New Hospital to open March 25

The UGA Veterinary Teaching Hospital will open at its new location on College Station Road March 25, 2015.

This state-of-the-art facility will allow the Hospital to better meet its current patient care demands and the educational needs of the College while ensuring a bright future for both the CVM and the veterinary profession.

The entire site will be referred to as the Veterinary Medical Center and will include a new teaching hospital for small and large animals, a covered equine performance arena, a building dedicated to Field Services, Production Medicine and Theriogenology, and an education building for teaching students and for continuing education courses.

The Hospital will move to the new site along with all clinical faculty, hospital staff, clinical pathology and third- and fourth-year students.

The Community Practice Clinic will remain in its current location on the main CVM campus and the vacated hospital building will be repurposed for much-needed research and instructional space.

Learn more about our new facility at: www.vet.uga.edu/hospital

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Surgeons use feline adult stem cells in kidney

Clinicians at the UGA Veterinary Teaching Hospital successfully performed a kidney transplant in a domestic cat using stem cells harvested from the patient to optimize the cat’s acceptance of the new kidney.

The surgery, performed in May 2014, was the second successful feline kidney transplant using feline adult stem cells performed at the Hospital.

“To the best of our knowledge, UGA is the only veterinary facility in the world to use adult stem cells in feline kidney transplantation,” said Chad Schmiedt, DVM, DACVS, a board-certified small animal surgeon who heads UGA’s feline kidney transplant program.

The transplant patient is a four-year-old flame point Siamese male named Arthur, whose owners brought him from Virginia to undergo the procedure at UGA. Arthur was diagnosed with chronic renal failure about a year and a half ago. Two other veterinary teaching hospitals had previously declined to perform Arthur’s surgery due to possible complications, including concerns that tests showed Arthur’s body did not absorb as much cyclosporine as desired.

Cyclosporine suppresses the immune system so that the donated organ is less likely to be rejected. In his initial meeting with Arthur’s owners, Schmiedt suggested using feline adult stem cells, otherwise known as mesenchymal stem cells or MSCs, as part of Arthur’s immunosuppressive protocol. Now, nearly a year after his surgery, Arthur is doing great.

“We used feline adult stem cells in one other transplant that we did in 2013,” said Schmiedt, who noted a growing body of studies detailing the successful use of adult stem cells in human renal transplants. “A study published in 2012 found the use of MSCs during renal transplant surgery in humans lowered the risk of acute organ rejection, decreased the risk of infection, and the
Surgeons use feline adult stem cells in kidney transplant patients had better estimated renal function one year after surgery.”

John Peroni, DVM, MS, DACVS, a board-certified large animal surgeon and associate professor whose research focus includes stem cell therapeutics, said he sees promise in using mesenchymal stem cells in the transplant setting.

“MSCs in veterinary species have been primarily used to treat musculoskeletal injury—problems with bones, tendons and joints—and those are our most frequent uses here at the UGA College of Veterinary Medicine,” said Peroni, who is also past chairman of the North American Veterinary Regenerative Medicine Association’s board. “But there is good evidence to support using stem cells to modulate the immune system and regulate inflammation. So, the transplant setting might be another optimal use for these types of stem cells.”

Arthur’s new kidney was donated by a cat named Joey, who had been part of a research program in the College of Veterinary Medicine. The feline transplant program at the UGA Veterinary Teaching Hospital requires that the donor cat be adopted by the recipient cat’s family—so Joey and Arthur are now playmates.

“Cat owners who seek kidney transplants for their sick cats have to be very dedicated,” Schmiedt said. “They will give their cat medication twice a day for the rest of its life. They also must be willing to take their cats to the veterinarian for frequent medical checkups... a significant amount of time and expense is involved in keeping the recipient and donor cats healthy. But cat lovers who will go to this extent typically are willing to extend this kind of care to all cats they own.”

Companion animal owners interested in the use of stem cell therapies should ask their veterinarian to consult with the Regenerative Medicine Service about the potential benefits. For more information on the UGA feline transplant program—one of three active transplant programs based at a teaching institution in the U.S.—see: www.vet.uga.edu/hospital/services/surgery_sa/

Managing osteoarthritis through cellular therapy

Osteoarthritis, or OA, is common in dogs of all ages, sizes and breeds. While there is no cure for it, there are several treatment options to help manage the pain and inflammation. The UGA Veterinary Teaching Hospital offers several advanced treatment options such as platelet rich plasma therapy, stromal vascular fraction therapy and stromal cell therapy (often referred to as stem cell therapies). While the use of these types of therapies for the treatment of OA is still a relatively new concept, they are gaining in popularity and are producing some positive results.

If traditional treatment options for OA are not alleviating your pet’s discomfort, please have your veterinarian contact orthopedics specialist Sam Franklin, DVM, MS, PhD, DACVS, DACVSMR, at 800.861.7456 to learn more about the Hospital’s cellular treatment options.
Picture Your Pet Photo Contest Winners

Our 2014 competition exceeded expectations with nearly 350 entries submitted by more than 125 clients. Printed and framed photographs of the winning entries will be displayed in the new Veterinary Medical Center. To learn more about the 23 winning photos pictured here, visit: www.vet.uga.edu/photo-contest
Treating atrial fibrillation in horses

The Hospital is now one of only a handful of places across the nation to offer an alternative treatment option for equine patients suffering from atrial fibrillation, a relatively common type of heart arrhythmia in horses.

The procedure, called transvenous electrical cardioversion, is more effective than the drugs that have been traditionally used to treat this condition, has fewer side effects and produces immediate results.

Spearheading this initiative for the Hospital is Amanda Coleman, DVM, DACVIM (Cardiology) and Steeve Giguère, DVM, PhD, DACVIM (Large Animal), who helped bring the technology to the U.S. in 2005.

It works by placing two specialized catheters through a large vein in the horse’s neck. The catheters are strategically positioned in the heart with the help of an ultrasound machine. An electrical impulse is then delivered through them to the heart, converting the abnormal rhythm to a normal one.

“The electrical pulse basically forces the heart to reset,” said Giguère. “An electrocardiogram is done immediately after the procedure to confirm that it was successful.”

The horse is typically kept in the hospital overnight for observation, and after one to two weeks of rest it can go back to its normal activity level. While the treatment does require placing the horse under anesthesia, the procedure itself is relatively quick and is considered low risk.

In the past, the only treatment option for atrial fibrillation was to give the horse a medication — which was not always successful, especially if the condition was long standing. The condition also had a recurrence rate of about 25 percent.

While this procedure has the same recurrence rate, it has a higher success rate, especially in patients that may have had this condition for a while, and it has fewer side effects. If the condition recurs, the procedure can be repeated.

Common symptoms of horses that may be suffering from atrial fibrillation include exercise intolerance, poor performance and/or bleeding from the nose during a workout. It is easy to test for an irregular heart rhythm, which can be detected through an electrocardiogram or a physical exam.

If you believe your horse has atrial fibrillation and would like to see if it would be a good candidate for this procedure, you or your veterinarian may contact the UGA Veterinary Teaching Hospital at 800.861.7458.
New equipment puts VTH at the forefront of animal care

The new UGA Veterinary Teaching Hospital will not only look impressive, but it will also feature top-of-the-line equipment that is on the leading edge of what is currently being used in veterinary medicine.

These improvements can be found throughout the facility and range from LED surgery lights to food animal hydraulic chute systems. Some of the more significant technological advances in the new hospital include the following:

**Linear Accelerator**
This brand new piece of equipment, known as the “linac,” will put UGA at the forefront of veterinary radiation therapy both nationally and from a global perspective.

A more advanced model than what we have in our current hospital, its incredible precision allows for a higher dosage of radiation to be delivered to the tumor while sparing more of the surrounding normal tissue from damage than ever before. Not only does this result in fewer side effects each time the animal undergoes radiation therapy, but it also reduces the number of therapy sessions needed to treat the tumors that cannot be removed by surgery.

For example, the new linac may allow us to treat a small, well-defined brain tumor or a pituitary tumor with just one round of radiation therapy instead of 18 rounds. The speed of radiation delivery will also be about three times faster, shortening the length of the treatment sessions.

The new linac’s advanced precision will also allow us to treat more types of tumors. This may potentially include lung tumors and liver tumors. Also, osteosarcomas and urogenital tumors, such as bladder/prostate tumors, can be treated with improved effectiveness. Additionally, the room that houses the linac was strategically designed so that it would be large enough to allow equine patients access to this new technology as well.

**64-Slice CT Scanner with Special Large Animal Table**
This machine provides outstanding image sharpness and clarity combined with amazing speed. Rapid image acquisition provides for more precise vascular and lung studies. Shorter scan times will also allow some of our small animal patients to be sedated rather than put under general anesthesia, depending on the procedure.

This new machine will allow us to preform a wider variety of diagnostic procedures and can also be used on large animals, such as horses. It provides instantaneous access to 3-D data by multiple users simultaneously, which means our clinicians and students will be able to review the diagnostic images jointly. The significant improvements of this machine will enhance the patient experience, accuracy of diagnostics, and the learning environment.

**3T Open Bore MRI**
The MRI machine that will be used in the new facility is considered top-of-the-line by veterinary and human medical standards. It is more advanced than the current model being used at the Hospital and features exceptional quality and speed as well as state-of-the-art exam software that can sense motion and decrease artifacts in the final diagnostic images it produces.

Its open design can accommodate a wide variety of patient shapes and sizes, allowing both our large and small animal services to use it. It also allows for images to be taken of the entire body without having to reposition the patient. The machine is quieter, and has improved clarity and resolution for optimal cardiac, joint, brain and abdominal imaging. Additionally, its speed has the potential to reduce exam times by up to 20 percent, which also reduces anesthesia times and overall stress on the animal.
New Faculty
Five specialists have been added to our faculty in recent months.

Lisa Bazzle, DVM, joins the Hospital as a clinical instructor of emergency and critical care for small animals. She completed her residency in this area at North Carolina State University.

Andrew Bugbee, DVM, DACVIM, is a clinical assistant professor of small animal internal medicine. He is board-certified by the American College of Veterinary Internal Medicine. Dr. Bugbee completed his residency at UGA and returns to Athens after having gained additional experience at Purdue University.

Kathryn A. Diehl, DVM, MS, DACVO, joins us as an assistant professor of ophthalmology. Dr. Diehl completed a combined residency in comparative ophthalmology and fellowship in cellular biology at the University of Wisconsin. She is board-certified by the American College of Veterinary Ophthalmologists.

Maria Ferrer, DVM, MS, DACT, comes to the Hospital as an associate professor of theriogenology. Dr. Ferrer did her residency at Louisiana State University. She is board-certified by the American College of Theriogenologists. With the addition of Dr. Ferrer, the Hospital is now expanding its theriogenology services to focus on both large and small animals.

Alison G. Meindl, DVM, joins the Community Practice Clinic as a clinical assistant professor. She comes to UGA with nearly ten years of private practice experience, most recently at the Animal Clinic del Rancho in Scottsdale, Ariz.

Clinical Trial Opportunities
The Hospital is currently offering several clinical trials. Below is a brief summary of some of our newer studies. To learn more on these and other clinical trials being offered at UGA, visit: www.vet.uga.edu/research/clinical/current

Dogs with elbow dysplasia
Study to evaluate the utility of MRI for characterizing articular cartilage pathology in dogs with elbow dysplasia.

Dogs and cats with localized measurable external tumors
Study to determine the safety and potential efficacy of the AuroLase® system for the treatment of local tumors in dogs and cats.

Dogs with arthritis of the elbow or knee
Study to evaluate the efficacy of tramadol on pain and dysfunction.

Dogs with arthritis
Study evaluating the effect of meloxicam, an NSAID, on a possible biomarker for joint pain in dogs with osteoarthritis.

Dogs with persistent renal proteinuria
Study to evaluate the efficacy of telmisartan for the treatment of proteinuria, as compared to the current standard, enalapril.

Horses with bladder stones
Study investigating a new technique for the removal of cystic calculi (bladder stones) in standing, sedated horses.

Every Gift Makes a Difference
The Hospital plays an important role in animal health in our state and nation, and helps train the next generation of veterinarians.

By making a gift to our Hospital Building Fund, you are ensuring a bright future for our students, clients, patients and the veterinary profession.

Please support us in our mission and contact the College's Development Office at 706.542.1807 or give2vet@uga.edu to learn more.
You're Invited ...

Hospital Dedication Ceremony

February 13 at 2 p.m.

2200 College Station Road, Athens, Ga.

Please make plans to join us for the dedication of our new Veterinary Medical Center. There will be a ribbon cutting ceremony followed by a brief reception and tours of the new Teaching Hospital for all attendees. We would love for you to come and celebrate this important milestone with us! Please note that this is the dedication of the new facility only. The Hospital will not actually open until late March. Learn more at: www.vet.uga.edu