



# *Veterinary* **VISION**

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Volume 10/Number 1

**Everyone Can Help: Dog Bite  
Prevention in Children**

**Off-season Surgery for  
UT's Smokey**

**Regenerative Medicine: Stem  
Cell Therapy Helping the  
Equine Community**

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As this issue goes to press, I am pleased to report the UT Veterinary Medical Center's equine and farm animal hospitals renovation and expansion project is well under way with an anticipated completion date of March 2013. Furthermore, we have completed the merger of the Comparative Medicine and Pathobiology departments into the Biomedical and Diagnostic Sciences department with the intent to secure national accreditation of our diagnostic laboratories, a service and discovery area in which the UT College of Veterinary Medicine is a national leader.

I am pleased to announce the formation of the college's Regenerative Medicine Alliance of Tennessee (RMAT), which involves collaborations with multiple faculty investigators in our clinical sciences departments and the

*RMAT is the perfect blend of basic science and clinical medicine*

UT Graduate School of Medicine focusing on using stem cells for the treatment of vascular, neural and orthopedic diseases. In the Large Animal Clinical Sciences department, researchers are investigating the potential roles of cells in regenerative

therapy. The project got under way in 2009, and results to date have been instrumental in initiating both basic and clinical experiments pertinent to equine regenerative medicine. Our LACS group established and validated protocols to isolate stem cells from fat tissue and peripheral blood in horses. Continuing with this initiative, they have also optimized protocols to encourage these cells to differentiate into three other cell types: osteocytes (bone), adipocytes (fat) and chondrocytes (cartilage). The next team goal is to understand the biology of these cells with regard to influencing their proliferation rate, differentiation capacity and expression of markers for identification. In order to use these cell-based therapies effectively, it is imperative to understand this biology and to identify methods to direct cell function.

With these outcomes, researchers would be able to encourage regeneration of cells and tissues to restore normal function. Already veterinarians are using these results to treat client cases of bone and tendon damage and laminitis. Effective treatment in horses can then be translated for use in human patients. In fact, the collaboration with the UT Graduate School of Medicine is aimed at generating and using custom biomaterial that will play an important role in tissue engineering for humans.

Thank you! I am excited to let you know that UTCVM achieved \$54.2 million through the Campaign for Tennessee thanks to the wonderful generosity of many of our supporters—clients, alumni, friends, corporations, associations and professional groups, and foundations. Our goal of \$50 million was well exceeded—a testimonial to the quality of health care and education we deliver in support of animal health and welfare and the veterinary profession.

Further good news centers on the formation of the UTCVM Alumni Council, which is supported by the college's Office of Alumni Relations and Development. Class representatives from each of our 32 alumni classes met as a group for the first time in August to serve the purpose of providing a link between the college, its graduates and external constituencies. We envision council members contributing to the vitality of the college by maintaining and creating connectivity of all alumni with our faculty, staff and current professional students. I am excited about this special opportunity to advance the college and strengthen its relationship with its graduates.

UTCVM made national news this fall when our Center for Agriculture and Food Security and Preparedness (CASFP) received notice that the U.S. Food and Drug Administration made a five-year award of \$1.3 million per year to build on its well-established national training program to address high priority needs of the National Integrated Food Safety System (NIFSS). Through the use and modification of already existing food safety and defense training courses, CASFP will support the granting agency in documenting concrete training program deliverables supporting the Food Safety Modernization Act and the NIFSS within the first year of this grant program.

Finally, I want to express my sincere gratitude for all you do to help build our future with your gifts of time, expertise and funds. There are many challenges ahead, but working together, we will accomplish all of them to improve animal and human health. 🍷

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





# Veterinary VISION

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## On the Cover:

Doll, a 10-year-old American quarter horse, is a stem cell donor for the UT College of Veterinary Medicine's Regenerative Medicine Alliance of Tennessee. CVM researchers have found that Doll's stem cells, shown here in the background, seem especially robust, giving the college a good supply for incoming patients. CVM's researchers and veterinarians have been cultivating stem cells harvested from the bone marrow of horses, which are then injected into equine patients to speed healing of tendon and ligament injuries.



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# Dog Bite Prevention in Children: Everyone Can Help



With aid from Rufus, Dr. Carrie Talley, '01, is doing her part to help prevent dog bites in children. Talley graduated from the college about the time Dr. Michael Sims and Dr. John New launched the college's Dog Bite Prevention Program for Children. Dog bites are a costly public health problem in the United States. The Centers for Disease Control and Prevention estimate 4.5 million Americans are bitten by dogs each year, and 1 in 5 dog bites results in injuries that require medical attention. Among children, most dog bite-related injuries occur in those between the ages of 5 and 9 during the warmer months of the year.

When Talley's son Carter entered first grade in Maryville, Tenn., she thought it would be a good idea to talk to him and other kids his age. "When I picked Carter up from school, I noticed other parents bringing their dogs as they picked up their children. Kids express love through hugging, and they think that's what all dogs want them to do. While some dogs will tolerate it, other dogs interpret the gesture as threatening or painful and it doesn't always end happily." Talley knows that first-hand; as a child, she was bitten on the face when she hugged a relative's dog. Her goal with the first-graders at her son's school was to teach them proper ways to behave around dogs and show affection in other ways.

The college's Dog Bite Prevention program has grown to include materials for use at home and in school

classrooms. In addition to a website for both children and adults ([www.vet.utk.edu/dogbiteprevention](http://www.vet.utk.edu/dogbiteprevention)), a 12-minute video with Rufus (a large lovable costumed dog that teaches children how to avoid dog bites), pamphlets and bookmarks, a complete lesson plan is also available. May 2011 marked the third year the college distributed Dog Bite Prevention DVDs to almost 5,000 first-graders in Knox County.




Maryville, Tenn., elementary school student Carter Talley with his dog, Otis.

Talley says the program is well designed and the lesson plan easy to follow. "I read through the material, which includes questions to ask the students before the presentation. What surprised me most was the huge percentage of hands that went up when I asked who had been bitten by a dog. I'm so glad we have this resource and are able to minimize the future risk for these kids." Talley adds that the program was well received by the almost 100 first grade students. "The video was entertaining, and the plan does a good job reiterating important lessons. The students asked thoughtful questions, and even the teachers said they learned valuable information."

Talley encourages others to learn more about the program. "I didn't have to put a lot of time in it at all. The program

almost runs itself, and the teachers love you for that. You look like a hero walking out of the classroom."

For information about the program, visit [www.vet.utk.edu/dogbiteprevention](http://www.vet.utk.edu/dogbiteprevention). Contact Dr. Michael Sims at 865-974-5820 or at [msims@utk.edu](mailto:msims@utk.edu) for pricing and ordering information. Donations to the program are appreciated and can be made at [www.vet.utk.edu/giving](http://www.vet.utk.edu/giving). 



# MABEL THE TABLE



I've heard them all. Mabel the Table. Mega-Mabel. Mabel's never met a bag of treats she didn't like... Do you think I like being this non-petite?

The words hurt, but so do I! My joints ache. Breathing can be a chore. Just rolling over is exhausting! My new mom, Dr. Angela Witzel (a veterinary nutritionist at UT Veterinary Medical Center), has to carry me up the steps so I can be with my new family! How embarrassing is that?

Just before Christmas 2011, my owners surrendered me to Young-Williams Animal Center in Knoxville because I was just too large for them to care for me. Instead of my ideal weight of 23 pounds, I weighed a whopping 67 pounds! The nice vets at YWAC arranged for me to visit the nutrition and physical therapy services at UT. I was the fattest dog they had ever seen—AND THEY HAVE A FAT CAMP! But that's how I met my mom. And let me tell you, I can't get away with anything!

My caloric intake is monitored (in spite of my begging!), and I have to exercise. Right now I use the underwater treadmill because it's much easier on my joints and the water helps support my weight. No fad diets and no miracle pills. Vet Vision readers, the next time you see me I'll be healthier and happier!



Have your person call 865-974-8387 if you need to lose weight.

 Follow my journey on Facebook!

## Off-season Surgery for Smokey

During the second game of the Volunteers' 2011 football season, Dr. Darryl Millis noticed Smokey IX, the 8-year-old bluetick coonhound mascot, showing early signs of lameness. Millis, whose season seats are on the first row at Neyland Stadium, tapped an officer on the shoulder, explained he is an orthopedic surgeon at the UT Veterinary Medical Center, and asked to speak to Smokey's handlers. Immediately following the game, Smokey's handlers (members of Alpha Gamma Rho Fraternity) brought the mascot to the John and Ann Tickle Small Animal Hospital at the medical center. The diagnosis? A partially torn anterior cruciate ligament. Unlike humans, where a torn ACL is usually the result of an acute traumatic event or sporting injury, an ACL injury is a degenerative condition that manifests itself gradually in dogs. It is the most common injury seen by the orthopedic service at the medical center.

Sometimes owners attribute their dog's "slowing down" to old age or arthritis. Changes in activity level, no matter how minute, can lead to undiagnosed problems that can be treated with medicine, physical therapy, surgery or a combination of the three. The game plan for Smokey was to help him make it through the season pain-free.

Smokey's treatment mirrors treatments found at a human hospital: a combination of platelet-rich plasma, therapeutic laser, electrical stimulation (e-stim), non-steroidal anti-inflammatory drugs, and joint supplements. Smokey's physical therapy also includes walks in an underwater treadmill and balancing exercises under the supervision of both Millis and Dr. Marti Drum, clinical instructor in charge of the hospital's physical therapy and rehabilitation service. The treatment helped Smokey make it



through the remaining eight games of the season without joining fellow Vols on the ranks of the injured reserved.

Smokey has undergone off-season tibial plateau leveling osteotomy (TPLO) surgery in his knee. Since Smokey is an otherwise fit and healthy dog, Millis is hopeful the mascot's post-operative rehabilitation will be successful, and his howls will fill Neyland Stadium next season.

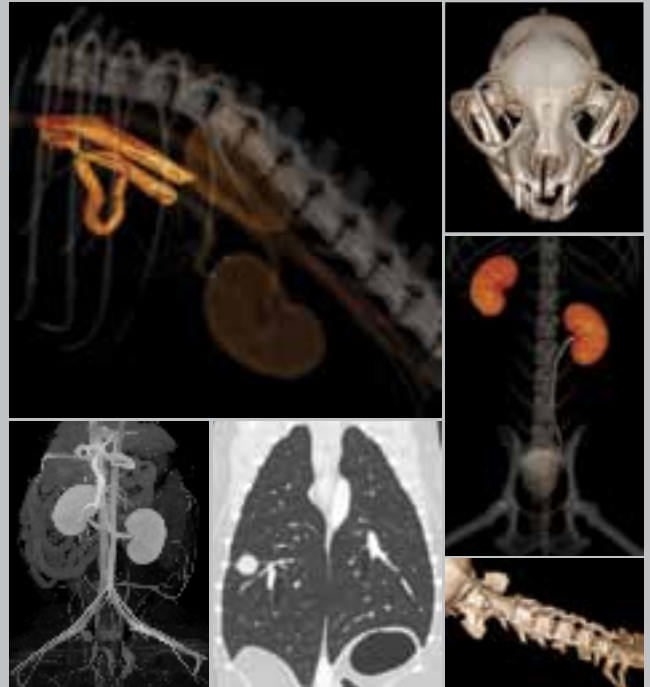
# Images Matter! **Coming soon for our referring DVMs: Outpatient CT scans**

UT Veterinary Medical Center is excited to announce the installation of a new 40-channel multidetector CT scanner. This new Philips Brilliance 40-channel CT puts the medical center at the forefront of CT imaging as it is one of a handful of teaching institutions in the country to possess this cutting-edge technology.

This powerful CT scanner offers ultra-fast scan times, translating to shorter patient anesthesia: a whole body scan can be conducted in less than 30 seconds! Because images are acquired using slices that are less than 1 mm, resolution is greatly enhanced, and images can be quickly and seamlessly reconstructed in multiple planes and in 3-D. These tools greatly augment our board-certified radiologists' diagnostic accuracy, and they expand our imaging capability to include angiographic studies for the evaluation of portosystemic shunts, thromboembolic disease and other vascular abnormalities. In addition, 3-D reconstructions are potent tools in the pre-operative evaluation of various diseases, especially orthopedic conditions such as complex fractures.

Multidetector CT technology is not only a powerful diagnostic tool: it is also an invaluable teaching tool. Its multiplanar and 3-D reconstructions allow students and practitioners to better comprehend anatomy and the complex relationship of soft tissue, bones and vessels.

Similar to other services that the UT Veterinary Medical Center offers on an outpatient basis for our referring veterinarians, this multidetector CT scanner is another cutting-edge diagnostic tool community veterinarians can offer clients.



Ophthalmology resident Dr. Sonia Kuhn and Avian and Exotic Medicine resident Dr. Katherine Baine are working with faculty members Dr. Diane Hendrix and Dr. Mike Jones to lay the groundwork for eye health in future generations of America's symbol, the bald eagle. While eagles have the best vision of any animal, veterinarians often see the raptors when they are sick or have suffered some sort of trauma. Working with Dollywood's American Eagle Foundation, UT Veterinary Medical Center clinicians have the opportunity to get an up-close look at the healthy eyes non-releasable raptors.

The clinicians have added another component to the annual physical exams of the raptors at the American Eagle Foundation: comprehensive ophthalmology exams. Learning the normal parameters of a healthy eagle eye will not only enable veterinarians around the world working with injured eagles to determine the extent of damage a raptor's eye has suffered but also help them prescribe the best course of treatment.

At the Veterinary Medical Center, the eye exams include testing tear production, slit-lamp biomicroscopy, ophthalmoscopy, electroretinography to measure the eye's electrical response to light, and measuring intraocular pressure.

## Seeing into *the* **FUTURE**





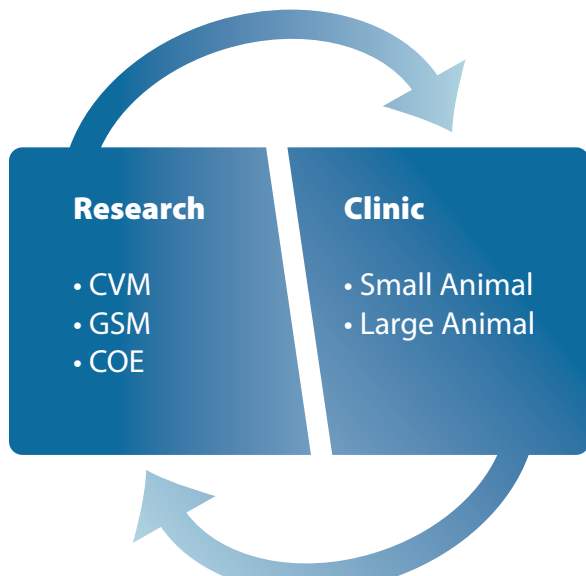
# Lending a Helping Hand to the Equine Community

by Madhu Dhar, Ph.D.,  
Research Associate Professor, Large Animal Clinical Sciences



## The Regenerative Medicine Alliance of Tennessee

The Regenerative Medicine Alliance of Tennessee at the University of Tennessee, Knoxville, encompasses an interdisciplinary group of faculty from the UT College of Veterinary Medicine, the UT Graduate School of Medicine, and the UT College of Engineering and is focused on using stem cells for curing diseases and alleviating suffering. For clinical cases, the large animal clinical component of the RMAT uses adult stem cells that have been isolated from horse bone marrow and fat. Preclinical studies in large and small animal models will set the groundwork for use in human clinical trials. RMAT is a perfect blend of basic science and clinical medicine. The UT Veterinary Medical Center provides the group with clinical cases of naturally occurring diseases, where stem cell therapy can be used to relieve pain and suffering and encourage healing. RMAT is fueled by a symbiotic relationship between research and the clinical environment.



## Introduction to Stem Cells

Stem cells are like master keys, possessing all the information needed to open all doors; however, by adding small constraints to this master key, it is possible to limit which door the key opens. In the same manner, stem cells are undifferentiated cells that are capable of differentiating into specialized cell types. Commonly, stem cells come from either embryonic or adult sources; in an effort to avoid ethical, political and legal issues, RMAT's clinical and research endeavors do not use stem cells from an embryonic source. The adult, somatic, stem cells the group uses exist throughout the body, including the brain, bone marrow, blood, blood vessels, skeletal muscles, skin and the liver. In the body, these cells remain in a quiescent or nondividing state for years until activated by disease or tissue injury.

Adult stem cells also act as the "paramedics of the body." In animal models, they have been shown to move rapidly into areas of tissue damage to enhance repair, revascularization and blood flow, while reducing inflammation and scarring. Adult stem cells isolated from bone marrow, peripheral blood, fat and umbilical cord blood also are referred to as adult mesenchymal stem cells (MSCs) and because of their biological properties and their ease of collection, they are routinely being used in cell-based therapies.

Stem cell research is also useful for learning about human development. Undifferentiated stem cells eventually differentiate partly because a particular gene is turned on or off. Stem cell researchers may help to clarify the role that genes play in determining what genetic traits or mutations we receive. For example, cancer and other birth



The RMAT Team (left to right): Dr. Dennis Geiser, director; Nancy Neilsen, research associate; Dr. Madhu Dhar, principal investigator; and UT Graduate School of Medicine's Dr. Chris Stephens, principal investigator.

defects are affected by abnormal cell division and differentiation. New therapies for diseases may be developed if we better understand how these agents attack the human body.

## Equine Clinical Trials

Equine stem cell research has the potential to improve the overall well-being of the patient and to translate to human medicine. Personnel in the research lab process, culture and cryopreserve bone marrow, or adipose-derived adult stem cells, and make them available to the clinic as the need arises. Cryopreserving these cells in a special media after expansion ensures that the cells are living and will grow when they are removed from their cryopreserved state. For example, roughly 10 million stem cells can be made available to a clinician in as little as one

to two hours for one injection into a tendon with a superficial digital flexor tendon (SDF) injury, into the coronary band of a laminitis horse, or into a horse with navicular disease. We are currently using equine stem cells successfully in the Large Animal Clinic at the UT Veterinary Medical Center and have treated cases with musculoskeletal soft tissue injury. However, the ability of stem cells to assist in the patient's recovery is highly dependent on the disease state and should not be considered a miracle drug. In light of what we know about stem cells, research is

being done so that stem cell therapy can be used routinely for each and every case presented to the clinic.

In addition to the work of the research team, clinical applications involve the work of large animal clinicians Dr. James Schumacher and Dr. Steve Adair, along with surgery resident Dr. Jessica Carter-Arnold.

Stem cells are provided to the clinic by the UT College of Veterinary Medicine's large animal research laboratory. The research laboratory is the place where equine stem cells are studied before they are made available to the clinic. The lab work involves the isolation, identification and characterization of adult stem cells from horse bone marrow, fat and peripheral blood. Even though the cells isolated from all of the above sources are referred to as stem cells, they are different in terms of their cellular properties. Our main focus is to characterize them using molecular tools in such a way that they can be manipu-



Above: Dr. Jessica Carter-Arnold, surgery resident Left: Equine Surgeons: Dr. Steve Adair and Dr. James Schumacher







Fig. 2A. Ultrasound images to show superficial digital flexor tendon (SDF) damage repair using stem cells in a research horse from the teaching herd at the Cherokee Farm. Ultrasound images of the right front SDF on the day of injury (A), at treatment 1 (B), treatment 2 (C), treatment 3 (D), and 67 days post initial injury (E).

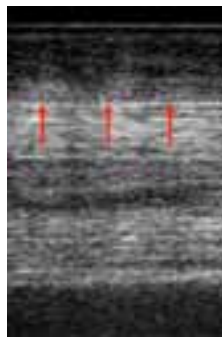


Figure 2B. The leg at treatment 2 (left) and 6 months post injury (right).

lated to perform better in the clinic. The lab performs tests to satisfy certain stem cell criteria for cells harvested from each and every source. In human medicine, the International Society of Cell Therapy (ISCT) has proposed three criteria to define stem cells. Equine researchers follow the same rules and criteria:

1. We measure the rate at which the cells grow and multiply in a tissue culture dish.
2. We assess whether the cells express the proteins that are used as markers to identify them as stem cells.
3. We demonstrate in a tissue culture setting that a potential stem cell has the capacity to become a bone, cartilage or fat cell when it is presented with suitable reagents in the culture dish (this step is imperative).

For translation into clinical therapy, the main focus of this research is to characterize the cells in such a way that we know what type of a cell (bone, cartilage or fat) is being injected into a patient. This characterization will help us understand the healing process and gain an insight into equine stem cell biology.

Another major aspect of stem cell biology actively being studied in the research laboratory is the choice of

autologous versus allogeneic stem cells. Even though the thrust in veterinary and human medicine is in using stem cells isolated from a patient (autologous) and reintroducing them into the same patient, that process can be technically challenging. For example, whenever stem cells are used in therapy, adequate numbers of these cells are required, and they can be obtained only by growing them in a tissue culture laboratory in the presence of a defined medium. Our research shows that if we start with roughly 100,000 equine bone marrow-derived stem cells, ideally, 6 million to 8 million cells should be available after one week. As a result, we have to wait at least for one week to obtain enough cells for one injection. For this reason, we isolate stem cells from horses in our teaching herd, characterize them completely with respect to the aforementioned ISCT criteria, and then decide which one to use in the clinical cases. Even though we are using the ISCT guidelines, compared to human medicine, there are still some inconsistencies in equine stem cell biology. We still have much to learn, and hence, basic research is ongoing in the lab.

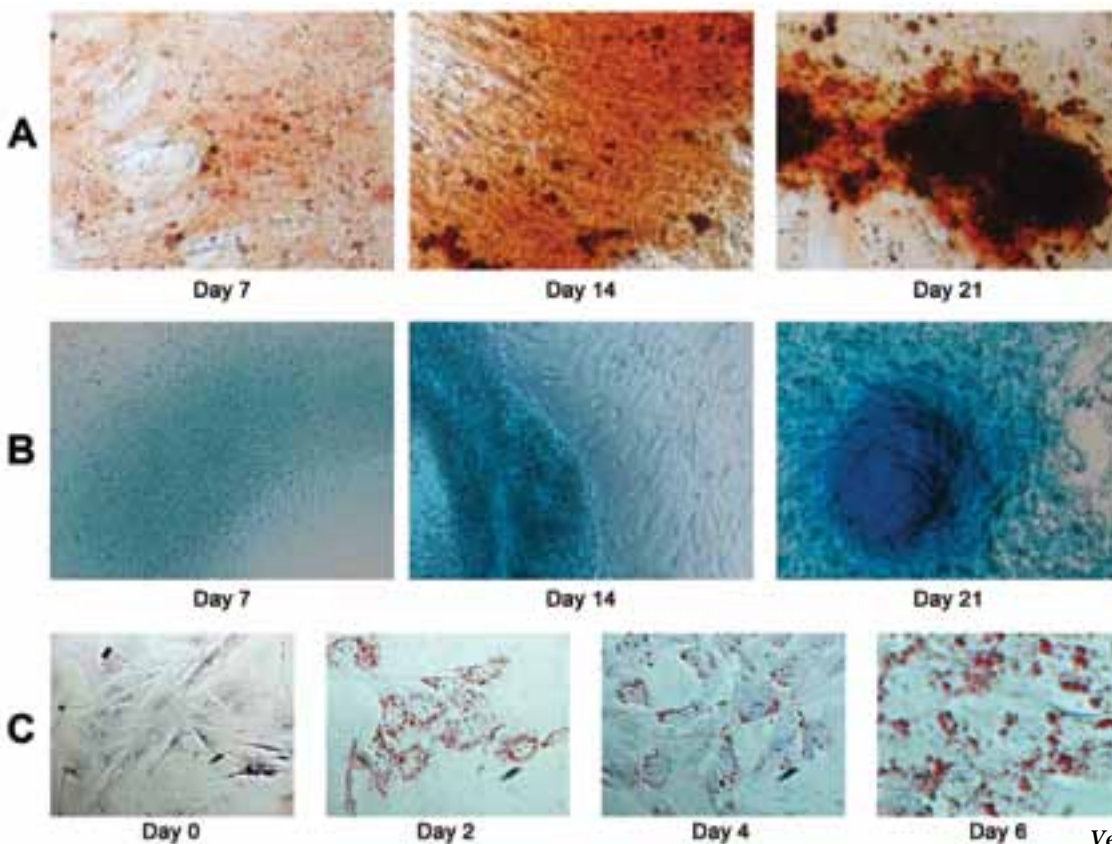


Fig. 3. Staining shows bone (A, red), cartilage (B, blue) and fat cells (C). Stem cells, as described in Fig. 1 are grown in the presence of specific cell culture reagents, which promote them to become bone, cartilage or fat cells, as the need may be (termed as differentiation).



## Laboratory of Regenerative Medicine

An important and recently upcoming aspect of stem cell research currently being studied in the research lab is tissue engineering. This effort has led to the collaboration between Dr. Madhu Dhar, College of Veterinary Medicine, and Dr. Chris Stephens, Graduate School of Medicine, to focus on basic science and translational applications of stem cells and tissue engineering. This collaboration led to the formation of The Laboratory of Regenerative Medicine (RegenMed), a research component of RMAT.

Tissue engineering was first developed because cells outside the body grow in only two-dimensions, which is vastly different from the three-dimensional environment in the body. This dimensional change in cell growth can be envisioned as the difference in building a ranch-style house and a large skyscraper. The difference in tooling and knowledge needed to transition between these construction

*“RMAT is a perfect blend of basic science and clinical medicine.”*

types is significant and comparable to the difference between two and three dimensional cell culture.

The body naturally produces a microscopic support structure during embryo development that allows for tissue formation; however, the traditional lab environment lacks the microscopic scaffold needed for this formation. Therefore, our tissue engineering endeavors focus on the use of custom scaffolds that support three-dimensional cell growth in the lab and clinical environment. The ability to persuade cells to grow in three dimensions allows our team to regenerate the damaged tissue using stem cells. Our current clinical applications of this technology are in stem cell-based repair of equine corneal abrasions and large, nonhealing wounds.

In vitro testing of a couple of custom generated scaffolds is currently in progress in the RegenMed lab. We currently have a Ph.D. student, Pelagie Favi, who is carrying out tests in the tissue culture lab on these scaffolds. The information gained will be used to translate into in vivo (animal) applications.



Dr. Madhu Dhar, holds a Ph.D. in Biochemistry. She has more than 15 years of experience in cell and molecular biology. Dhar is leading the bench work involving the isolation, identification and characterization of adult stem cells from equine marrow, fat and peripheral blood.

Research data from the large animal clinical laboratory has been presented as posters and oral presentations at national and international meetings.

## The Future of UT's Stem Cell Efforts

Efforts in both basic and clinical aspects of equine stem cell biology are ongoing at UT. In terms of basic research, we need to understand why and how some stem cells work better than others. What are the mechanisms involved when stem cells are used to repair a broken tendon or a navicular bone? In terms of clinical applications, stem cells will likely continue to be an important mode of therapy, and the clinicians will likely continue to use and refer to stem cell therapy as needed. Unique to the UT Veterinary Medical Center is that we have now identified two important applications for adult stem cells: wound healing and repair of corneal ulcers. Plans are underway to start pilot studies in which the use of stem cells in equine models of wound healing and corneal ulcers will be assessed.

### FUNDING SOURCES

University of Tennessee Center of Excellence in Livestock Diseases and Human Health.

Graduate School of Medicine Physicians Medical and Education Research Foundation (PMERF) and the Cardiothoracic Surgery Gift Fund, University of Tennessee Medical Center.

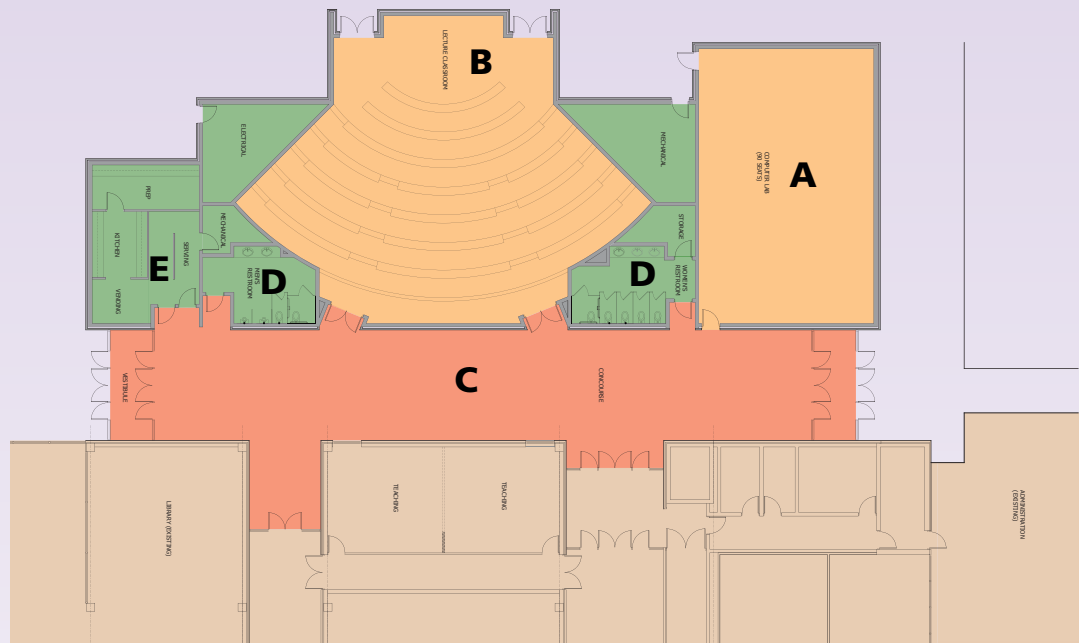


The College of Veterinary Medicine is pleased to announce that plans for a new Teaching and Learning Center are complete. The center will support our primary purpose: teaching the next generations of veterinarians.

The contemporary teaching facilities will enable us to provide a superior learning environment for our students on both an individual basis and in a larger classroom setting (85 to 95 students per year). The new atrium and concourse space will allow for greater informal student interaction and will serve as a venue for classes and collegewide activities and programs.

**Floor Plan**

- A—Computer Lab
- B—Seating
- C—Atrium concourse
- D—Restrooms
- E—Kitchen
- Existing Building



9,500 square feet of new construction  
 1,475 square feet of renovated space  
 Estimated construction cost \$2,055,500

- 124-person capacity lecture room
- 90-person capacity computer classroom
- Two 40-person capacity teaching rooms
- Kitchen and vending room with serving counter
- 20 foot x 130 foot atrium/concourse
- Large restrooms



# Class of 2014 Hosts Golf Tourney to Support Big Cat Sanctuary

A strong sense of community spirit motivated members of the Class of 2014 to organize and host the first UT College of Veterinary Medicine Charity Golf Classic. After months of brainstorming and planning, the class members hosted the tournament at Rarity Bay in Vonore, Tenn., on April 9, 2011. The event benefitted Tiger Haven, a nonprofit exotic cat sanctuary and rescue service in Roane County, Tenn.

The class voted to support Tiger Haven to raise awareness of the organization's work. Sonya Hunt, class service co-chair, said that the class wanted to start a tradition at UTCVM that "we could pass down, reach out to the community, and benefit a local charity." Thanks to the students and more than 100 participants in the tourney, the Class of 2014 presented Tiger Haven with a check for \$2,000. The students are planning another spring golf tournament and are excited about selecting another nonprofit group to support. If you are interested in sponsoring a hole this spring or playing in the tournament, contact Sonya Hunt at [cvmdev@utk.edu](mailto:cvmdev@utk.edu).



Class of 2014 tournament volunteers hope the golf tournament becomes an annual event. Front row: Cassandra Bates, Kelsey Quinn, Samantha Baumgardner, Sonya Hunt, Jessica Miner, Kimberly White and Abra Snider. Back row: Sandy Hamilton, Stacy Taylor, Andrea Pennington, Carl Gilliam, Seiche Ginger and Wesley Lyons.



UTCVM Dean Jim Thompson, left, forms a foursome with veterinary students Ben Kinney, STUDENT NAME and Nick Tataryn to benefit Tiger Haven.



Local businesses and organizations generously sponsored course holes.



The Society for Comparative Endocrinology has established the Dr. Jack Oliver Graduate Research Award in his memory. Oliver developed the UTCVM Clinical Endocrinology Service and served as its director until June 2011. He was also a professor of pharmacology at the college. The society's award pays tribute to Oliver as a contributor to the field of veterinary diagnostic endocrinology.

## Student News & Accolades

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

**Novartis Excellence Awards** for 2010 were presented to the following 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** was presented to **Leslie Sadeghi, '12**. The award is named for former UTCVM Dean Michael J. Blackwell.

**Jennifer Jankovsky, '13**, received the Veterinary Student Post Award for Natural Disease at the annual American Council for Veterinary Pathologists conference.



# S.A.V.E.

SUICIDE AWARENESS IN VETERINARY EDUCATION

*"... the UTCVM family and its supporters have come together to show their love and support for a program founded in memory of one of their own ... this program will become the pioneer for similar programs at other veterinary colleges." Cynthia Alvarado, '10*



## The N. Paul Nolen II DVM Memorial Project

Suicide Awareness in Veterinary Education, or S.A.V.E., is a program developed to introduce our veterinary students to research and evidence-based concepts of mental health and suicide prevention. This project is named in memory of Dr. N. Paul Nolen II, a 2010 graduate of the UT College of Veterinary Medicine, who lost his life as a result of suicide.

S.A.V.E. will make mental health education available to veterinary students throughout all four years of the veterinary school curriculum via classroom and self-paced online content. Being a veterinary student is a rewarding experience, but it can also be quite stressful. Excelling academically, balancing a rigorous education with family needs, and coping with the inevitable challenging life events that happen in an already full schedule can be a lot to handle. High levels of stress contribute to anxiety and depression, which can lead to other problems down the road including substance abuse and suicide. Research shows that veterinary students experience depression, anxiety and stress during their education and these negative emotional states continue on into professional life as a veterinarian. Giving bad news, communicating with clients, helping clients cope with the sickness and death of animals, and working effectively in teams are all challenging aspects of veterinary practice. Sometimes these challenges and stressors contribute to mental health problems that require proper identification and care.

Through the S.A.V.E. program, students will learn to recognize the symptoms and warning signs of mental illness and suicidal ideation. They also will learn what to do if they experience those symptoms or encounter others (a client, a colleague, or family and friends) who are.

Help UTCVM build its new mental health and suicide prevention program.

### To contribute to S.A.V.E.:

#### By mail

Send a check payable to UTCVM  
(note S.A.V.E. on the memo line)

UTCVM Development Office  
2407 River Drive, A301  
Knoxville, TN 37996-4550

#### By Phone

Call 865-974-4379

#### Online

Visit <http://tiny.utk.edu/givetosave>

# ALUMNI NEWS:

Returning this fall from Vietnam to visit Tennessee, **Dr. James C. Kile III, '82**, presented two seminars in public health, one for veterinary students and one for graduate students in the field. Kile is a veterinary epidemiologist with the Centers for Disease Control and Prevention, where he works with the U.S. Embassy in Hanoi as chief of the Animal-Human Interface (AHI) Initiative of the CDC Influenza Program. The goal of the AHI initiative is to enhance collaboration between Vietnam's animal and human health ministries and to strengthen the capacity in Vietnam to develop and conduct surveillance and research activities on influenza and other zoonotic diseases. Vietnam has had unique experiences with emerging zoonotic diseases of global public health importance, including severe acute respiratory syndrome, avian influenza A(H5N1), pandemic influenza A(H1N1) in 2009, and rabies. Kile chose this assignment noting that "understanding the risks and causes of cross-species transmission of zoonotic diseases is critical to the country, to the Asian region, and globally for both animal and human health."

## Join UTCVM Alumni on Facebook!

We are excited to have a Facebook group page just for you, our alumni! This group is closed and requires authentication to join. Just log on to Facebook, search for The University of Tennessee College of Veterinary Medicine \*ALUMNI\*, and make a request to join our closed group. It's a great way to stay updated about college and alumni activities and stay in contact with classmates and other alumni. If you experience difficulty joining the group, contact Megan McMurray Dugan, associate director of alumni relations and development at [utcvmalum@utk.edu](mailto:utcvmalum@utk.edu).



The inaugural meeting of the UT College of Veterinary Medicine Alumni Council was held in August 2011 in conjunction with the Tennessee Welcome event for incoming veterinary students. The Alumni Council includes a representative from each of the college's graduating classes.

Council members will provide a strong link among the college, its graduates and other external constituencies. They will contribute to the welfare of UTCVM by connecting alumni and students and by working to advance the profession and the college. Council members will facilitate alumni gatherings and activities in connection with continuing education programs and annual council meetings, student recruitment, regional and national conferences, networking and employment of students and recent graduates, marketing college programs, and fundraising in support of the college.



Congratulations to Dr. Greg Helton, '88, the first chairman of the new UTCVM Alumni Council.





# Earn Income *by* Making a Gift

In a recent article in The Wall Street Journal, the question was raised regarding how a retiree could replace interest income from certificates of deposit when current rates are hovering around 1 percent. That article, "Earning Income by Making a Gift," provided an answer: a charitable gift annuity.

The process is simple. **You make a gift** to a charitable organization, such as the University of Tennessee Foundation, for the benefit of the College of Veterinary Medicine **in exchange for a lifetime annuity.** You actually will be giving what remains of the annuity at the time of your death to the college. In the meantime, you will receive a fixed income stream for the rest of your life. At the time that the gift is made, a decision can be made as to whether the annuity will be for one life or two. An important aspect of a gift annuity is that the annuity payout is determined by one's age rather than prevailing interest rates. Currently, that means that a 60-year-old couple would receive a 4.2 percent yield. A 70-year-old couple would get a 5.2 percent yield. Yields for individuals are higher than those for couples. A gift annuity is considered tax friendly in that the yield is largely tax free and the initial charitable donation offers a significant tax deduction.

The University of Tennessee Foundation uses annuity rates established by the American Council on Gift Annuities (ACGA), an independent organization.

For couples and individuals who don't need income now, but would like a great option for the future, a **deferred gift annuity** offers the same advantages. The current income tax deduction might be more advantageous while one is younger and possibly at a higher income level.

A charitable gift annuity will provide income to you as well as support for the College of Veterinary Medicine. If you would like more information on charitable gift annuities or a personalized illustration, contact Dennis Jones, our director of gift planning at 865-974-7423 or [djones@utk.edu](mailto:djones@utk.edu).



Please cut out form, fill out both sides, and mail in.

## Support the UT College of Veterinary Medicine

Visit our website at [www.vet.utk.edu/giving](http://www.vet.utk.edu/giving) for a full listing of gift fund options and directions.

Your gift to the College of Veterinary Medicine will help us maintain and enhance our tradition of excellence in academics, patient services and clinical research benefiting animal and human health.

Mail to: UTCVM Development Office, 2407 River Drive, Ste. A301, Knoxville, TN 37996-4550



Name(s): \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ ZIP: \_\_\_\_\_

Daytime phone: \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Preferred email address: \_\_\_\_\_

I/we would like to make a gift of  \$2,500  \$1,000  \$500  \$250  \$100  Other:  \$ \_\_\_\_\_

Enclosed is my/our check made payable to the UT College of Veterinary Medicine

Please charge my/our credit card:  MasterCard  Visa  Discover

Acct. #: \_\_\_\_\_ Code #: \_\_\_\_\_ Exp. Date: \_\_\_\_\_

Signature: \_\_\_\_\_

## New Oxygen Cages for the Aslan ICU

A group of Small Animal Clinical Sciences clients and friends and College of Veterinary Medicine alumni generously supported the purchase of a bank of oxygen cages for the Aslan Intensive Care Unit in the John and Ann Tickle Small Animal Hospital.



### UTCVM thanks:

The Becky and Denny Lillard Endowment  
 Rhea W. Dean Sr.  
 Dr. William M. Collins  
 Prof. Amy Morris Hess  
 Jane A. Hudson  
 Dr. Greg Helton

Jerold and Judith Constable  
 The Aslan Foundation  
 The Grace Henderlight Family Trust  
 Donors to the Emergency and Critical Care Fund

# the Annual Donor

## Honor Roll of Giving

The Annual Donor Honor Roll of Giving for the gift period July 1, 2010 through June 30, 2011 is available on UTCVM's website at [www.vet.utk.edu/giving](http://www.vet.utk.edu/giving).

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



My/our gift will be matched by my employer and my completed matching gift form is enclosed.

Please designate my/our gift to:

- Oncology
- Metabolic Disease and Nutrition
- Physical Therapy
- Performance Equine Medicine
- Farm Animal Health
- Avian/Zoologic Medicine
- Emergency/Critical
- Wild Animal Treatment
- Care/ICU
- Scholarships
- Dr. N. Paul Nolen II/SAVE Fund
- Other (area or fund name): \_\_\_\_\_

I would like more information about:

- CVM giving opportunities
- Gifts of securities or property
- Estate or planned gifts
- Creating an endowment
- Life income plans

Visit our website at [www.vet.utk.edu/giving](http://www.vet.utk.edu/giving) for a full listing of gift fund options and directions.



**Thank you for supporting the UT College of Veterinary Medicine!**



## Faculty News

**Dr. Dennis Geiser**, a UTCVM assistant dean and professor of Equine Medicine and Surgery, was the 2011 recipient of the J. E. Moss Achievement Award recognizing excellence in teaching, research and continuing education in the UT Institute for Agriculture.



Working in a multi-disciplinary collaboration with UTCVM's **Drs. Joe Weigel and Hwa-Chain (Robert) Wang, Dr. Jiangang Chen** works with the Office of Laboratory Animal Care studying the adverse effects of exposure to pollutants and chemicals not normally found in the body (xenobiotics) and their influence on the endocrine system. **Wang** also was elected president of the local chapter of the Phi Chapter of the Society of Phi Zeta for the next two years.

**Dr. Brad Fenwick**, a professor in Biomedical and Diagnostic Sciences, has been named one of 13 Jefferson Science Fellows chosen to serve in the U. S. Department of State as a science advisor in Washington, D.C. Fenwick will work to promote international research cooperation with UT scientists. He is the first UT faculty member and the first veterinarian to receive the honor since the fellowship's inception in 2003.



At this year's Western Veterinary Conference, **Dr. Jim Blackford**, a professor of surgery in Large Animal Clinical Sciences, was elected the 2011 Equine Continuing Educator of the Year. Blackford presented



Dr. Jim Blackford

information on equine wound management at the conference.

The 2011 recipient of the Brandy Memorial Award was **Dr. Diane Hendrix**, professor, Ophthalmology. The award, generously provided by Jerry and Diane Garrett, recognizes outstanding faculty teaching that develops in veterinary students the qualities they found so important in their community veterinarian.



Dr. Diane Hendrix

**Dr. Jeremiah Lyons** and **Dr. Michael McEntee**, Biomedical and Diagnostic Sciences, along with Dr. Jonathan Wall of the UT Graduate School of Medicine, had their research highlighted on the cover of *Laboratory Investigation*, a journal of the Nature Publishing Group. The cover (enlarged IMAGE) shows a high-resolution aortic wall (denser yellow) from a dog with mucopolysaccharidosis-I,



Laboratory Investigation cover image reprinted with permission of the Nature Publishing Group.

a progressive disease sharing some similarities with atherosclerosis.

With the merger of the departments of Pathobiology and Comparative Medicine this year, **Dr. Sharon Patton**, professor, Parasitology, was appointed director of Diagnostic Services and **Dr. John C. New**, professor, Public Health, was appointed director of Public Health and Outreach Programs

At the 2011 International Association of Medical Science Educators annual meeting, **Dr. Nancy Howell** and **Dr. India Lane's** poster on using competency assessment to increase student self-awareness in problem-based learning exercises was one of only four selected for podium presentation. Howell is research assistant professor in Large Animal Clinical Sciences and director of assessment for UTCVM. Lane is the UT assistant vice president for

academic affairs and student success and holds a faculty appointment in the Small Animal Clinical Sciences Department.

**Dr. Mei-Zhen Cui**, associate professor, Vascular Biology, received a National Heart, Lung and Blood Institute R01 grant in the amount of \$1.49 million through May 2015 for her work on “Novel mechanism LPA-induced smooth muscle and vascular responses.”



UTCVM congratulates Faculty Achieving Diplomate Status in Specialty Fields: **Dr. Nathan Lee** is Diplomate, Radiation Oncology, ACVR.

**Dr. Guozhang Mao**, a research assistant professor, has been accepted into the highly competitive Medical Laboratory Technologist (one-year) program at the UT Medical Center.

**Dr. Donald McGavin**, professor emeritus of anatomic pathology in Biomedical and Diagnostic Sciences, received the Distinguished Member Award at American Council of Veterinary Pathologists meeting. A similar Distinguished Membership was bestowed posthumously on Dr. Linda Munson, a former UTCVM associate professor.

**Dr. Kimberly Newkirk**, assistant professor of Pathology, received a Morris Animal Foundation award for her proposal, “Detection of EGFR and HER2 Expression in Equine Ocular Squamous Cell Carcinomas.”

**Dr. Rick Gerhold**, a research fellow with Graham Hickling, director of UT’s Center for Wildlife Health, has accepted a 50 percent appointment with the Biomedical and Diagnostic Sciences department.

## Faculty Promotions, Tenure, Appointments and Retirements

### New Faculty Appointments

#### Small Animal Clinical Sciences:



**Dr. Erica Fields**, assistant professor of radiology

**Dr. Sophy Jesty**, assistant professor of cardiology

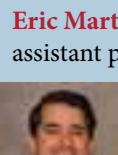


**Dr. Valeria Tanco**, assistant professor, Small Animal Reproduction

#### Large Animal Clinical Sciences:



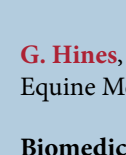
**Dr. Karen Kalck**, clinical assistant professor, Equine Medicine



**Dr. Jonathan Eric Martin**, clinical assistant professor, Equine Field Services



**Dr. Jose Castro**, clinical instructor, Equine Field Services



**Dr. Melissa G. Hines**, professor, Equine Medicine



#### Biomedical and Diagnostic Sciences:

**Dr. Guozhang Mao**, research assistant professor

**Dr. Feng Hao**, research assistant professor

**Dr. Kellie Fecteau**, clinical assistant professor and laboratory director, Endocrinology

### Faculty Promotions and Tenure Awards in 2011



**Dr. Tulio Prado**, Large Animal Clinical Sciences, to associate professor with tenure

**Dr. Carla Somnardahl**, Large Animal Clinical Sciences, to clinical associate professor



**Dr. Agricola Odoi**, Biomedical and Diagnostic Sciences, to associate professor with tenure



### Retirements

**Dr. Kathy Thomas**, lab section chief, Virology, Biomedical and Diagnostic Sciences

**Dr. Terry W. Schultz**, professor emeritus, Toxicology and Veterinary Histology, Biomedical and Diagnostic Sciences

The 2011 UT Institute for Agriculture’s William T. Miles M.D. Memorial Award was presented to **Dr. Elizabeth Strand**, director of Veterinary Social Work, in recognition of her significant contributions and service to the Knoxville community.

Pictured left to right with Dean Jim Thompson at the 2011 UT Institute of Agriculture Awards Program are Dr. Dennis Geiser, Dean Jim Thompson, Dr. Elizabeth Strand and CVM IT team leader Charles Lambrecht.



**Congratulations to faculty and staff members recently recognized for their years of service to the college:**

**35 years**

**David A. Brian**, professor, Virology, Biomedical and Diagnostic Sciences

**Hugo Eiler**, professor, Physiology, Biomedical and Diagnostic Sciences

**Mary “Polly” H. Giffen**, lab assistant III, Biomedical and Diagnostic Sciences

**Michael H. Sims**, professor, Physiology, Biomedical and Diagnostic Sciences

**Joseph P. Weigel**, associate professor, Small Animal Surgery, Small Animal Clinical Sciences

**30 Years**

**Barbara H. Campbell**, senior administrative services assistant, CVM administration

**Catheryn P. Hance**, accounting specialist, Large Animal Clinical Sciences

**David E. Harbison**, Hospital Operations and Clinical Programs

**Karen D. Catlett**, assistant supervisor, Small Animal Clinical Sciences

**Robert C. “Bob” DeNovo Jr.**, professor and associate dean, Administration and Clinical Programs

**25 years**

**Deborah W. Shepherd**, CVM administration and admissions

**H. Steve Adair**, associate professor, Equine Surgery, Large Animal Clinical Sciences

**Deborah F. Nelson**, accounting specialist III, Hospital Operations and Clinical Programs

**Janet B. Jones**, clinic director, Small Animal Clinical Sciences

**Cindy Moore**, student services assistant II, CVM Administration



UTCVM faculty and staff recently were recognized for their combined 250 years of service to the college and the UT Institute of Agriculture. Pictured front row, left to right: Dr. Bob DeNovo, Karen Catlett, Cindy Moore and Mary “Polly” Giffen. Pictured back row, left to right: Dr. Mickey Sims, Dr. Hugo Eiler, Dr. Joe Weigel and Janet Jones.





## Staff News

**Charles Lambrecht**, IT Team Leader for the College of Veterinary Medicine, is the 2011 recipient of the UT Institute of Agriculture's Professional Award for Outstanding Service.

### New Staff Appointments

**Joan Hayes**, laboratory assistant, Endocrinology

**Dr. Shi Chen**, postdoctoral research associate, Public Health

**Dr. Jing Shi**, postdoctoral research associate, Biomedical and Diagnostic Sciences

**Aimee Hebrard**, medical technologist I, Clinical Pathology Laboratory

**Brittany Heathman**, veterinary assistant II, Large Animal Clinical Sciences

**Celia Hurley**, veterinary assistant, Large Animal Clinical Sciences

**Lisa Amelse**, senior lab technician, Large Animal Clinical Sciences

**Marc Hammond**, pathology lab assistant, Biomedical and Diagnostic Sciences

### Retirements

**Dolores (Dee) Stephenson**, lab section chief III, Biomedical and Diagnostic Sciences

**Betty L. Young**, administrative support assistant III, Small Animal Clinical Sciences

**Sharon Beeler-Weaver**, large animal client representative, Administration and Clinical Programs

## House Officer and Graduate Student News

At the 2011 Comparative & Experimental Medicine and Public Health Research Symposium (CEMPH), the following UTCVM Biomedical and Diagnostic Sciences researchers received awards:

**Dr. Mohammad Ullah**, postdoctoral research associate, and **Mohammed Al-Wadei**, Ph.D. graduate student, each earned first place and excellence awards for their oral presentations. **Shalini Sharma**, CEM graduate research assistant, received the Gamma Sigma Delta award of



excellence. Small Animal Clinical Sciences resident **Dr. Jacqueline Bryan** was awarded the Phi Zeta Excellence in Animal Health Research Award. In the Intern/Residency category, **Dr. Debra Voulgaris** achieved an Award of Excellence.

The 2011 recipient of the Jessie's Memorial "Top Doc" Intern Award was **Dr. Carly Waugh**, Small Animal Clinical Sciences. The annual award was made possible by Mr. Jay Robinson in memory of his beloved Yorkie, Jessie.

**Sarah Hurst**, a Ph.D. graduate student in the Comparative and Experimental Medicine program, received her second graduate student travel award to attend the Comparative and Experimental Medicine program in Washington, D.C., along with a travel award from the International Mammalian Genome Society. Her mentor is **Dr. Madhu Dhar**, a research associate professor in Large Animal Clinical Sciences.

**Dr. Mohamed Abd-Eldaim**, Ph.D. '00, Comparative and Experimental Medicine graduate and former postdoctoral research associate in Virology, won the 2011 Egyptian

State Incentive Award for Young scientists.

**Dr. Amanda Crews**, medical resident, received first place at the American Council of Veterinary Pathologists meeting for her podium presentation, "Naked mole-rat skin and soft tissue metastatic mineralization," and for her poster of the same title.

**Dr. Carolyn Grimes**, medical resident, Clinical Pathology, received the 2011 Charles Louis Davis Foundation Scholarship Award.

### New House Officers

**Dr. Dan DeLillo**, cardiology intern, Small Animal Clinical Sciences



**Dr. Clare Scully**, '11, farm animal medicine intern, Large Animal Clinical Sciences

**Dr. B. Grace Shook**, field service resident, Large Animal Clinical Sciences

**Dr. Eva McElligott**, medicine resident, Large Animal Clinical Sciences

**Dr. Stacie Boswell**, surgery resident, Large Animal Clinical Sciences

**Dr. Melody Adams**, ABVP resident, Equine Field Service, Large Animal Clinical Sciences

**Dr. Jessica Carter-Arnold**, equine surgery resident, Large Animal Clinical Sciences

### New Residents

**Dr. Michelle Nobrega-Lee**, anatomic pathology, Biomedical and Diagnostic Sciences

**Dr. Sylvia Ferguson**, anatomic pathology, Biomedical and Diagnostic Sciences

# Sit, Stay, Heal

## First K-9 Cancer Walk in Knoxville

volunteer spirit



Team UTCVM mustered almost 200 walkers with one or more canine pals in tow in support of the Morris Animal Foundation's first K-9 Cancer Walk in Knoxville, Tenn. Team UTCVM recruited faculty members, staffers, students, clients, program volunteers and friends, raising more than \$8,700 to support cancer research, in this instance through Morris Animal Foundation grants. Dr. Joe Bartges, Acree Family Chair in Small Animal Research, was the featured speaker on this special occasion, officially "unleashing" all walkers onto the half-mile and one mile walking paths. Team UTCVM's recruitment efforts garnered the college the foundation's awards for Most Team Members, Most Team Support and Top Fundraising Team. The Knoxville event raised more than \$48,000 for the Morris Animal Foundation's work in support of K-9 cancer research.

UTCVM's presence promoted our cancer research efforts at all levels (basic, translational and clinical) along with the advanced diagnostic and treatment options for cancer patients at our veterinary medical center. The college is one of only four veterinary colleges nationwide holding membership in the National Cancer Consortium. Dr. Amy LeBlanc serves as the director of translational research in the Molecular Imaging and Translational Research Program (MITRP), a joint appointment with UTCVM and the UT Graduate School of Medicine, acting as a conduit between basic and clinical researchers in human and veterinary medicine.

Over the years, many of the college's clinical researchers have received support from the Morris Animal Foundation in the form of grants not only for canine cancer studies, but also a variety of companion animal diseases. Team UTCVM was formed to demonstrate our support for the resources Morris Animal Foundation provides for the study of companion animal diseases. It's a win-win relationship benefiting animal health.

Dr. Joe Bartges, center, headed up Team UTCVM at the first Knoxville K-9 Cancer Walk sponsored by Morris Animal Foundation.





# Pet Memorial Celebrations provide pet loss support for grieving families

We in Veterinary Social Work, a partnership program between the University of Tennessee College of Veterinary Medicine and College of Social Work, recognize and appreciate the unique bond that exists between humans and animals. We offer UT Veterinary Medical Center clients and the greater community pet loss support services, including a bimonthly pet loss support group and short-term individual grief counseling sessions, free of charge. In 2007, we began hosting the Pet Memorial Day event, which is held on the second Sunday in September in recognition of this national holiday. This day has always been a time of building community for those who want to honor their companion animals.

In 2011, we began offering a quarterly Pet Memorial Celebration. The event provides the opportunity to use art as a way to connect with the heart, the center of the pain for those grieving. To enhance building community and fellowship with others, participants share a small meal, which is followed by a memorial/remembrance ceremony. After the ceremony, participants create a memorial art project that they take home. The project allows those in attendance the space to remember their beloved animal without having to speak a word. The end result is a beautiful work of art, straight from the heart!

The event's co-facilitator, Teresa Nolen Pratt, is a licensed clinical social worker and artist who plans the craft projects for the events. Each project turns out as unique as the relationship between the participant and his or her animals. Attendees sit around the table, sharing stories and



*"Healing from grief is not the process of forgetting, it is the process of remembering with less pain and more joy."*  
—Author Unknown



memories—if they choose—while sifting through pictures to find just the right ones. They peruse the craft supplies to find the right color paint or fabric, then glue, hammer and cut supplies to create a finished work. The atmosphere is one of togetherness in grief. The participants not only hear how others have found ways to cope with the pain of their loss, they also learn through the memorial art project a new way to process the pain in their heart. Participants also are invited to make a memory quilt square that they can then volunteer to leave with us to put together as a quilt that hangs in the Family Room of the UT Veterinary Medical Center for one year. After the year is up, participants can elect to get their quilt squares back or keep them as part of the quilt.

To increase the sense of fellowship and community at this year's fifth annual Pet Memorial Day, we invited the attendees to bring a human-friendly food item for the "PAWt"-luck to share with others. We encouraged those participating to bring a dish that reminded them of their animal, a human-friendly food their animal enjoyed eating or would have eaten if given the opportunity. Attendees shared stories about the food "disappearing" or about how excited the animals became when they got this special treat.

The bond between humans and animals is so special and unique that we in Veterinary Social Work hope that as clients learn to process their grief, they are then able to open their hearts and homes to love another animal again.



# Clifford's Second Chance:

HALT pairs homeless dogs and troubled teens to place dogs in 'forever' homes

**C**lifford trots up a dog agility bridge with his tail wagging. As he tours around the grounds of Catatoga Kennels, his nose to the ground, he appears confident and unaware of his good fortune. Clifford, a male Basset mix, was selected from nearly 100 dogs at Knox County's Young-Williams Animal Center to participate in the fall class of HALT, Humans and Animals Learning Together.

The HALT program is sponsored in part by the College of Veterinary Medicine. Founded by CVM Professor John New and Knoxville resident Beth Code, HALT links troubled teens with homeless dogs. Twice yearly adolescents from local residential treatment centers conduct basic obedience training for HALT dogs during a four-week course. The HALT dogs are given physical exams and vaccinations by Dr. John Shaw, '87, and observed for possible health problems at Shaw's Ideal Veterinary Clinic in Oak Ridge. Once they have been deemed healthy, they are transferred to Catatoga Kennels in Farragut, where HALT classes are held.

Each year HALT works with about 20 teens and 10 dogs. A HALT volunteer is assigned to help each adolescent train the dogs. While helping the teens learn about themselves, they are helping five fortunate dogs learn basic commands and become more adoptable. Interactions between student trainers and dogs contribute valuable lessons in patience, responsibility and commitment. Students learn that training a dog takes time and that the dog depends on them for guidance.

Founded in 1987, HALT has helped more than 600 troubled teens learn about themselves, while finding homes for more than 300 dogs.

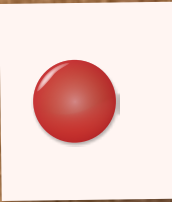
Classes are held each spring and fall. For information about HALT or adopting a HALT dog, go to [www.vet.utk.edu/halt](http://www.vet.utk.edu/halt) or call Catatoga Kennels at 865-693-5540. Adoption fee is \$100, which supports HALT.



Clifford, a recent HALT graduate, learned basic obedience through a program that links troubled adolescents and homeless dogs.

**The Veterinary Social Work Garden, a contemplation and comfort garden for people and their beloved pets.  
Gift of Bob DeVault and Julie Watts–2010**





# HABIT's Lucky Cajun and His Volunteer Army

by Donna Silvey, HABIT volunteer

If the saying is true that “It takes a village to raise a child,” then it helps if there is a fluffy white dog to lead the villagers to the children. Boudreaux began his Human-Animal Bond in Tennessee Ruff Reading career in fall 2008 at Belle Morris Elementary School in Knoxville. His name speaks to his heritage as a Hurricane Katrina rescue.

In the three years that B— as he is often called—has visited Belle Morris, his kids have dramatically increased their reading skills. Their drive to improve is fueled by the often hilarious antics of this dog. This Cajun is not one to passively lie around as the children take turns reading to him. No, he places a pom-pom like paw on an arm if they begin to falter. He lies on his belly and looks directly at them as they read. He even sticks his head over the book occasionally to see the pictures. As a result, his kids are convinced he totally gets into the book, and they will frequently turn their book around to show him the pictures.

Inspired by Boudreaux's antics, I have often shared the most recent hilarity with friends and family. I also shared with my friends and family that the classroom was woefully short on quality books and supplies. With budget constraints, the class only had a handful of ragged books when Boudreaux began his Ruff Reading assignment. Those who learned of the need began to offer support by sending books and other supplies. One mother made it a learning opportunity and took her son to a local used book store where they collected a shopping bag full of gently used books for the class. Another group made fluffy fleece pillows for the reading area. One local doctor even got into the act. He supplied the class with new reading lamps, tons of books, and a new reading area rug. As if that wasn't enough, he even began to send them a book a week with a note of encouragement after he had made a personal visit to the class to read to Boudreaux's Bunch. Here is the really amazing part: I never asked anyone for anything. Yep, that's right. All of these gifts and more were purely inspirations of the individuals hearing about Boudreaux's exploits and the classroom situation.

The teacher in Boudreaux's class, Ms. Waring, made incredible use of the books and supplies offered. She has energetically structured class work around the gifts and

made sure every child has at least one book at home to read. She creatively designed a writing center with the gifts and has the children write thank you notes to the contributors as a way to incorporate writing skills development into the process. The children have become aware of the large community of volunteers interested in their well-being and willing to lend a helping hand. Nice story, right? It doesn't end here.

In early January 2010, I fell and broke my right leg, my driving leg. Faced with the possibility of disappointing Boudreaux's Bunch, I needed a way to get across town each week and deliver my little Cajun to his kids. Several folks had told me they would love to watch him in action some time. I took them at their word. I sent out emails asking for chauffeurs and received a 100 percent positive response. A different driver was lined up for each week for eight weeks. Now, an army of folks were in for the treat of their life. They, too, got to witness the Cajun magic in action. All of the chauffeurs had the same fate: they left their hearts in that classroom. One by one they began to offer their support to Ms. Waring and Boudreaux's Bunch. One made sure Ms. Waring was appropriately recognized and supported for her amazing work. Another couple offered their help to the class. Several brought gifts of healthy snacks and additional books. One truly inspired chauffeur contacted Ms. Waring and arranged to volunteer in the classroom for two hours each week. Again, no one was asked to contribute anything other than a ride to the class. Each volunteer answer the call of what was placed on their heart as they witnessed the kids reading to the Little Cajun.

In their own way, hurricanes and broken legs can be blessings. Just ask the Ruff Readers in Ms. Waring's class. It has taught me a valuable lesson. It taught me that caring people love to have the chance to share their time, talent and resources with those who have a real need. It taught me that tragedies and hardships also bring opportunities.

Forty-one pounds of fluffy white fur, one black ear and a heart as big as Louisiana can make magic happen in a classroom. He can also lead an army of volunteers to the village children.

Donna Silvey is a volunteer with UT College of Veterinary Medicine's HABIT community service program. For more information about HABIT, go to [www.vet.utk.edu/habit](http://www.vet.utk.edu/habit).



# Changing Lives

The Companion Animal Initiative of Tennessee's mission is to reduce the state surplus of homeless cats and dogs by taking a proactive approach and promoting humane education throughout the state. The end result is improving the lives of all companion animals in Tennessee. As CAIT director Teresa Jennings and CAIT board members build a roadmap for the program's next three years, Jennings says two factors are key to meeting CAIT's mission: educating students and involving private practitioners and community veterinarians.

**"... education of students and involving private practitioners and community veterinarians—making them more aware of what issues animals are facing and larger picture ... helping animals and owners in community—if we don't change the culture we won't get anywhere."**

## Spring Semester Shelter Medicine Elective

From its humble beginnings of four veterinary students just a few years ago, the spring 2012 Shelter Medicine elective has an enrollment of 15. Every year millions of animals enter animal shelters and rescues across the nation, and Jennings believes veterinary colleges are obligated to equip those who are interested in the emerging field of shelter medicine with the right tools. The Association of Shelter Veterinarians has released "Standards of Care in Animal Shelters" and is working to make shelter medicine a specialty within the American Veterinary Medical Association. At UTCVM, students help assess dogs at Young Williams Animal Center in Knoxville. At the end of the course students should be able to identify methods of prevention, diagnosis and treatment of diseases of animals in shelters. Students also should be able to provide the veterinary community with quality programs aimed at promoting the proper treatment of pets, impacting the number of unwanted dogs and cats killed in shelters and reducing the risk of injuries and diseases from pets.



## Community Outreach

The month of March heralds Mardi Growl, a fundraiser for Young Williams Animal Center. The event brings out dog lovers from all over Tennessee and raises awareness of various problems (from abuse to obesity to cancer). Events like Mardi Growl and the annual Dogwood Arts Parade are a way for CAIT and UTCVM to be a part of and keep a finger on the pulse of the community.

## Cultural Awareness Elective

Our fall semester curriculum offers the Cultural Awareness elective. Various cultures and populations view their pets differently. Expanding veterinary students' sphere of knowledge and introducing them to non-traditional populations will allow them to tailor their practice of veterinary medicine to specific clients and communities and may impact the receptiveness of pet owners to the veterinary medical care of their animals. The elective focuses on various populations including underserved populations such as elderly, disabled, homeless and low income. The students also learn more Native American, Appalachian, Latino and African American cultures.

**Feral Fixin' Facts** As of October 2011 we have seen 1,673 cats from 15 counties across East Tennessee

- 859 females, of which 161 were pregnant with 590 feti
- 811 males
- Ranging from 1.5 pounds to 15.8 pounds, average weight 6 pounds
- 1 microchip found
- 38 were already altered (so they were ear-tipped, given vaccines and fluids and sent to recovery)
- 11 were already tipped (so they were given vaccines and fluids and sent to recovery)
- 24 percent had ear mites
- 42 percent had fleas
- 1 out of 176 cats tested positive for heartworm antigen
- 16.8 percent, or 27 of 161 cats tested, tested positive for heartworm antibody
- 4.3 percent, or 17 of the 397 tested, were FIV positive
- 6.3 percent, or 25 of the 397 tested were FeLV positive
- 36 percent, or 129 of the 354 tested, were positive for toxoplasmosis



For more information on any projects described above, please visit the CAIT website at [www.vet.utk.edu/cait](http://www.vet.utk.edu/cait) or email us at [CAIT@utk.edu](mailto:CAIT@utk.edu).



# We love ya, Patt!

volunteer spirit





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Image Matters. New 40-channel multidetector CT scanner at UT Veterinary Medical Center. See page 6 for more information.



Follow Mabel the  
Table's Story on  
page 6 and 

The University of Tennessee College of Veterinary Medicine



9:00 a.m. ~ 4:00 p.m. **Saturday** April 14, 2012



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