Medicine and went on to complete both her residency in large animal surgery and clinical fellowship in large animal surgery and medicine at Oregon State. An equine surgeon, she was most recently associate teaching professor at the University of Missouri. Her clinical interests focus on soft tissue surgery.

Randolph Winter, DVM, DACVIM
Assistant Professor – Cardiology
Dr. Winter joins the VMC Cardiology and Interventional Medicine Service. He is a 2010 graduate of the Texas A&M University College of Veterinary Medicine and completed his small animal rotating internship at Colorado State. He completed his residency in cardiology at Texas A&M in 2014. The same year he received the American College of Veterinary Internal Medicine Resident Research Award. Previously assistant professor of cardiology at Auburn University, Dr. Winter is a PhD candidate in Biomedical Sciences. His research focus is on equine endothelial progenitor cells.

Jenessa Winston, DVM, DACVIM
Assistant Professor – Small Animal Internal Medicine
Dr. Winston, a 2011 graduate of the North Carolina State College of Veterinary Medicine, joins the VMC Small Animal Internal Medicine Service. She completed her residency in small animal internal medicine in 2015 through the Clinical Investigator Program at NC State, where as a NIH T32 fellow, she is working towards her PhD in Comparative Biomedical Sciences. Her research interests include bile acid metabolism and gut microbial and host interactions applicable to inflammatory bowel disease, enteric pathogens and other systemic diseases.

Blue Buffalo Veterinary Clinical Trials Office Seeks Participants
We have multiple clinical trials for several conditions, such as urinary disease, cancer, heart disease and more.

Please visit: vet.osu.edu/vmc/clinical-trials for a full list of current trials, or contact our Blue Buffalo Veterinary Clinical Trials Office at: cvm-clinicaltrials@osu.edu or 614-247-8706.

Upcoming CE Events
College of Veterinary Medicine Continuing Education

Columbus - March
Greater Charleston, WV - March
Dayton - April
Cleveland/Akron - April/May
For more details, please visit: vet.osu.edu/alumni/continuing-education