

Veterinary **VISION**

A Publication of the University of Tennessee College of Veterinary Medicine • Volume 9/Number 1

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**Animal Hoarding:
Beyond the Surface**

**Announcing the PetSafe Chair in
Small Animal Clinical Behavior
Research**

**Cancer Imaging: Diagnostic
and Treatment Options for
Animals and People**

Cocoa Starves Cancer

THE UNIVERSITY of
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With this issue, I am pleased to announce that our veterinary teaching hospital, opened in 1978, has expanded, matured and is now officially recognized as the **UT Veterinary Medical Center**. We are the only academic veterinary medical center within Tennessee, and we are proud to provide the animals and people of Tennessee and beyond with the clinical knowledge, skills and expertise uniquely found within an academic veterinary medical center.

The medical center operates four fully staffed and equipped veterinary hospitals—equine, farm animal, small animal and exotic animal—and provides contemporary health care 24/7/365. Our passions include delivering exceptional veterinary medical and biomedical education to students and veterinarians, discovering new knowledge to advance the medical and surgical care of both animals and people, and ensuring the safety of our nation's public health. We have become much more than a teaching hospital: we are a major medical center.

UT's Veterinary Medical Center provides you and your animals with many advantages:

- A **team of experts**—supported by the knowledge and skills of other basic and clinical scientists and professional staff—provides care using **state-of-the-art equipment** to determine the cause of and effectively treat serious underlying medical conditions.
- Every patient receives professional **24-hour monitoring** and care.
- The **wide breadth** of services available at the medical center allows for **care of the whole patient**, including nutritional assessment and management, physical rehabilitation, integrative medical management and behavioral evaluation.
- **Compassion and commitment** to people is as important within our veterinary medical center as is our expertise in patient health care.

Although the teaching hospital has grown into a medical center, **teaching is and will remain mission No. 1.**

I'm very pleased to announce that the groundbreaking for our expanded and renovated Large Animal Hospital, a \$20.9 million capital project, is projected for spring 2011. Completion is anticipated by December 2012. **I send my sincere thanks to all of you who contributed to the \$1 million Large Animal Hospital Challenge Match—we achieved the \$1 million challenge goal!**



This issue of Veterinary Vision focuses on the health care issues surrounding hoarding in its several guises. Seemingly daily, the news media informs us of yet another instance of animal hoarding, resulting in the rescue of sick, malnourished animals that, if they can survive medical intervention, frequently move into our community animal shelters, from which we all hope they will be adopted into caring, permanent homes. However, as we all know, many of these animals will be euthanized because our shelters and other companion animal fostering environments simply cannot provide ongoing, long-term care and shelter for all of the animals that arrive at their premises.

Hoarding is a national problem. Here in our College of Veterinary Medicine, we are working on solutions through our developing shelter medicine and small animal behavior research and medical service programs, and through focused efforts to improve animal welfare legislation led by our Companion Animal Initiative of Tennessee (CAIT) outreach program. We invite our alumni, referring veterinarians, clients and friends to work with us in various volunteer roles to help develop solutions.

A special article in this issue focuses on UT's research investigations in cancer imaging led by our director of medical oncology, Dr. Amy LeBlanc. LeBlanc, who holds a joint appointment in the UT Graduate School of Medicine's Department of Radiology, serves as the director of translational research in the Molecular Imaging and Translational Research Program (MITRP). LeBlanc's role is to bring together top UT Medical and Veterinary Medical Center physicians, veterinarians, and scientists to evaluate naturally occurring disease in animals; to investigate, define, and understand the underlying disease mechanisms at the molecular level; and to then translate that basic science "bench-top" knowledge into cutting-edge "bedside" medical diagnostic or treatment options for both animals and people.

All of us at the UT College of Veterinary Medicine and the Veterinary Medical Center send you our sincere thanks for all you do to help build our future with your time, talents and treasure. While we still have much to do together, let me assure you we are making strong progress, and we will get it done to achieve a bright future for animals, people and our environment. 🐾

James P. Thompson

James P. Thompson, DVM, Ph.D.
Dean and Professor

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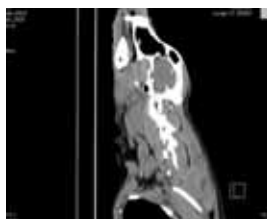
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Animal Hoarding: Beyond the Surface

TENNESSEE TOE HOUNDS *Everyone involved in the confiscation of 76 dogs from a South Knoxville home in April 2010 had to check their hearts, their emotions and their senses at the door. Inside, animal waste was 6 inches to a foot deep throughout the residence. Three dogs were found dead on the premises and 29 had to be euthanized. Local Young Williams Animal Center (YWAC) set up a triage to treat the rescued dogs. According to YWAC veterinarian Dr. Rebekah DeBolt, all the dogs were emaciated, malnourished, suffered skin issues, some were hairless, two had heartworms, and several were pregnant. The dogs were dubbed "Tennessee Toe Hounds" because of the extra toe many had on their hind legs, a product of inbreeding. YWAC Executive Director Tim Adams said some of the dogs were born in the house and had never seen daylight. An elderly brother and sister who lived there were arrested and charged with dozens of felony counts of animal cruelty. The story sparked fierce reactions throughout the community.*



Simple to describe: animal hoarding is a situation where people take in animals and lose the capacity to realize they are unable to provide adequate care for them ... but animal hoarding is anything but simple to understand. Dr. Elizabeth Strand, licensed clinical social worker and founding director of UTCVM's Veterinary Social Work program, says both animal and human suffering exist in cases of animal hoarding and to make progress, both victims' needs must be addressed. It's not just an animal issue nor just a human issue. Effective intervention requires a tag team of human and animal professionals working together including public health, mental health, medical doctors, veterinarians, housing, animal control, animal welfare organizations and the judicial system.

Dr. Strand sat down with VV to take us beyond the surface of animal hoarding.

VV: Who is the typical animal hoarder?

Strand: While animal hoarding exists across all socioeconomic levels and sexes, research describes the typical hoarder as a single female above age 60 in a lower socioeconomic class.

They don't set out to be hoarders; that usually evolves later in life and oftentimes, a crisis such as loss of a job or loved one, a divorce, a medical condition or a violent event such as a robbery can trigger hoarding behavior.

VV: Why hoard animals?

Strand: The animals are living things that can show them love. Perhaps there was something missing in their childhood or they lost a meaningful relationship and the animals replace it. Many hoarders view themselves as a savior not doing anything harmful or wrong but doing society a favor by rescuing animals. They see themselves as doing something really, really loving and believe the animals are better off with them than they would be in a shelter or adopted by someone else.

VV: How is hoarding animals different from hoarding objects?

Strand: Animals are alive. A person can completely own and manipulate objects but not animals. Animals cuddle, love, fight, move on their own.

VV: Do hoarders recognize their abnormal behavior and if not, why go to such lengths to keep it hidden?

Strand: What they consider "not normal" is other people complaining about the number of animals living with them. Animal hoarders don't recognize they are doing anything wrong and actually believe the problem rests with an unfeeling, uncaring and harsh society. They realize they face negative consequences if they say anything about the number of animals they have, so they learn not to say anything. As a matter of fact, animal hoarders will often go to extensive lengths to hide their behavior, including keeping a clean set of clothes in the car and spraying perfume on themselves so they don't smell like the home environment.

VV: What are some of the warning signs?

Strand: Certainly, personal hygiene is a warning sign. Others include unwillingness to adopt animals out and clinging to the tenacious belief the animals are better off with them, unwillingness to allow anyone in the home, and the smells and noise pollution around the home. Another sign veterinarians may see is "vet hopping." Some animal hoarders will take different animals to different veterinarians so no one really knows how many are in the home.

VV: Is animal hoarding treatable?

Strand: Without treatment, there is 100 percent recidivism. We don't have any good numbers yet in terms of how effective treatment is, but we do know there is some success.

VV: When animal hoarding cases make headlines, many responses from the community label the hoarders "animal abusers" and call for them to be locked away with no hope of release.

Strand: Animal hoarding is horribly misunderstood. The vitriol of the people who respond to this type of behavior is almost more troubling to me than the behavior itself. They are all victims. Oftentimes animal hoarders don't have stoves, no air conditioning, no running water, and no medical care. The neglect for the animals also applies to them; they are both living in squalor—in a diseased environment—and are extremely unhealthy.

VV: So is increased community awareness good or harmful?

Strand: I think it can ultimately promote effective intervention. We're in a bit of a lag time where communities have a feeling of disdain rather than compassion, but in time—when we as a mental health profession can produce a successful intervention—then people may not have as much anger. But if we are really going to make progress, we need to stop demonizing any one part of the system. In these types of situations, human emotions arise intensely so the first step for anyone involved is to check your emotions.

VV: So what can members of the community do if they suspect animal hoarding?

Strand: Without endangering yourself, try to build a relationship. Ask the person, "What can I do?" "Is there some way I can help you?" "It



seems like you have a lot of animals, and I imagine you love

each of them, but are you feeling overwhelmed? Would you like help in finding homes for them?" Ask if they need help with utilities or help contacting utilities. If they are unwilling to accept help, turn to the professionals and report the situation to animal control.

VV: What do you think is one of the most important aspects of dealing with animal hoarders?

Strand: I believe involving mental health from the beginning of a confiscation is crucial in addressing the situation effectively. Before the animals are confiscated, the hoarder should be removed from the premises and not forced to witness the animals—the very ones they cared for—being dragged away. That creates a trauma they rarely overcome. Their world view, whether we see it or not, is they are responsible for those animals and care for them. We need to remember that both animals and humans are suffering and treat everyone involved with compassion. 🐾

Photos courtesy of Knoxville Police Department, Animal Control Division.

Types of hoarders

The Overwhelmed Caregiver: A passive acquisitioner. Animals are considered family members.

The Rescue Hoarder: An active acquisitioner. Mission driven. Fears animals will die. May have a network of enablers or be a group activity.

The Exploiter Hoarder: Tends toward sociopathic characteristics. Lacks empathy for people or animals.

The Specific Breed (or color) Hoarder: Begins as a breeder of animals for sale and becomes overwhelmed.

The Hospice Hoarder: An emerging type of hoarder. Begins by providing end-of-life care without veterinarian's participation.

Sources: International OCD Foundation and American Veterinary Medical Association





Large Animal Hospital Renovation Update

The Large Animal Hospital construction and renovation project will begin this spring. Its anticipated completion date is December 2012.



New front entrance design for the UT Veterinary Medical Center on Neyland Drive. The project is privately funded.



New Construction:

Large Animal Hospital	33,446 square feet
Orthopedic Diagnostic Center	32,225 square feet

Hospital Renovations:

18,764 square feet

Total Area:

84,435 square feet

Cost:

\$20.9 million

Cancer Imaging

From Bench-top Science to Bedside: Diagnostic and Treatment Options for Animals and People

By Dr. Amy LeBlanc

A significant challenge currently exists in the study of human cancer in that most laboratory animal tumor models do not adequately represent the sheer biologic complexity and heterogeneity of this spontaneous disease in humans; yet, these tumor models are at work in the vast majority of drug development endeavors. Exploration of the complex relationships between drug exposure, molecular targets and other pharmacokinetic endpoints cannot be readily achieved using rodent tumor models.

Comparative oncology is the study of spontaneous, naturally occurring cancer in animals as a relevant model for the human disease. The basic biology of cancer in dogs is similar to human cancers, especially in bone cancer, melanoma, non-Hodgkin's lymphoma, soft tissue sarcomas, and cancers of the head/neck and breast. Dogs' physical size, similarities to humans in drug metabolism and excretion pathways, spontaneous development of a diverse yet relevant spectrum of tumor types, and predictable responses to anticancer therapies such as chemo-

"Veterinary oncology is in dire need of improved therapies for cancers affecting pets in addition to the financial support that propels such investigational studies"

therapy, biologic response modifiers, and radiotherapy make them ideal subjects for the comparative approach. Recently, the study of pet dogs and cats with cancer has been recognized as an unparalleled opportunity to test new treatments and make scientifically sound correlations between drug exposure and molecular changes within tumors and healthy tissues through serial biopsies or blood collections.

This approach does more than benefit humans with cancer; it also benefits pets affected by cancer. Many pet owners consider their animals as family members, and although there have been significant advances in veterinary medical and surgical care, a large number of these family members are still diagnosed with cancer in the United States every year. Veterinary oncology is in dire need of improved therapies for cancers affecting pets in addition to the financial support that propels such investigational studies. The relative scarcity of grant funds for dedicated veterinary oncology research, coupled with the lack of widespread third-party payment in veterinary medicine, compound the need to attract attention and support for our efforts to benefit companion animals, their owners, and human cancer patients alike.

In 2005, the National Cancer Institute's Center for

Cancer Research – Comparative Oncology Program (CCR-COP) developed a novel infrastructure that links 20 state-of-the-art veterinary academic centers within a Comparative Oncology Trials Consortium (COTC). This group conducts centrally managed, multicenter trials to define the safety and efficacy of novel anticancer strategies. The results of the first preclinical trial of the COTC, evaluating targeted delivery of tumor necrosis factor (TNF α) to tumor-specific blood vessels, was recently published, and several others have been completed since this inaugural trial was finished in 2006. As part of the UTCVM clinical oncology faculty, Dr. Jeff Phillips, Dr. Al Legendre, and I are pleased to have been instrumental in the completion of this inaugural trial, and we continue to maintain UTCVM as an active site for enrollment in various COTC trials evaluating novel therapeutics and medical devices.

The UTCVM clinical oncology program has several unique advantages as a site for comparative oncology research. First, we have three board-certified veterinary oncologists. In addition, I am also the director of translational research within the UT Graduate School of Medicine's Molecular Imaging and Translational Research Program (MITRP). I feel confident in our work with companion animal Positron Emission Tomography (PET) imaging, as we have authored what has become the seminal published work in PET findings of normal dogs and cats, as well as a cohort of dogs with various spontaneous malignancies. Our results have laid the groundwork in collecting pilot data in dogs with various cancers (refer to Winston's images), and we are now exploring PET/CT as a method of monitoring response to cancer therapy in dogs to better tailor their treatment strategy. PET/CT is currently only available in a handful of veterinary academic centers, thus the UTCVM-MITRP collaboration provides a singular opportunity for clinical and comparative oncology research.

Expansion of molecular imaging techniques like PET, in addition to improved availability of novel PET-labeled biomarkers, plays a critical role in advancing comparative oncology research. It is well accepted that PET is the gold standard for care in human clinical oncology and a major focus in preclinical cancer drug development. PET scans are now routinely fused with computed tomography (PET/CT) to allow collection of anatomical and molecular data sets in a single study. Clinically, the PET/CT combination is used to diagnose, stage, or monitor many common cancers, and depending on the cancer type, PET changes the choice and modality of therapy instituted in 30 to 60 percent of the cases in which it is used. Routine integration of noninvasive imaging techniques like PET serves to

“One way to accomplish these goals is to increase enrollment of companion animals in funded clinical trials”

advance the frontier of cancer care, and more than 2 million scans will be performed in the United States this year alone. Improvements in prognosis for cancer patients in the United States have been attributed to the personalization of cancer therapy through discovery and implementation of tumor-specific and targeted therapies.

Further, imaging of PET biomarkers specific to cancer will contribute significantly to the anti-neoplastic drug development pathway, specifically in the realms of diagnosis, optimal drug dosing, and therapeutic drug monitoring. Our efforts serve to raise awareness of the unique collaboration between the UTCVM and MITRP, as well as the value of spontaneous disease in companion animals as ideal models for humans. Besides cancer, these models may also be useful in studies of atherosclerosis, myocardial disease, effects of radiation injury, mechanisms of anesthetic drugs, obesity and insulin resistance, protein folding disorders, and more.

Branching out

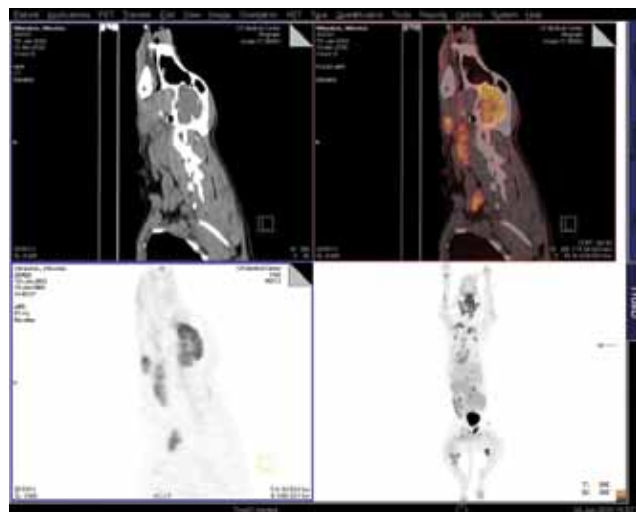
My joint appointment between the UTGSM and UTCVM allows me to act as a conduit between basic and clinical researchers in human and veterinary medicine. I am currently working with UT Medical Center physicians and researchers, and clinicians and researchers within the UTCVM and Institute of Agriculture, UT Science and Engineering Research Facility, and Oak Ridge National Laboratory. My main goal is to help researchers in various scientific fields realize the potential of PET/CT imaging in their particular field of study.

I believe we must continue to work toward routine integration of companion animals into biomedical research efforts and to unite the efforts of basic researchers and clinicians that care for both human and veterinary patients. One way to accomplish these goals is to increase enrollment of companion animals in funded clinical trials. The UTCVM is experienced and knowledgeable in how to implement and carry out trials of this type through the existing COTC infrastructure, and we are taking the lead in investigator-driven studies of novel therapeutics, PET tracers and scan protocol optimization. I am working to approach multiple potential partners to attract interest in molecular imaging endpoints for dogs through the UTCVM clinical oncology program and am investing time and effort into developing new partnerships and

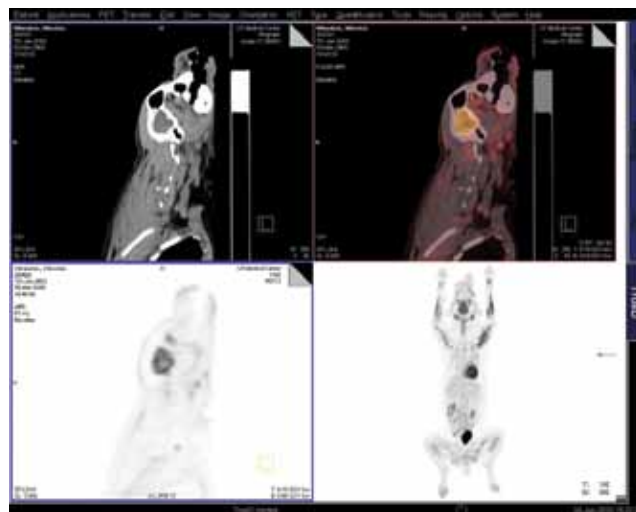
Whole-body PET and PET/CT images of a dog with multicentric non-Hodgkin's lymphoma prior to and after completing induction multidrug UW-Madison chemotherapy. The isotope used is ¹⁸F-fluorodeoxyglucose (FDG), the most common PET radiopharmaceutical for cancer imaging. Areas of intense FDG uptake correspond to areas where lymphoma has invaded lymph nodes or organs such as spleen, liver and heart. Normal organs can take up FDG, such as the brain and salivary glands. FDG is excreted into the urine, causing intense uptake inside the urinary bladder. In the MIP (maximum intensity projection) images, isotope localization is represented in black; in the fused PET/CT images, the intensity of uptake is represented by a color scale, where the highest uptake is yellow.

agreements in the biomedical research field to increase the visibility of the UTCVM and MITRP collaboration. 

1. Paoloni MC, Khanna C. Vet Clin North Am Small Anim Pract 37(6): 1023-33, Nov 2007.
2. Paoloni MC, Tandle A, Mazcko C, Hanna E, Kachala S, LeBlanc A, Newman S, Vail D, Henry C, Thamm D, Sorenmo K, Hajitou A, Pasqualini R, Arap W, Khanna C, Libutti S. PloS One 4(3): e4972, March 2009.
3. Withrow SJ, MacEwen EG, Eds. Small Animal Clinical Oncology 3rd ed. Philadelphia, PA: WB Saunders, 2001
4. LeBlanc AK, Wall JS, Morandi F, Kennel SJ, Stuckey A, Jakoby B, Townsend DW, Daniel GB. Vet Rad Ultrasound 50(4): 435-40, 2009.
5. LeBlanc AK, Jakoby BW, Townsend DW, Daniel GB. Vet Rad Ultrasound 50(2): 215-223, 2009.
6. LeBlanc AK, Jakoby BW, Townsend DW, Daniel GB. Vet Rad Ultrasound 49(2): 182-188, 2008.
7. Townsend DW. J Nucl Med 49(6): 938-955, June 2008.
8. McLarty K, Reilly RM. Clin Pharmacol Ther 81, 420-424, 2007.
9. Bunyaviroch T, Coleman RE. J Nucl Med 47, 451-469, 2006.
10. Hicks RJ, et al. J Nucl Med 43, 752-756, 2002.
11. Lesko LJ. Clin Pharmacol Ther 81, 170-177, 2007.
12. Annual Report to the Nation on the Status of Cancer, 1973-1999. Cancer 94, 2766-2792, 2002.
13. Nutt R, Vento LJ, Ridinger MH. Clin Pharmacol Ther 81(6): 792-5, June 2007
14. Lee CC., et al. Science 310: 1793-1796, 2005.
15. Kabaka GW. Acc Chem Res 17: 215-224, 1984.
16. Kabaka GW. J Labeled Compd Radiopharm 50: 888-894, 2007.
17. Oka S, Hattori R, Kurosaki F, Toyoma M, Williams LA, Yu W, Votaw JR, Yoshida Y, Goodman MM, Ito O. J Nucl Med 48: 46-55, 2007
18. Schuster DM, Votaw JR, Nieh PT, Yu P, Nye JA, Master V, Bowman FD, Issa MM, Godman MM. J Nucl Med 48: 56-63, 2007.
19. Dittmann H, Jusufoska A, Dohmen BM, Smyczek-Gargya B, Fersis N, Pritzkow M, Kehlbach R, Vonthein R, Machulla HJ, Bares R. Nucl Med Biol 36: 163-169, 2009.
20. Kim SJ, Lee JS, Im KC, Kim SY, Park S, Lee SJ, Oh SJ, Lee DS, Moon DH. J Nucl Med 49: 2057-2066, 2008.
21. Pradhani AR, Krohn KA, Lewis JS, Alber M. Europ Radiol 17: 861-872, 2007
22. Swanson KR, Chakraborty G, Wang, CH., Rockne R, Harpold HLP, Muzi M, Adamsen TCH, Krohn KA, Spence AM. J Nucl Med 50: 36-44, 2009.
23. Juweid ME, Cheson BD. New Eng J Med 354(5): 496-507, Feb 2006.
24. Waldherr C, Mellinger IK, Tran C, Halpern BS, Rozengurt N, Safaei A, Weber WA, Stout D, Satyamurthy N, Barrio J, Phelps ME, Silverman DH, Sawyers CL, Czernin J. J Nucl Med 46(1):114-20, Jan 2005
25. Hutchings M, Barrington SF. J Nucl Med 50:21S-30S, Feb 2009
26. MacKenzie AR, von Mehren M. Expert Rev Anticancer Ther 7(8): 1145-54, Aug 2007
27. Kruser TJ, Bradley KA, Bentzen SM, Anderson BM, Gondi V, Khuntia D, Perlman SB, Tome WA, Chappell RJ, Walker WL, Mehta MP. Tech Cancer Res Treat 8(2): 149-58, April 2009.
28. Facey K, Bradbury I, Laking G, Payne E. Health Tech Assess 11(44), 2007.
29. Hicks RJ, Rischin D, Fisher R, Binns D, Scott AM, Peters LJ. Eur J Nucl Mol Imaging 32(12), 1384-91. Aug 2005.
30. McConathy J, Goodman MM. Cancer Metastasis Rev 27:555-573, July 2008
31. Vallabhajosula S. Semin Nucl Med 37(6), 400-19, Nov 2007



Winston Sagital January



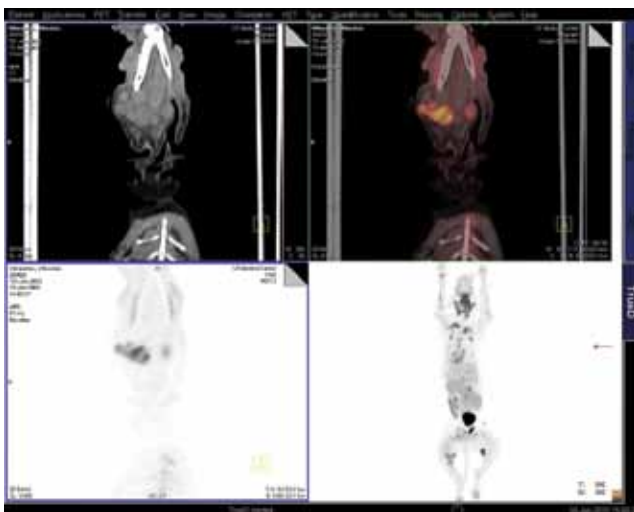
Winston Sagital March

Cocoa Starves Cancer

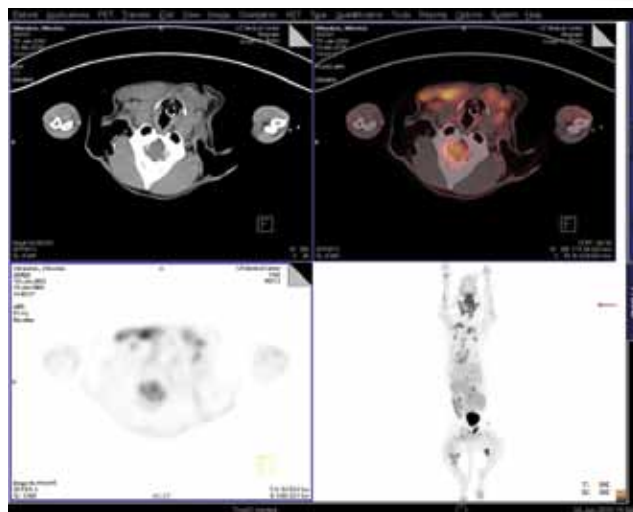
In 2007, Cocoa, a 10-year-old spayed female chocolate Labrador retriever, came to the UTCVM John and Ann Tickle Small Animal Hospital with a large soft tissue sarcoma, a common type of cancer in dogs, on her right hip. The mass was too large for the surgeons to remove completely. After consultation with the small animal oncology service, she was entered into a clinical trial sponsored by the National Cancer Institute/Comparative Oncology Program's Comparative Oncology Trials Consortium (NCI/COP-COTC) via Dr. Amy LeBlanc, the director of the study at UTCVM. This clinical trial tested a new anticancer strategy: a potent cytotoxic compound called tumor necrosis factor- α (TNF- α) linked to a targeted delivery system—in order to kill cancer cells while leaving the body's normal cells unharmed. This type of cancer treatment is known as anti-angiogenic therapy, where the target is not the cancer cells themselves, but rather the supporting vasculature. In this approach, researchers aim to “starve” the rapidly growing tumor cells of needed oxygen and nutrients, leading ultimately to their death. In this case, TNF- α was preferentially delivered to the tumor's blood vessels while sparing the body's normal vasculature, thus limiting the side effects caused by systemic non-targeted delivery of TNF- α .

Cocoa had a remarkable response to the study drug, shrinking the tumor significantly over approximately one month, thus making it possible for the tumor to be subsequently removed. She enjoyed good quality of life during and after the study was completed. This study was the first NCI/COP-COTC-sponsored clinical trial in pet dogs with cancer to test the safety and efficacy of a new anti-cancer drug. The results of this trial will support future studies of TNF- α in a targeted delivery system for human cancer patients.

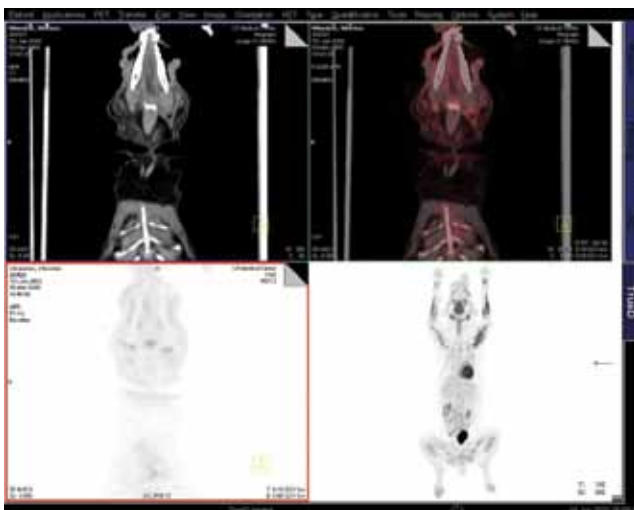
Paoloni M., Tandle A., Mazcko C., Hanna E., LeBlanc A., Vail D., Henry C., Sorenmo K., Thamm D., Kachala S., Newman S., Pasqualini R., Arap W., Khanna C., Libutti S. Tumor Vasculature Targeted Delivery of Tumor Necrosis Factor (TNF- α) Using a Novel Targeted Vector (AAVP-TNF- α) to Treat Pet Dogs with Spontaneous Tumors. PLoS One March 2009, 4(3): 1-11.



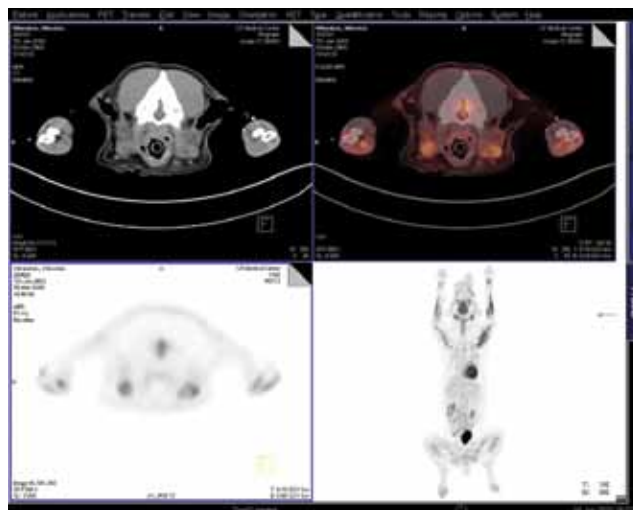
Winston Coronal January



Winston Axial January



Winston Coronal March



Winston Axial March



The Future Looks “Albright” in Veterinary Behavior


The University of Tennessee College of Veterinary Medicine welcomes Dr. Julia Albright as its PetSafe Chair in Small Animal Clinical Behavior Research. The college partnered with Knoxville-based Radio Systems Corporation, makers of the PetSafe and Invisible Fence brands, to create the chair. Randy Boyd, Radio Systems Corporation's founder and CEO, is a graduate of UT. The position was created to help protect the human-companion animal bond through research to better understand companion animal behaviors that jeopardize a pet remaining in the home environment.

Albright received her master's degree in animal behavior in 2001 and her DVM from UT in 2005. In 2009, she completed a residency in animal behavior at Cornell University College of Veterinary Medicine and later served as a postdoctoral fellow and clinical behaviorist at Cornell. She brings to UT clinical, research and teaching experience and looks forward to returning to her alma mater to train future veterinarians. The native Tennessean says, “This position is the perfect environment for my commitment to the field and my devotion to the Tennessee community.” Albright says an evidence-based animal behavior course is a key component of a veterinary behavior program. “I believe it is imperative we work to help the public and students differentiate facts grounded in science from myths perpetuated on TV and the Internet.” In addition to teaching, she embraces the challenges of lecturing and demonstrating techniques to such diverse audiences as veterinarians, veterinary technicians, experimental psychologists and general pet owners.

Nationwide, there are fewer than 50 board-certified veterinary behaviorists, not enough to meet the need in even the country's largest cities. Dr. Claudia Kirk, department head of Small Animal Clinical Sciences at the college, says having someone with Albright's expertise

puts the college on par with an elite group. “Very few colleges have a veterinary behaviorist on board,” says Kirk. “Since behavior issues are the number one reason why animals are surrendered to shelters, Dr. Albright will help fill an important gap in clinical service and in teaching veterinary students. I look forward to the new discoveries that will help enrich the human-animal bond, improve the quality of life for pets, and enhance the training of future veterinarians.”

With nearly 70 million U. S. households having at least one companion animal, many dog and cat owners don't know how to address some problematic behaviors of pets, such as chewing, improper elimination and excessive barking. Studies, including several that involved UTCVM faculty member Dr. John New, have shown that up to 40 percent or more of dogs and cats are relinquished to animal shelters because of behaviors that, in many cases, can be modified. “Veterinary behaviorists work within the unique space between the fields of academic animal behavior, welfare, and neurobiology; non-academic animal training; and veterinary medicine,” says Albright. Her work reflects her belief that problem behavior treatment and prevention at the animal-owner level should be combined with research into genetic and molecular etiologies of behavior and temperament. “The research opportunities provided by PetSafe and UT will result in improved welfare and quality of life of companion animals as well as progression in the fields of behavioral science and veterinary behavior.”


Albright's primary postdoctoral research focuses on the effect of dietary omega-3 fatty acids in the treatment of canine aggression. She has also investigated such diverse topics as genetic mapping of canine aggression and equine cribbing, as well as cribbing prevention modalities. “All my current and future research shares the common goal of finding immediate and lasting solutions to animal behavior problems.” She joins the college in early April. 



Linking Referring Veterinarians to Our Patient Information System

A referring veterinarian is an integral member of a patient's veterinary medical team. In an effort to enhance this partnership, the UT Veterinary Medical Center has created the VOLVet Portal, a gateway into the medical center's patient information system that provides real-time information on the status of patients they have been referred to us. The portal also provides immediate access to results of laboratory tests that have been sent to our diagnostic laboratories.

Referring veterinarians log onto our secure website to access their patients' medical records, including lab work results, diagnosis and treatment plans. We will continue to send our conventional client communication information such as discharge instructions and referral letters, but our referring veterinarians can now visit the portal at their convenience, keeping their clients informed about their pets' status at our medical center.

One of the referring veterinarians who tested the portal during its beta testing phase reported, "Signed in, and had a great time perusing the last few years of referral cases I'd sent to the UT Veterinary Medical Center." 

Thank you!


UTCVM thanks Karl Storz Veterinary for its generous gift of endoscopy equipment, including a three-chip camera head, camera control unit and light system. The gift was made in support of the work of Dr. Joe Bartges, Acree Family Endowed Chairholder, Small Animal Clinical Research.

STORZ
Karl Storz Veterinary
Endoscopy

Curbside Courier Service is here!

Life for Knoxville-area veterinary clinics just got easier. The UT Veterinary Medical Center now provides daily courier service for laboratory diagnostic services to veterinary clinics in Knoxville and the surrounding area, making the quality diagnostic services clinics rely on much more convenient.

Veterinary Medical Center couriers collect lab samples from area veterinary clinics at 5 p.m. Monday through Friday and at 11:30 a.m. on Saturdays. The evening pick-up times provide diagnostic clinic staff enough time to submit all samples collected daily, optimizing the turnaround time for the veterinarian and their patient owners. For each stop, there is a flat \$5 courier fee, regardless of the number of samples submitted to our diagnostic laboratories.

Once our qualified laboratory technicians process the samples, results are entered into the medical center's electronic data system. Referring veterinarians can then access lab results on their computers at their convenience through the VOLVet Portal (see accompanying article). This free referral portal archives previous lab values, providing community veterinarians with a comprehensive overview of the lab value changes and aiding them in determining the most effective treatment plan for their patients. The medical center will continue to fax lab results to those who prefer to have hard copies. Visit www.vet.utk.edu for more information. 



Stephanie Evans coordinates the UT Veterinary Medical Center Diagnostic Laboratory Center Service. She customizes services to meet individual needs, working closely with veterinary clinic clients on pricing, creating custom panels, and courier and lab-related concerns or questions.

REVOLUTIONARY MEDICINE

The Veterinary Medical Center's Linear Accelerator

Radiation therapy is a critical component of many kinds of cancer treatments, and the UT Veterinary Medical Center offers Tennessee's only radiation therapy program. The goal of radiation therapy is to provide effective treatment while maintaining quality of life for the patient and family.

Our linear accelerator, a high-energy machine that produces x-rays and electrons used to irradiate tumors, is equipped with a special device that allows quick changes in the size and shape of the radiation beam to fit the irregular contour of almost any tumor while lessening damage to surrounding tissue. With the capability of generating radiation of several different energies, the linear accelerator can treat tumors in different locations within the body.

Our radiation oncologists use CT images and a computer specifically designed for radiation therapy to create a 3D image of the tumor and prescribe a customized treatment plan. With the high-energy linear accelerator, radiation treatment time is a matter of seconds rather than minutes, reducing the amount of time a patient is under anesthesia.

Tumors best treated with radiation therapy:

- Brain tumors
- Soft tissue sarcomas
- Prostate tumors
- Thyroid Carcinomas
- Spinal cord tumors
- Nasal tumors
- Thymomas

UTCVM is proud to introduce radiation oncologist Dr. Nathan Lee. He joins Dr. Bill Adams, veterinary technician Lyssa Clingner, and the rest of our oncology team dedicated to providing the best and most progressive care during and after the patient's cancer treatments.



Student News & Accolades

Andrea Mitchell, '12, received the 2010 Comparative Gastroenterology Society (CGS) Veterinary Summer Research Scholar Award. CVM's Dr. Jacqui Whittemore was Mitchell's mentor on a project titled, "Comparison of operator judgment and impedance measurements for Veress needle placement."

Novartis Excellence Awards for 2010 were presented to the following CVM students at the annual spring Honors Convocation:

Linda West, '10	Dermatology Award
Randi Timmons, '10	Parasitology Award
Margaret Jablecki, '10	Pain Management Award
Rebekah Willis, '10	Rehabilitation Therapy Award

The Nestle-Purina Petcare Company Excellence in Companion Animal Nutrition Award was presented to **Martha Cline '10**.

Cat Arthur, '10, was the recipient of the Simmons (and Associates) Educational Fund Business Aptitude Award for 2010.

The 2010 Blackwell Award for Public Health Promise, named for former UTCVM Dean Michael J. Blackwell, was presented to **Leslie Sadeghi '12**.

Nimet Browne, '10, received the ACVIM Certificate for Clinical Excellence and is pictured with Dr. Carla Sommadahl, Large Animal Clinical Sciences.

Martha Cline, '10, and **Margaret Jablecki, '10**, received the ACVIM Certificate of Clinical Excellence and are pictured with Dr. Diane Mawby, Small Animal Clinical Sciences.



Celebrating Job No. 1

It seems that many recent higher education news headlines have bemoaned, “Quality of teaching declining rapidly!” or “Universities devalue teaching for research efforts.” At UTCVM, the news in teaching is quite different. Since its inception, “Teaching is Job One” has been an unwritten motto and guiding principle in the college. The UTCVM Master Teacher Program has translated the unwritten message into an action. Its mission is “to provide the resources, programs and leadership that support the highest quality of professionalism and instruction within the various educational missions of the CVM.”

The Master Teacher Program was launched in 2008 to meet strategic goals in further strengthening teaching programs, from the DVM program to clinical education, graduate student teaching development and continuing education. The program consolidated efforts in several areas into a streamlined approach, and aimed to connect and expand leadership and expertise in education across the college. Unlike some programs in which participants earn the title of “master teacher,” this program is built around voluntary and committed participation of core members, with individual sessions open to all faculty. The goal is ongoing professional development toward mastery, as opposed to recognition or exclusion.

With monthly meetings, quarterly workshops and annual fundamentals of teaching sessions, the Master Teacher Program has become a visible and institutionalized part of the UTCVM culture. Faculty members have gathered to talk and learn about technology in the classroom, new millennial students, assessment practices, and documenting teaching efforts. There’s been no shortage of fun, either, as meetings have included surprise exercises, good food and plenty of opportunities for thoughtful conversations about teaching. The core faculty members have provided input as the college develops guidelines and protocols for delivering, assessing and publishing educational efforts. And the news is spreading. For example, we’re proud that our Guidelines for Peer Review of Teach-


ing have provided the platform for implementing a similar process across UT Knoxville.

Although each monthly meeting is organized around a single topic, dialogue and exchange in a positive light are the key benefits. Program values are reviewed at each session, and include commitments to ongoing improvement, positive attitudes, and open and confidential participation. Participants are expected to complete developmental programs, regularly attend sessions, and develop an individual area of expertise to share with others.

Co-led by Drs. Mickey Sims and India Lane, program planners (Sims, Lane, Dr. Nancy Howell and Ms. Misty Bailey) meet monthly to design, review and assess the impact of Master Teacher Program efforts. More than 30 percent of UTCVM the faculty has committed to participation as core members, and more than 60 percent of faculty attended at least one event last year. Participants point to the program as particularly useful in improving their teaching methods, materials or communication; increasing their ability to assess students; and enhancing the learning environment in their classroom.

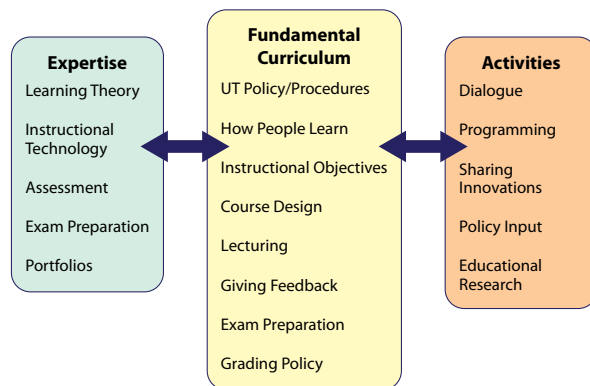
The program has been highlighted in recruitment of new faculty members, and is gaining attention as a model for other institutions. Program leaders recently presented a poster at the Association of American Veterinary Medical Colleges (AAVMC) annual meeting in Washington, D.C. (see figure). This fall at UTCVM the Master Teacher Program hosted an AAVMC conference on teaching in veterinary medicine, “Making the Most of Teaching Time,” the first such conference dedicated solely to teaching development for veterinary educators. The conference brought veterinary faculty from all across North America to Knoxville to learn about quality and innovative teaching practices. UTCVM faculty members were heavily represented as hosts and speakers.

Of course, UTCVM students and graduates are the biggest winners as the Master Teacher Program gains steam.

The faculty is developing and sharing expertise in lecturing, lecture-based technology, exam construction, educational objectives and educational research. All of these techniques bring inspired and quality teachers to the UTCVM classroom, better prepared for Job One. 



Dean Jim Thompson gives 'high-fives' to members of the graduating Class of 2010 after the commencement program.





Working with CVM's assistant director of alumni relations and development, Megan McMurray, Dean Jim Thompson launched what many hope will become a senior class tradition: painting a congratulatory graduation message on the Rock, UT Knoxville's student message board located on Volunteer Boulevard. In early May, a group of fourth-year students, along with Thompson, gathered late one afternoon to paint a message congratulating the Class of 2010 on its accomplishments and graduation.

Another CVM tradition-in-the-making is the new Tennessee Welcome orientation program for incoming veterinary students and their families. The first Tennessee Welcome was held in early August. The weekend event is designed to get new students acquainted with each other, engage their families in the life of the college, and provide incoming students with a better understanding of the UTCVM experience.





All About Student Success:

Dr. John and Cathy Henton Veterinary Scholarship Endowment

After more than 30 years of teaching and service in support of the veterinary profession at UTCVM, Dr. John Henton, professor emeritus of equine reproduction and director of continuing education, passed away in July.

CVM students, alumni, faculty and staff came to know the late Dr. John and his surviving wife, Cathy, for their selfless dedication to students and lifelong learning. Innumerable veterinary students and house officers recall their "touch of home" care, ranging from sound advice to holiday dinners at the Henton farm. The Hentons were synonymous with student educational opportunities and providing tangible and intangible support and encouragement to ensure student success. It seems most appropriate that we honor Dr. John and Cathy with a veterinary scholarship endowment in their names at the college as a way to express our deep thanks for their commitment to veterinary education and their love for the hundreds of students they knew over the past three decades.

We invite you to join with alumni, faculty, staff and friends to make a gift or pledge to the **Dr. John and Cathy Henton Veterinary Scholarship Endowment** to celebrate the Hentons. Printable gift/pledge forms are available at www.vet.utk.edu/giving, or call the UTCVM Development Office at 865-974-4379 or at cvmdev@utk.edu. Thank you!



Tennessee's New Assistant State Veterinarian



UTCVM alumna Dr. Sara Clariday ('79) was appointed Tennessee's assistant state veterinarian by the Tennessee Department of Agriculture (TDA) in July. Clariday is a native of Mount Juliet, Tennessee, and was a

member of UTCVM's first graduating class. She and her husband, fellow classmate Dr. David Clariday, established Hartsville Animal Clinic, a mixed animal practice, in 1979. In 1984, they relocated to Mount Juliet and opened the Mount Juliet Animal Clinic. The Claridays also run a beef operation on their family farm. Their son, Dr. Nathan Clariday, is a 2006 graduate and a member of the family's practice.

As assistant state veterinarian, Sara Clariday will serve as the field coordinator working with field staff in TDA's Animal Health Section. She is also charged with managing dog and cat dealer licensing and coordinating the disaster animal response teams across the state.



the Annual Donor

Honor Roll of Giving

The Annual Donor Honor Roll of Giving for the gift period July 1, 2009, through June 30, 2010, is available on UTCVM's website at www.vet.utk.edu/giving.

Thank you for your continued support for the College of Veterinary Medicine!

Keepsakes—Tokens of Friendship

A keepsake, according to Webster's dictionary, is "anything kept, or given to be kept, as a token of friendship or affection; remembrance."

Perhaps you have something from your parents or grandparents that you consider a keepsake. Seeing it or handling it stirs fond memories.

A bride may keep her wedding dress as a treasured keepsake, a remembrance of a special day in her life. A daughter may wear this same dress in her own wedding and keep it to pass down someday to her daughter. An athlete may keep a uniform as a remembrance of the glory days of competition and victory. Many of us keep treasured photos of our companion animals in family albums, along with images of our human family members.

We all cherish our keepsakes.

The College of Veterinary Medicine has keepsakes as well. Note Webster's phrase "anything ... given to be kept, as a token of friendship." This definition applies perfectly to our endowments. These have been "given to be kept" in perpetuity as a "token of friendship" and support for our mission.

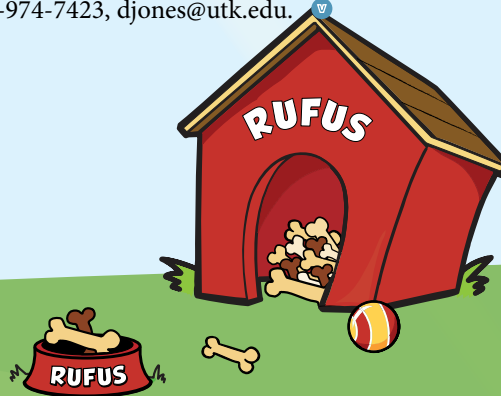
We keep a list of our keepsakes in an endowment book. Like a treasure chest or family album, this book is a tangible reminder that our friends care about us and want to continue supporting us after they are gone.

The principal of an endowment fund is held in a permanent pool of invested funds with only the net earnings, or a portion thereof, used to meet the purposes described in the endowment agreement. The balance is reinvested so the amount available to spend in future years will keep pace with inflation.

Endowments can carry the name of the donors or the name of someone a donor wants to honor or memorialize. Endowments can provide annual "gifts" for general purposes or specific uses.

Endowments can be created with cash, securities, real estate or other assets of value and may be funded in life or at death, or a combination of the two.

The University of Tennessee College of Veterinary Medicine has some wonderful keepsakes. Would you like to create one as a token of your friendship and support? If so, please contact our director of planned giving, Dennis Jones, at 865-974-7423, djones@utk.edu.



Members of the East Tennessee Veterinary Medical Association presented CVM Dean Jim Thompson with a special gift for the Dr. John and Cathy Henton Veterinary Medicine Scholarship Endowment.

Left to right: Dr. Ken Chamness, Dr. Bob DeNovo, Dr. Richard Hewitt, Dr. Barbara Reeve, Dean Jim Thompson, and Dr. Randy Hammon and Dr. Sally Poston.

The Nestlé Purina Nutrition Center opened last fall, in the John and Ann Tickle Small Animal Hospital. The UT College of Veterinary Medicine thanks the Nestlé Purina Pet Care Company for its generous support of the Nestlé Purina Nutrition Center and also the Companion Animal Initiative in Tennessee (CAIT) program, which works to reduce companion animal overpopulation in Tennessee.

Faculty News and Accolades

Three College of Veterinary Medicine faculty members were recognized with 2010 UT Knoxville Chancellor's Honors Awards:

Dr. Elizabeth Strand, director, Veterinary Social Work, received the Alumni Association Award for Public Service.

Dr. Casey LeBlanc, associate professor, Clinical Pathology, received the Excellence in Teaching Award.



Dr. Hildegard Schuller, distinguished research professor, Experimental Oncology, received the Research and Creative Achievement Award.

The 2010 **Brandy Memorial Award** recognizing outstanding faculty teaching, developing in veterinary students the qualities that donors Jerry and Dianne Garrett found so important in their community veterinarian, was awarded to **Dr. Karen Tobias**, professor, Surgery, Small Animal Medicine.



The 2010 **Charles and Julie Wharton Professors Awards** were presented to



Dr. Darryl Millis, professor, Orthopedic Surgery and Veterinary Physical Rehabilitation, Small Animal Clinical Sciences

Faculty Promotions, Tenure, Appointments and Retirements

Retirements

Dr. Barton (Bart) Rohrbach, associate professor, Veterinary Public Health and Epidemiology, Comparative Medicine



Dr. Robert E. Holland, professor and head, Department of Large Animal Clinical Sciences

Dr. Leon N. D. Potgieter, professor and interim associate dean for research (Comparative Medicine)

Promotions

Dr. Casey LeBlanc to associate professor, Clinical Pathology, with tenure, Pathobiology Department



Dr. Shelley Newman to associate professor, Anatomic Pathology, with tenure, Pathobiology Department

Dr. Stephen Kania to professor, Immunology, Comparative Medicine Department



and **Dr. Kimberly (Kim) Newkirk**, Assistant Professor, Pathobiology. The Wharton Professors Awards provide a generous salary supplement to faculty

selected for this recognition. The annual Wharton Professors Awards are the gift of UT Trustee, Charles E. and the late Julie K. Wharton.

Two CVM faculty members were inducted into the profession's honorary society, **The Society of Phi Zeta**: **Dr. Agricola Odoi**, assistant professor, Veterinary Public Health and

Dr. Hwa-Chain Robert Wang to professor, Molecular Oncology, Comparative Medicine Department

25 or more years of service

Dr. Al Legendre, 35 years, Small Animal Clinical Sciences

Dr. Jack Oliver, 35 years, Comparative Medicine

Carolyn Wilson, 30 years, Large Animal Clinical Sciences

Dr. Hildegard Schuller, 25 years, Pathobiology

Dr. Ralph Harvey, 25 years, Small Animal Clinical Sciences

New Appointments

Dr. Sharon Patton, professor, Parasitology is serving as interim department head, Comparative Medicine.



Dr. Christine L. Cain has joined the Small Animal Clinical Sciences faculty as assistant professor, Dermatology. Cain earned the DVM at The Ohio State University and completed her residency at the University of Pennsylvania School of Veterinary Medicine.

Epidemiology, and as an honorary member, **Dr. Maria Cekanova**, research assistant professor, Oncology, Small Animal Clinical Sciences.



Dr. Patti Sura, assistant professor, Surgery, Small Animal Medicine, received the **2010 Brogan Clinical Professorship Award** for her contributions toward

advancing the science of clinical veterinary medicine and surgery.

Dr. Cristina Lanzas, DVM, PhD has joined the Comparative Medicine faculty as primarily a researcher but also teaching epidemiology to DVM and graduate students. She came to UTCVM through the university's National Institute for Mathematical and Biological Sciences (NIMBioS) program.



Dr. Nathan Lee has joined the Small Animal Clinical Sciences faculty as clinical assistant professor of Radiation Oncology. Lee earned the DVM and completed a residency in radiation oncology at the Cummings School of Veterinary Medicine at Tufts University.



Dr. Howard K. Plummer III has been appointed research assistant professor, Molecular Cancer Analysis, Pathobiology. **Dr. Hussein A. Al-Wadei** has been appointed research assistant professor, Experimental Oncology, Pathobiology. **Dr. Naveen Rajasagi** has been appointed research assistant professor, Virology, Pathobiology.

Dr. Cheryl Greenacre, associate professor of Avian and Zoological Medicine, is now a Diplomate of the American Board of Veterinary Practitioners – Exotic Companion Mammal Medicine in addition to Avian Medicine.

The 2010 **SCAVMA Award** (UT Student Chapter of the American Veterinary Medical Association) was presented to **Dr. Sharon Patton**, professor, Parasitology.

Dr. Olya Smrkovski has joined the Oncology faculty in Small Animal Clinical Sciences as clinical assistant

professor. Smrkovski completed her residency in Oncology at UTCVM.

Three UTCVM faculty members received special 2010 UT Institute of Agriculture awards:

Dr. Jack Oliver J. E. Moss Achievement Award

Dr. Michael Sims Webster Pendergrass Outstanding Service Award

Dr. John New William T. Miles, M.D., Memorial Award for Community Service

House Officers and Graduate Student News and Accolades

Medicine intern, **Dr. Stephanie Moore**, was the 2010 recipient of the **Jessie's Memorial 'Top Doc' Intern Award** made possible by Jay Robinson in memory of his beloved Yorkie, Jessie.



2010 inductees into the Society of Phi Zeta from Small Animal Clinical Sciences included residents and graduate students **Drs. Chad Andrews, Cherise Clement** and **April Durant**. **Dr. Maria Cekanova** was an honorary inductee, and **Dr. Matt Allender**, 2009 zoological medicine resident, received the **Phi Zeta Manuscript Award**.



Dr. Ferenc Toth, resident in Large Animal Clinical Sciences, received the **Mark S. Bloomberg Resident Research Award** to attend the Veterinary Orthopedic Society Conference. Toth's article, "Full-thickness Skin Grafts have Superior Cosmetic Outcome," appeared on The Horse website (www.thehorse.com) in July 2010.

Pathobiology resident **Dr. Leisl Breickner** received a **Charles Louis Davis Foundation Student Scholarship Award** from the American College of Veterinary Pathologists at its annual conference.

Dr. Vanessa Grunkemeyer has achieved diplomate status with the American Board of Veterinary Practitioners–Avian specialty

2010-2011 Interns

Large Animal Clinical Sciences

Dr. Grace Shook Field Service

Small Animal Clinical Sciences

Dr. Mary Leissing
Dr. Lynsey Rosen
Dr. Carly Waugh
Dr. Tommy Vanderford
Dr. Mel Milosovic
Dr. Rossana Perez-Freytes

2010-2011 Residents

Large Animal Clinical Sciences

Dr. Jessica Carter Surgery
Dr. Martin Suarez Anesthesia

Small Animal Clinical Sciences

Dr. Alyce Marks Radiology
Dr. Sara Hyink Internal Medicine
Dr. Shannon Flood Oncology
Dr. Amy Wood Neurology
Dr. James Steele Zoo Medicine
Dr. Jennifer Carr Orthopedics

Dr. Dan Ward, professor, Ophthalmology, is the 2010 UTCVM **Distinguished Coughlin Professor**. The award is named in honor of the late Knoxville veterinarian Dr. Dennis Coughlin Sr.



Staff News and Accolades

The 2010 American Animal Hospital Association (AAHA) **Hill's Animal Welfare and Humane Ethics Award** was presented to **Teresa 'T' Jennings**, program administrator, Companion Animal Initiative of Tennessee (CAIT), a UTCVM public service program focused on animal overpopulation and welfare issues. The award recognizes a veterinarian or non-veterinarian who has advanced animal welfare through extraordinary service or by furthering humane principles, education and understanding.

Jaime Norris is the new **CAIT Program Coordinator** working with CAIT Program Administrator Teresa 'T' Jennings.

Karl Snyder, Clinical Pathology senior lab section chief, is the 2010 recipient of the **Mildred Pendergrass Award for Outstanding Service**, which recognizes professionalism, leadership, initiative and cooperativeness.

Licensed Veterinary Medical Technician **Janet Jones**, Small Animal Clinic Sciences director, has been elected vice president of the Tennessee Board of Veterinary Medical Examiners. Jones, who has been with the college for 24 years, was instrumental in creating a career ladder for UTCVM veterinary technicians and a national LVT internship program. She has worked as an advocate with both the Tennessee Veterinary Technicians Association and the Tennessee Veterinary Medical Association to win their support in having a veterinary technician on the licensing board that regulates both veterinarians and veterinary technicians.

The UT College of Veterinary Medicine's Outstanding Employee for fall 2010 is **Jeannie Bormet**, 'floating' technician in the small animal hospital. Bormet is cross-trained, working in most of the small animal health services and is described as having "integrity, commitment and compassion."

Leslie Wereszczak, senior veterinary technician and ICU supervisor, received the 2010 **Brogan Clinical Nursing**



Assistantship Award in recognition of her exceptional attitude and ability in providing competent and compassionate care for small animal patients.

The 2010 recipient of the **Charles Reed Outstanding Service Award**



was **Nancy K. Zagaya**, LVMT, senior veterinary technician in the Exotics and Wildlife Hospital.

Nelle Wyatt, referral coordinator, has achieved the status of **Certified Professional Dog Trainer**.

Gina Galyon, LVMT, research specialist I, passed the **National Board Exam** for veterinary technicians, as has **Jennifer Heidrich**, LVMT, veterinary assistant I.

UTCVM's **Outstanding Employee** for spring 2010 was **Michael Cunningham**, information specialist II in the college's instructional resources unit.

Staff Promotions, Appointments and Retirements

Promotions

Karl Snyder, to senior lab section chief III, Clinical Pathology, Pathobiology

Violetta Pikoulas, to senior medical technologist II, Clinical Pathology, Pathobiology

Dawn Hill, to senior veterinary assistant, LAT, ALAT, Small Animal Clinical Sciences

Jessica Konzer, to senior veterinary technician I, Small Animal Clinical Sciences

Elise Marchant, to veterinary technician II, Small Animal Clinical Sciences

Taly Reyes, to veterinary technician I, Small Animal Clinical Sciences

Michelle Hill, to laboratory assistant I, Histology Laboratory, Pathobiology

Retirements

Doris J. Millsaps, senior laboratory section chief III, Clinical Pathology, Pathobiology, with 19 years of service

New Employees

Dr. Heike Bernert, postdoctoral research associate (Dr. Schuller), Pathobiology

Dr. Benjamin Unger, postdoctoral research associate (Dr. Schuller), Pathobiology

Carrie Barker, coordinator, course development, Center for Agriculture and Food Safety and Preparedness

Jay Cabler, IT specialist, online course development, Center for Agriculture and Food Safety and Preparedness

Amy Clark, senior medical technician I, Clinical Pathology, Pathobiology

Dr. Arokya Mary Sashi Papu John, research specialist II, Histology, Comparative Medicine

Dr. Becky Wilkes, research associate III, Virology, Comparative Medicine

Kelley Beam, laboratory assistant, Endocrinology, Comparative Medicine

Ashley Johnson-Clinger, laboratory assistant, Bacteriology, Comparative Medicine



Ben Smith, part-time pharmacist, Hospital Operations

Veterinary Technician Internship Program

Finishing intern, **Jacqueline Cole**, has been accepted into the four-year accelerated veterinary medicine program at the Royal Veterinary College in London.

Incoming interns for 2010-2011 are **Leigh Crump**, St. Petersburg College, Florida; **Sarah DeRosier**, Alfred State College, New York; and **Allison Reynolds**, Northshore Community College, Massachusetts. Interns accepted into this program must be graduates of AVMA-accredited veterinary technology programs.



Four UTCVM Licensed Veterinary Technicians presented talks and case reports at the 2010 American College of Veterinary Internal Medicine Conference in Anaheim, CA. From left to right: Amanda Callens, Bobbie Werbe, Tammy Moyers and Gina Galyon.

Happy 5th Birthday, CAIT!

When Jaime Norris began college, she was majoring in pre-veterinary medicine. Her interests evolved, and she recently graduated from East Tennessee State University with a degree in interior design. However, her new position with CAIT allows her to be involved in veterinary medicine on a different level. Norris has already worked with various shelters across the state, offering suggestions to help them make their front lobby area more appealing, thus making prospective pet owners' experiences more positive. Passionate about the Earth and recycling, Norris feels helping reduce the number of homeless animals in Tennessee will help make it an even better place to live.

While Companion Animal Initiative of Tennessee (CAIT) is working to decrease the number of unwanted dogs and cats in the state, it's working to increase the number of people to help achieve that goal. In May CAIT welcomed Jaime Norris as program coordinator. In an effort to help tackle the seemingly never-ending supply of intact dogs and cats, Norris focuses her efforts on statewide spay and neuter clinic opportunities for UTCVM students. Norris also helps people who call the CAIT Spay and Neuter Helpline at **1-866-907-SPAY** locate spay/neuter opportunities in their communities.

This year, the Tennessee legislature passed several laws that will impact animals across the state. A few of interest include:

- It is now a Class A misdemeanor offense for a person who has been convicted of a violent felony to own,

possess or have custody or control of a vicious dog or a potentially vicious dog.

- Forfeited deposits people pay to agencies to ensure they spay or neuter the animals they adopt must now be used to conduct programs to spay and neuter dogs and cats in the agency's community. Previously the money could be used to conduct educational programs about spaying and neutering.
- In barber shops, cages for service animals or birds, as well as fish tanks for decorative purposes, must be cleaned daily.
- The list of animal-related practices that are exempt



Jaime Norris (left), CAIT program coordinator, and Teresa "T" Jennings (right), CAIT program director, at the HSUS Expo in Nashville, May 2010.






Feral Fixin's: As many as 125 feral cats will be spayed or neutered, given an examination and vaccines, and have their ears tipped (international sign for a fixed cat) on a given feral fixin' day at UTCVM.

from veterinary licensure requirements has been expanded.

- Individuals, veterinarians and animal control officers who provide, render or obtain emergency care for non-livestock animals are granted immunity from civil liability.
- It is now a Class A misdemeanor offense for a person who was previously convicted of animal cruelty to subsequently violate an animal custody restriction imposed by the sentencing court.

CAIT worked with the UT College of Law to create the Compiled & Edited Tennessee Laws Pertaining to Animals 2010 version, which is now available. The compilation, which has become more popular than originally envisioned, empowers animal control agencies and other law enforcement agents. Now officers can easily access laws and include a copy of the violated law when handing out citations. Visit www.vet.utk.edu/cait to download or order a printed copy of the latest version.

For more information on any projects described above, please visit the CAIT website at www.vet.utk.edu/cait, or e-mail us at CAIT@utk.edu 

Compiled & Edited Tennessee Laws Pertaining to Animals



2010

with UNIVERSITY of TENNESSEE
College of Law & Veterinary Medicine

Thanks to the American Society for the Prevention of Cruelty to Animals, CAIT holds monthly conference calls where Tennesseans can call in and learn about bills currently being heard in the state legislature and how the bills, if passed, would impact animals in Tennessee. The call is free and the public is invited to participate by calling **1-866-907-7729** for more details.

In April 2010, CAIT celebrated the 1,000th feral to come through the Feral Fixin' program. The program has expanded to include ferals not just from Knoxville but from all over East Tennessee. More than 1,300 ferals have come through the program and at least 452 unwanted feral births have been prevented. The events are a great way to bring the community together to address the feral overpopulation problem in a proactive way. Volunteers have put in more than 4,100 hours for this project alone. Please help the entire feline population by keeping your cat indoors, and if you must let your cat outdoors, ensure it is spayed or neutered. **Please don't litter!**



CAIT
Companion Animal Initiative of Tennessee

NEUTER

Improving the Lives of Companion Animals in Tennessee

Each year, CAIT sponsors public seminars, and their popularity continues to grow. Two of our most popular include "Alternatives to Being the Alpha: Better Ways to Interact with Dogs," and "Keeping Cats Healthy." The seminars can be viewed online under the events tab on the CAIT website.

Troubled Teens & Homeless Dogs ... HALT for Lessons Learned


For Dr. John Shaw, HALT is the ultimate win-win organization. Shaw, a 1987 graduate of the College of Veterinary Medicine and owner of Ideal Veterinary Hospital in Oak Ridge, Tennessee, serves on the Board of Directors for HALT—Humans and Animals Learning Together. HALT links troubled teens with homeless dogs, which receive basic obedience training as part of the teens' therapeutic treatment.

Shaw oversees veterinary care for the dogs selected to participate in the HALT program twice a year. "We're doing good for animal shelters, for the kids and for those who adopt a HALT dog afterwards," said Shaw. "It's rewarding to see animals arrive from the shelter and see their personalities blossom as they learn to play and interact with other dogs and people. It's why I'm in the business I'm in."

The HALT program is sponsored in part by the veterinary college. Twice yearly adolescents from local residential treatment centers conduct basic obedience training for HALT dogs during a four-week course. Dogs are selected from Young-Williams Animal Shelter and given physical exams and vaccinations by Shaw and his staff. Dogs are also treated for any medical conditions, spayed or neutered, and observed for any underlying health conditions before being transferred to Catatoga Kennels in nearby Farragut, where HALT classes are held.

Everyone associated with HALT contributes to the success of the program, said Shaw, who not only is involved in the veterinary medical side of the program, but occasionally is able to attend HALT classes and observe first-hand how the dogs and teens interact with each other. "For a dog that I perhaps earlier thought might be difficult to train to be responding so well to a girl who can see her own traits in the dog is so rewarding."

The impact of having a veterinarian involved in HALT is huge, said Candy Wansley, HALT board chair. "Dr. Shaw and his staff are so dedicated, not only to the HALT dogs, but to the teens," said Wansley. "Seeing a troubled teen hug and train a homeless dog brings hope and joy to all involved in HALT."

Each year HALT works with about 20 teens and 10 dogs. HALT volunteers help each adolescent train the dogs, while helping the teens learn about themselves. Classes are held each spring and fall, with the next HALT class beginning on April 18 and concluding on May 12, 2011. For information about HALT or adopting a HALT dog, go to www.vet.utk.edu/halt or call Catatoga Kennels at 865-693-5540. Adoption fee is \$100, which supports HALT. 



HALT dog graduate Casey Snow poses with Bailey Snow, a member of his permanent family.

Caring for People Who Care for Animals

The University of Tennessee Veterinary Social Work Program (UT-VSW), a partnership of the UT Colleges of Veterinary Medicine and Social Work, is designed to inform, enhance and support both professions. The program began in 2002 and has since become a model program in the fields of veterinary medicine and social work.

Educating Veterinary Social Workers Online

Veterinary social work is growing in its mission of educating social workers! In spring 2010, the program offered its first academic course on veterinary social work. The class was delivered entirely in an online format, allowing social work students from across the state of Tennessee to enroll. Because it was offered through distance education, we were able to offer lectures by experts in the field from across the country. Lecturers included Dr. Christina Risley-Curtiss from Arizona State University; Dr. Tracy Zaparanick, associate dean of academic affairs, Humane Society University; Mrs. Toni Eames, a trailblazing leader in the field of guide dogs for the blind and adjunct professor of Sociology at California State University; and Ms. Mary Nell Bryant, active lobbyist for children and animals in the Tennessee Legislature. We also were so pleased that two faculty members from UTCVM agreed to contribute: Dr. John New, founder of HABIT, presented on animal welfare in animal-assisted interventions, and Dr. Carla Sommardahl, large animal internist, presented on specific needs when helping with large animal loss.

This class, Introduction to Veterinary Social Work, is now a core component of the new Veterinary Social Work Certificate program (VSW-CP). The certificate program contains 22 credits and can be completed by current Master of Science in Social Work (MSSW) students at the UT College of Social Work. The entire certificate curriculum as well as the entire MSSW program can be completed online through distance education. The program offers a comprehensive foundation in veterinary social work topics focusing on the knowledge and skills needed to integrate animals into social work practice in ethically sound ways and in keeping with the values of the social work profession. The vision of VSW-CP is to produce professional social workers knowledgeable in the practice and skills necessary to help people through human-animal relationships in a variety of settings and through a variety of social work practice methods.

New Partnership in UTCVM's Leadership Training Program

UT-VSW is very excited about the partnership Dean Jim

Thompson established with Banfield to provide additional leadership education for the college's veterinary students. This fall the second-year students participated in a



two-day program on the veterinary college campus. The first day focused on FRANK Communication Training (a training program developed specifically for Banfield by leaders in the field on veterinary communication skills), and the second day was dedicated to education on leadership styles and teamwork skills. The topics were delivered by seasoned professional veterinarians who work for and educate Banfield employees about the skills necessary for success in practice. This opportunity to develop communication and leadership skills in UTCVM veterinary students gives them a competitive edge in the veterinary industry today.

Highlights from the 2010 Veterinary Social Work Summit

In May 2010 the college hosted the second-ever Veterinary Social Work Summit. The feedback about the 2010 summit was as positive as the first! Topics presented fell into the four areas of veterinary social work: the link between human-animal violence, grief and bereavement, animal assisted interactions, and compassion fatigue management. Additional topics included animal hoarding interventions by a New York City social worker; "Donkeys and Chickens and Goats, Oh My," a presentation on peoples' attachments to farm animals; mindfulness practice and the human-animal connection; and a panel discussion on human social support needs in veterinary practices. The panel included representatives from the American Animal Hospital Association (AAHA), the Animal Medical Center of New York, the University of Minnesota and the University of Tennessee. Attendees of the 2010 Veterinary Social Work Summit included veterinarians, veterinary technicians, licensed professional counselors, marriage and family therapists, and of course, social workers!

Fourth annual Pet Memorial Day

On September 12, 2010, Veterinary Social Work hosted its fourth annual Pet Memorial Day. This nationally recognized "holiday" is always held the second Sunday in September. During the event, participants had an opportunity to memorialize their animals through art projects and a short memorial ceremony.



Proud of Our New Staff Social Worker!

We are very pleased to have added Sarina Lyall, LMSW, to the Veterinary Social Work team. Sarina was a veterinary social work intern in the 2009-2010 academic year and then joined the team serving as the staff social worker and primary grief counselor for the veterinary clinics. She has had an interest in grief counseling for many years and has a true talent in helping people heal after the loss of loved ones. When you call the VSW PAUSEline at 865-755-8839, you will most often find Sarina's calming and kind voice on the other end.

Pause with our PAUSE Program


PAUSE stands for "People and Animals United through Service and Education," which captures UT-VSW's vision and mission perfectly. PAUSE also means, however, to actually pause. The pace of today's life is very fast. With e-mails and text messages, iPods and iPads, and all the excellent computer technology available today, everything seems to move a lot faster than it used to. To spend an entire Sunday afternoon sitting outside on the front porch, drinking lemonade, doing nothing except watching the birds and butterflies, and occasionally saying hello to a neighbor that passes by rarely happens anymore. We are plugged in and moving fast! One thing that helps us slow down a little is often our connection with animals. Pausing to sit with, enjoy and care for an animal can give us a mo-

ment of respite from the busy world.

To honor this gift given to us by our animals, we at UT-VSW are dedicated to helping people



**PEOPLE & ANIMALS UNITED
THROUGH SERVICE & EDUCATION**

find efficient ways and times to just simply "PAUSE" and enjoy life, instead of getting stuck on an endless treadmill of accomplishing the next task and responding to the next crisis. For more information, call our VSW PAUSEline at 865-755-8839. Remember, find a little moment to PAUSE today. 

From Sarina—

"Grief is something we will all experience in our lives. I have found that grief over the loss of a companion animal is often more painful due in part to the lack of support and validation for the loss. We here at Veterinary Social Work provide a safe and supportive place for individuals to tell their story, and the most important thing I do is listen with an open heart. Every person has a unique story about how his or her animal became a part of his or her life and what the animal meant. I then use that story to help the owner find ways to honor an animal's memory. When I work with pet parents, I try to help them use their grief as an opportunity for personal growth.

"Some of the clients I work with have not yet experienced the death of their beloved animal; however, they may be providing care for their animal that has a terminal or chronic illness. These individuals are going through anticipatory grief and often need to talk about their emotions. During these times, I can provide brief supportive phone calls.

"The Veterinary Social Work grief services that we offer are not just for the owners of the animals. Often VSW provides grief counseling and support to the veterinary teams who have formed a bond with their patients. Sometimes alumni of UTCVM call us for support, too."

Please go to www.vet.utk.edu/socialwork for more information about Veterinary Social Work at UTCVM and about pet loss counseling and support groups through PAUSE.

Paw Prints in the Heart

by Karen J Armsey,
HABIT Program Coordinator

Bea Lauten was not a classically beautiful dog: she had a huge scar on her head; she was so skinny that you could see all her ribs; and she had this long skinny tail that she could use as a whip. In fact, it was her tail that I first noticed; it was always wagging.

When I was first starting my job at Human-Animal Bond in Tennessee (HABIT), Dr. Susan Lauten, CVM nutritionist, stopped by the office to talk with my predecessor, M.L. Dotson, and she had Bea with her. While she was standing at the door, I realized that the thumping noise I was hearing was Bea's tail hitting against the door. And because they were talking about something I was not involved in, I asked if I could take Bea for a walk. While I had her outside, we stopped and sat in the sun for a few moments. While I talked to Bea about my day, she looked me straight in the eye and listened to every word that I said, and the tail never stopped.

As I got to know Bea, I learned what an amazing dog she was. Bea was a HABIT dog who worked with special education classes starting at Lonsdale Elementary School, but at that time she was also working at Dogwood Elementary School, and according to Dr. Lauten, Bea loved her work. I could tell from the monitoring forms that I received and the stories I would hear that the students had a special connection with Bea. I learned just how important Bea was to the students when my dog Maggie and I substituted for Bea and Dr. Lauten. Dr. Lauten had hurt her back and was not going to be able to visit with the students for six weeks. Because

a couple of students had made progress with the help of the dog, we thought that it would be good to have Maggie go in Bea's place. I quickly

learned that, while they thought Maggie was a perfectly nice dog, she was no Bea. Every week I visited with them, I was told by at least one of the students that Bea would do it differently, and that they missed Bea. I am sure that the sun was shining on the day that Bea returned to the classroom; if it was not shining in the sky, it was shining in the faces of the students when they saw their friend and Dr. Lauten walk back into the class.

Bea had fought and won a battle with cancer before I met her, but you would never have known she was ever sick. The tail just kept wagging. Dr. Lauten saved her from a bad situation, so no one knew her age. So when she started to slow down, it was hard to tell if it was from old age or ill health. Dr. Lauten retired Bea from HABIT a year ago, but I always hoped that she would bring her back. I learned a few months ago, that Bea had left us; I was saddened by this very much. I miss having her

listen to my stories, but most of all I miss the drum beat of her tail.

While Bea Lauten was not a classically beautiful dog on the outside, on the inside she was one of the most beautiful dogs I have ever had the pleasure to meet. She taught me that life's journey is not always easy and that sometimes you end up with scars. But if you stay hopeful, never give up, and never stop wagging your tail, you will end up where you can make a difference and maybe even change some lives.

For more information about the HABIT program, go to www.vet.utk.edu/habit.



H.A.B.I.T
Human-Animal Bond in Tennessee

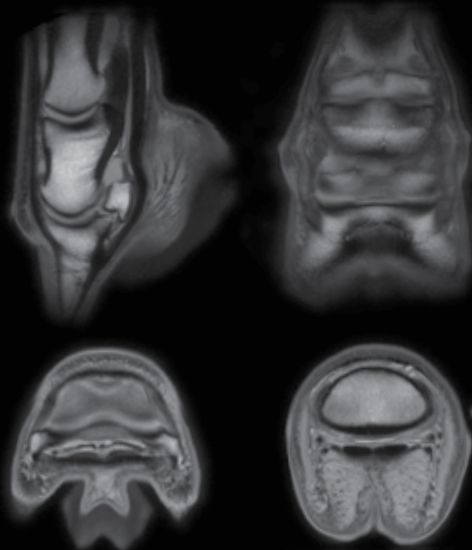
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BEYOND ROUTINE



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UT Veterinary Medical Center

UT Veterinary Medical Center now offers high-field Magnetic Resonance Imaging (MRI), eliminating the need for clients to trailer their horses long distances for advanced diagnostics. Our veterinary medical team of board-certified surgeons, anesthesiologists, radiologists and licensed veterinary technicians has partnered with MREquine Diagnostics Imaging to expand our radiology services and bring this powerful, noninvasive diagnostic tool to the region for community veterinarians, enabling them to provide a more targeted therapeutic treatment plan for their patients.

MRI is ideal to evaluate soft tissue pathology, especially the nervous and musculoskeletal system. Our expanded imaging capabilities include:

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For more information, contact Dr. Jim Blackford at jblackford@utk.edu.



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9:00 a.m. ~ 4:00 p.m. **Saturday** April 16, 2011