Partnering with Leading National Company to Keep Pets Safe

UTCVM has created a new faculty position to teach future veterinarians companion animal behavior. The college has partnered with Knoxville-based Radio Systems Corporation, makers of the PetSafe and Invisible Fence brands, to create the PetSafe Chair in Clinical Animal Behavior. Randy Boyd, Radio Systems Corporation 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.

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.

“...behavior issues are the number one reason why animals are surrendered to shelters...”

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, Small Animal Clinical Sciences Department head, says the new faculty position 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, we will help fill an important gap in clinical service and in teaching veterinary students. I look forward to the

News of the new PetSafe Chair in Clinical Animal Behavior makes Miss Lilly smile. She thinks it might ultimately help her roommates (especially the cats) become better behaved.

new discoveries that will help enrich the human-animal bond, improve the quality of life for pets, and enhance the training of future veterinarians.”

Dr. Jim Thompson, UTCVM dean, says by establishing the PetSafe Chair in Clinical Animal Behavior, Boyd and PetSafe will allow the college to graduate veterinarians who are able to council clients and intervene to help animals remain with their owners and out of shelters. “Animals and people will be better off because of Mr. Boyd’s and Radio Systems Corporation’s commitment to excellence. UT will now have a faculty member dedicated to teaching the art and science of behavior medicine that will greatly magnify behavior expertise in local communities, across this state and beyond.”

For Boyd, who recently launched an effort to make Knoxville and the surrounding area the Pet Friendliest Community in America, the PetSafe Chair is an opportunity to discover practical, science-based methods for responsible pet owners to be able to create and sustain a lasting bond. Boyd says, “This will be a win for UT, a win for our community and a win for animal welfare. UT will recruit a professor/researcher to lead this field of study and build a department around it.” Boyd says there is a vacuum nationally in veterinary behavior, and the university, along with the community, will have the possibility of being the national leader in the area through this effort. “There is a terrible lack of clinical research in animal behavior and as a result of this initiative we hope to improve understanding of pets and thus improve their welfare. Some of the research initiatives will include but not be limited to excessive vocalization in dogs; elimination; aggression; fears, anxieties and phobias; ontogeny of behavior problems in pets; and investigation of the genetic basis of behavior and behavior problems.”

The college plans to interview candidates this spring and fill the position July 1.
**Challenging Research at UTCVM**

Last spring, researchers around the country scrambled to apply for a piece of the millions of dollars in new National Institutes of Health (NIH) Challenge Grant Funds, made possible by the American Recovery and Reinvestment Act (ARRA). In total, the NIH received more than 20,000 applications and funded only 841.

The good news for UTCVM is that Dr. Hildegard Schuller’s application was one of those 841. In fact, it was one of only 152 funded at the full level of $1 million over two years. Schuller’s study, “Modulation of cancer prevention by social stress,” focuses on how chronic psychological stress might stimulate the development and progression of cancer, thus counteracting the effects of cancer preventive agents, particularly in lung and pancreatic cancers.

Schuller says the funding agency embraced the novel approach. “This research has the potential to generate data that can be used immediately in the clinic,” says Schuller, who isn’t searching for new anti-cancer drugs but exploring ways to make existing drugs work by toning down the stress. “Cancer patients are usually filled with anxiety. We will determine if stress reduces the effect of known anti-cancer agents, and if so, does the reduction of stress through medication prevent this from happening and make the anti-cancer agents work.”

Schuller has also received two R01 NIH grants focusing on pancreatic cancer, bringing her total current funding to more than $3 million. Schuller is a distinguished professor in the Department of Pathobiology and has been funded as an independent investigator by the NIH since 1986.

The Tennessee Department of Agriculture (TDA) and UTCVM have partnered to expand free post-mortem animal diagnostics to cattle, sheep and goat farmers in East Tennessee. TDA will reimburse the veterinary college for necropsy (animal autopsy) examinations of cattle, sheep and goats. For more information, contact us at 865-974-5673. Clients are responsible for transporting the carcasses to the appropriate location. For information regarding on-site necropsies, please call 865-974-8387.

Free necropsies are also available at TDA's C.E. Kord Animal Disease Diagnostic Laboratory in Nashville and the West Tennessee Animal Disease Diagnostic Laboratory at UT Martin.

**Free Post-mortem Animal Diagnostics for Cattle, Sheep and Goats**

**A Vet’s Best Friend**

FRED sits … FRED stays … FRED rolls over with help, but the fluffy blonde’s biggest trick is the ability to teach veterinary medicine. Okay, maybe not actually teach it, but help in the process. FRED stands for Flexible and Rigid Endoscopy training Device and is the “braindog” of Dr. Jacqui Whittemore and her former student Dr. Katy Kottkamp.

Endoscopy and other minimally invasive procedures (MIP) are becoming more common in veterinary medicine. Some clinicians say working the controls of an endoscope are akin to patting your head and rubbing your belly at the same time. It can be done, but it takes training and practice to become proficient and efficient. Current endoscopy training devices (simulators) on the market run in the six figure range, making them cost prohibitive for veterinary colleges and private practitioners. For many years, Whittemore, an assistant professor at UTCVM, believed an affordable endoscopy simulator was possible. The idea of FRED was born.

The outside of FRED is Whittemore’s thrift-store find; a stuffed dog with a huggable, goofy expression that claims not a care in the world. (While working on FRED in her garage, Whittemore had to assure her neighbors she wasn’t working on a real dog.) His innards are household materials that are eerily transformed into a dog’s esophagus and stomach when an endoscope passes through them. The images projected on a computer monitor are realistic enough to capture the interest of clinicians passing by the endoscopy room as they stop and ask, “Who’s the patient?”

Whittemore envisions her prototype, which currently sports a complete intestinal tract, will eventually have additional removable modules. If a private practitioner is going to be scoping a bladder on Monday, she can insert the urinary tract module and practice the procedure over the weekend. Going to scope lungs? Insert the respiratory module.

Whittemore is working with the UT Research Foundation (UTRF) to breathe life into FRED. UTRF has filed a provisional patent application on FRED and is searching for a company with the resources to help bring FRED to market and make him available to human and veterinary medical colleges and practicing veterinarians across the country.

The idea of FRED was born. The concept of FRED was believed an affordable endoscopy simulator could be achievable. For many years, Whittemore, an assistant professor at UTCVM, believed an affordable endoscopy simulator was possible. The idea of FRED was born.
Little Brown Dog Touches Hearts

In early November, officers with the Animal Control Unit of the Knoxville Police Department (KPD) brought a small dog suffering severe shear wounds to the John and Ann Tickle Small Animal Hospital at UTCVM. Friction across a rough surface creates shear wounds, where first the skin, then tendons, ligaments and bone are eventually worn or ground away. According to a KPD news release, officers reported witnesses said the dog had been dragged behind a vehicle.

The 17-pound terrier mix had to be stabilized overnight before Dr. Patricia Sura, assistant professor of surgery, and veterinary medical technicians could assess her condition. The patient, lovingly dubbed Little Brown Dog (LBD), at the veterinary hospital, suffered severe skin, tissue, joint and bone wounds and was listed in critical condition.

Treating severe shear wounds is labor intensive. Doctors changed LBD's bandages daily; at first under general anesthesia, then under heavy sedation. She also received two skin grafts to cover wounds on her paws. LBD spent a long time in the intensive care unit for pain management. Each time her bandages were changed, veterinary students ensured she was stylishly attired. LBD sported The Joker's colors from Batman, daisies with smiley faces, Wonder Woman, a watermelon, a Care Bear, Lady Vol colors and turkeys. These days, she sports a lovely pink collar with “Brown” written on it.

Media coverage surrounding LBD was extensive, spurring an incredible outpouring of compassion. She even has her own webpage at www.vet.utk.edu! The college received letters and donations from almost every state and from other countries. In all, more than $13,500 was donated toward her medical care. The additional funds were put toward the college's Assisted Care Fund for animals like LBD who need medical help.

Today, LBD has recovered and lives with her forever family where she rules the roost and sports her red boots for her hikes through the woods.

Mary Wallace Armistead, widow of Dr. W.W. Armistead, former UT Institute of Agriculture vice president and founding dean of the College of Veterinary Medicine, passed away January 21.

An active member of the UT Faculty Women’s Club, she supported the veterinary college and institute through volunteer activities. Those who knew her said she was Dr. Armistead's right hand.

They created the Armistead Award in Agriculture Endowment, as well as the Armistead Award in Veterinary Medicine Endowment.
A project is worth 1,000 words

In addition to regular Pet Loss Support Groups, Veterinary Social Work is offering group meetings dedicated to using art. For some, processing grief verbally is either too difficult or isn’t enough to help cope with a situation. Art is another avenue toward the healing process, and the art projects are something tangible participants can take home. The Pet Loss Support Group meets from 6:30 p.m. to 8 p.m. every Tuesday through May in the Family Room at UTCVM. The second and fourth Tuesday groups are dedicated to using art. For more information about the free meetings, call 865-755-8839 or visit www.vet.utk.edu/socialwork. UTCVM is located at 2407 River Drive in Knoxville.

Is your vet a UTCVM alum? Want to highlight your vet in our alumni e-newsletter? Send information to meganmcmurray@utk.edu