Focus on Clinical Trials

Clinical Trials Office partners with Comprehensive Cancer Center, Nationwide Children’s Hospital

The Clinical Trials Office (CTO) in The Ohio State University Veterinary Medical Center continues to be the largest and most comprehensive center in the country for clinical trials involving client owned animals. The CTO has recently joined Ohio State’s Comprehensive Cancer Center as a developing resource in an effort to improve translational oncology outcomes across species.

The Comprehensive Cancer Center provided funding for renovation of the CTO work space at the college, which now occupies over 1,000 square feet. They also supported renovation and expansion of the tissue bank, which collects and stores samples necessary for researchers at Ohio State to study the biology and genetics of disease in animals.

The CTO has also partnered with Nationwide Children’s Hospital to study osteosarcoma in both dogs and children with the hope of finding better treatments for this devastating disease. The collaboration resulted in the successful application for a $10 million program project grant aimed at improving outcomes in childhood sarcoma.

From the Director

One of the advantages of a teaching and research hospital is that we can offer the option of clinical trials as a treatment for your patients. Clinical trials represent the leading edge of medicine, and at the time of this writing, we have 15 trials that are currently recruiting participants, including several that are mentioned in the stories here. We encourage your clients to take part in our clinical trials when appropriate. You can find a list of all the trials at our Clinical Trials Office website, vet.osu.edu/vmc/clinical-trials.

In this issue, we also pay tribute to Emeritus Professor Dr. Phil Murdick, who passed away in August. Dr. Murdick, former chair of Veterinary Clinical Sciences and an associate dean, was a great leader and innovator at the college and veterinary hospital. He will be missed.

I hope you have enjoyed the beautiful weather this fall and are looking forward to the holidays! As always, thank you for trusting us with your referrals, and please contact me with any issues or concerns.
Focus on Clinical Trials

Cardiology study investigates new measurement tool

In the past, the Cardiology and Interventional Medicine Service at the Veterinary Medical Center has studied drug therapy for heart diseases and heart failure. A recent study, conducted with the Wexner Medical Center Department of Radiology, used MRI to evaluate the hearts of dogs with pulmonary valve stenosis and stiff hearts. Pulmonary valve stenosis is a congenital heart defect seen often in puppies.

"Previously, the only way to measure the stiffness of heart muscle was by invasive catheterization," said Dr. Brian Scansen, assistant professor in Veterinary Clinical Sciences. "We validated a new method to measure this stiffness by MRI in order to evaluate the severity of the puppy’s heart condition."

Specifically, the researchers hope to assess whether damage caused by the malformed valve is permanent or reversible, and to determine the risk for advanced problems in these dogs. Such information may help to improve the understanding and implications of heart muscle stiffness not just in dogs, but also in humans with similar diseases.

In addition to the MRI study, Dr. Scansen is now enrolling English bulldogs and boxer dogs with pulmonary valve stenosis into a new study investigating the ability of a high resolution CT scanner to diagnose abnormal coronary arteries. In these breeds, abnormal coronary arteries are often found in association with pulmonary valve stenosis, and the presence of these abnormal coronary arteries complicates treatment of the stenosis. More information on this study can be obtained from Dr. Scansen at Brian.Scansen@cvm.osu.edu.

Veterinary Medical Center at Dublin now offering outpatient imaging services

The Ohio State University Veterinary Medical Center at Dublin is now offering specialized imaging services for our referring veterinarians and their clients on an outpatient basis.

New imaging services now available through our radiology service include ultrasound and Computed Tomography. In addition, the Internal Medicine service offers outpatient endoscopy.

Referring veterinarians will receive a phone call, as well as a written report, with the results on the same day as the procedure. Please call (614) 889-8070 for more information and to set up appointments.
Focus on Clinical Trials

Establishing new pain control standards for farm animals

Dr. Amanda Hartnack, resident in the Department of Veterinary Clinical Sciences, is working toward a specialization in farm animal surgery. As part of her research for her master’s thesis, she is hoping to develop new pain protocols for surgery in farm animals. Her first step was to conduct a study on the effectiveness and appropriate dosage of the combination of morphine, lidocaine and ketamine - or MLK. Although this drug combination has been used in both horses and farm animals for pain management, there has been little documentation of the absorption rates of the drugs, or of their efficacy when used in this fashion.

In Dr. Hartnack’s study, calves that needed hernia surgery were given one of two pain protocols, and a pain scoring system was used to compare the effectiveness of each. Because this type of surgery is relatively non-painful, preliminary results of the study showed a very small difference in the score. The next step will be to complete the data analysis and conduct another clinical trial. The researchers have received a grant from the American Association of Bovine Practitioners (AABP) to continue this work.

Anti-inflammatory drug may prevent bone loss in bucked shins

Dr. Alicia Bertone, professor in the department of Veterinary Clinical Sciences and surgeon in the Galbreath Equine Center, is excited about her newest study. She is helping test a new drug, VEL-0230, an anti-inflammatory that targets a specific enzyme – cathepsin K – which degrades bone.

“In people, the problem is called shin splints,” she said. In horses, the affliction is known as bucked shins, characterized by heat, swelling and pain on the front of the cannon bone. This is a problem that can induce long-term layup issues in sport horses, including lameness.

“The problem with inflammatory bone diseases is that the bone resorption occurs before the bone can begin to heal, which actually weakens the bone,” she explained. VEL-0230 can reduce this bone weakening as well as reduce the pain of bone inflammation.

VEL-0230 may offer other advantages as well. Since it targets only one enzyme and specifically in bone, there have been no side effects. A new clinical trial is about to start in the VMC. Pharmacological studies have already been conducted to determine appropriate dosage and requirements for participation. Plenty of eligible sport horses have interested owners already willing to participate. “No other drug in veterinary medicine that reduces bone resorption is currently available,” said Dr. Bertone. “This may eventually be used in humans.”
In Memoriam

Dr. Philip (Phil) W. Murdick, emeritus professor in the Department of Veterinary Clinical Sciences, died on August 24th at the age of 84. Dr. Murdick received his undergraduate degree, DVM, MS and PhD all from The Ohio State University. He joined the faculty in 1956, becoming a professor in 1969. An early specialist in veterinary reproduction and obstetrics, he focused his research on the endocrine physiology of reproduction in livestock, especially horses.

Dr. Murdick was a founding faculty member of the Department of Veterinary Clinical Sciences (VCS), and starting in 1972, served as the department’s second chair for nine years. He served as the associate dean for Curriculum and Education from 1981 until his retirement in 1988.

He was also a major contributing member of the faculty leadership group that designed and built the Ohio State Veterinary Teaching Hospital in the early 1970s. A pioneer of the comprehensive teaching hospital concept, Dr. Murdick recruited the first residency-trained board certified specialists to help develop a premier clinical education program.

Dr. Murdick was also a key leader in early 1970s curricular reform in the college that led to an innovative team-taught systems-based pre-clinical veterinary core curriculum. This remains an essential component of the college’s curricula today.

As department chair, Dr. Murdick established a highly regarded residency training program with the acceptance of the first trainees into newly created residency programs in surgery, internal medicine, ophthalmology, radiology and anesthesiology. His actions helped to lay the foundation for veterinary specialization in the college and beyond.

We salute Dr. Murdick for being a pioneer in veterinary clinical sciences and academia, for helping to establish a solid foundation for the VMC and for his enduring contributions to the veterinary profession.

Departures

Dr. Matt Annear (Ophthalmology) left the VMC at the end of September to pursue other career opportunities.

Dr. Carlos Pinto (Theriogenology) resigned from his position in October. He has accepted a tenured faculty position at the Louisiana State University School of Veterinary Medicine, where he completed his residency and doctoral programs.

Dr. Barrak Pressler (Small Animal Internal Medicine) left the VMC at the end of September to pursue other career opportunities.