

ANNUAL MAGAZINE OF THE UNIVERSITY OF TENNESSEE COLLEGE OF VETERINARY MEDICINE

VOL**Vet** Vision

WORKING FOR THE ADVANCEMENT OF ANIMAL & HUMAN HEALTH

2019-2020

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INSTITUTE OF AGRICULTURE
THE UNIVERSITY OF TENNESSEE

Vol Strong

Dear Friends,

I have always been honored to be part of our UTCVM family, but never more than now. While nothing could prepare us for the impact of a global pandemic, I am proud of the way our veterinary community has responded. As an essential service, we have continued to provide emergency and urgent care for patients, our diagnostic labs have continued to meet the needs of referring veterinarians, and our scientists have continued their work to make new discoveries that impact both animal and human health.

COVID-19 has created many obstacles for the college to navigate, but our people have never wavered in their dedication and passion to provide a stellar medical education to our students, who, in turn, have proven their resilience as they have adapted to changes necessary to protect everyone's safety.

As you read this magazine, I hope you enjoy the stories of our faculty, staff, and students who work tirelessly every day—pandemic or not-- to help the college meet its mission to provide **Knowledge. Compassion. Discovery.**

Sincerely,



James P. Thompson
UTCVM Dean



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SPECIAL THANKS to the faculty, staff, students, and clients of the UT College of Veterinary Medicine for letting us share their stories.

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Heart to Heart

Catching up with Dr. Becky Gompf

Among the first females hired at the college, **Dr. Becky Gompf** has taught cardiology to every class. She has attended every hooding and graduation at UTCVM; she ensures the faculty wear their hoods correctly because “after going to hoodings with everyone on campus and seeing the faculty hoods falling off the shoulders, I determined we were going to look professional!” After preparing to switch to part time, Dr. Gompf postponed her plans when the college’s other cardiologist left to go into private practice.

What was the college like when you came in 1978?

It was a brand new vet school, and we were all young and energetic.

I can still remember Dean Gage, our small animal department head, saying “We want you to be good in two of three areas: clinics, teaching or research.” Back then, we all took clinics and teaching because those were the most important areas to us. We all worked together, and the whole faculty cared for each other and looked out for each other. It is not just lip service when we say we were family then and we are still family now. Spring flings were a lot of fun back when we were younger, especially in the volleyball games between faculty and students out on the front lawn after we were done in clinics. Now, the younger faculty have to carry on the traditions of spring fling games between faculty and students.

What were some of the challenges you faced?

Early on, some of the students did not want to learn from a female faculty member, but those students were few and far between. I ignored them. It was their problem, not mine. Your perspective changes over the years. While you are more sensitive about others’ opinions when you are younger, as you get older you just do your best and realize you cannot please everybody.



Dr. Gompf’s photo from the 1979 edition of CHIMERA, the UTCVM yearbook.

What do you enjoy most about teaching and how has teaching changed?

Interaction with the students is my favorite part of teaching. The one-on-one with them in the clinics has remained the same, but there is so much more knowledge than when I started. In addition, the biggest change has been all the technology and trying to keep up with it and find ways to engage the students. Our Master Teacher Program has really helped me to improve my teaching.

What challenges does the college face?

Hiring faculty who are qualified to teach. All universities are finding it harder to hire faculty because of the competition from private practice. The universities are not keeping up with changes in veterinary medicine as far as work-life balance is concerned. In addition, the student debt load is high and is a burden once the student graduates.

What advice do you have for new students?

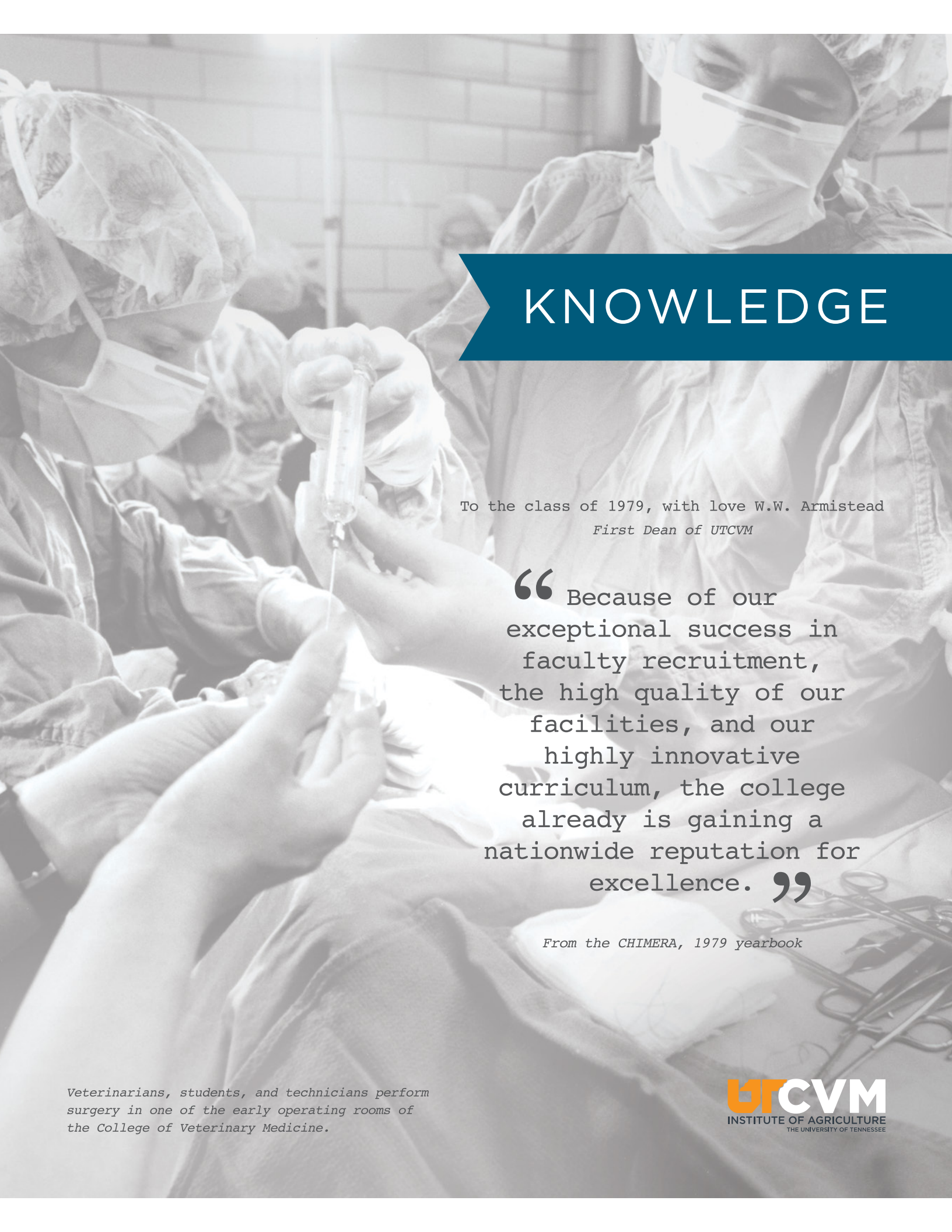
We all start veterinary school being very naïve about all the hard work it entails; it is so different from undergraduate. Students are in class a lot longer hours and a lot more is expected of them. They are with a group of people who are as smart as or smarter than they are. In addition, students have to realize they are working with people – not only their peers and their staff, but also their clients. Students also need to remember that there are so many opportunities in veterinary medicine besides private practice.

What makes UTCVM special?

People look out for each other; that has changed very little over the years, which is wonderful. The compassion and caring is what makes UTCVM special. 🐾



Dr. Gompf recently performing a echocardiogram on a patient.



KNOWLEDGE

To the class of 1979, with love W.W. Armistead
First Dean of UTCVM

“ Because of our exceptional success in faculty recruitment, the high quality of our facilities, and our highly innovative curriculum, the college already is gaining a nationwide reputation for excellence. ”

From the CHIMERA, 1979 yearbook

Veterinarians, students, and technicians perform surgery in one of the early operating rooms of the College of Veterinary Medicine.

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Simulation • Learning

UTCVM is planning for plows to hit the dirt heralding the groundbreaking on the college's Teaching and Learning Center (TLC). The TLC will enhance the college's educational and interactive environment and support students' professional and personal growth. In addition to an auditorium-style classroom and a wet lab, the TLC includes dedicated space that will house a simulation center, an innovative teaching tool that offers students the opportunity to become proficient and confident in performing technical skills before and during their clinical years' experiences.

While construction will begin this fall, the simulation program is already underway at the college; using temporary space since 2016, faculty and technicians have been involved in developing new models used to help students learn, refine, and master clinical skills. The models range from simplistic 2x4 boards with rubber tubing to realistic canine abdominal surgical models.

Building confidence and competence

Ms. T, a life-size equine simulation model, has synthetic reproductive organs, colon, intestines, kidneys, and veins. Dr. Karen McCormick, an equine internal medicine specialist and clinical assistant professor at the college, says working with Ms. T is great training even for students who grew up around horses. “When we use Ms. T to teach students, it allows them to practice the skills, palpation, blood draws, abdominal fluid taps, and other medical procedures on a simulation model that’s not moving. They aren’t afraid of it.” In 2018, McCormick led a research project that showed a significant difference between students who used the equine simulation model prior to palpation on a live horse to those who did not. “The results showed simulation is a valuable tool for learning a procedure like equine rectal palpation. It improved the students’ perceived confidence as well as competence evaluated by an impartial third party.”

Third-year veterinary student Kristina Selzer agrees. “When I am faced with that real emergency I think it will help me remain calmer, because I have seen it in a simulation and I won’t panic right off the bat. I’ll be like, ‘all right, I’ve done this.’ That’s a big help.”

The college has also purchased a bovine pregnancy simulator complete with a pelvis and modules mimicking multiple stages of gestation.

About as real as it gets

The surgical field is sterile, the patient is draped, and the student is gowned and gloved. Dr. Cassie Lux, a small animal surgery specialist and associate professor at the college, wants the setting to be as realistic as possible when students practice appropriate decision making, tissue-handling, and produce suture patterns and surgical knots on the lifelike tissues of the SynDaver canine abdominal surgery model. “They get to explore the abdomen in a way they would in the operating room and experience the difficulty of some suturing patterns inside the abdomen,



because it’s not a flat surface they are learning on. This is the best option we have to offer.” Lux, who created a series of teaching videos with the model, allows the students to make minor mistakes while performing procedures that are more advanced so they can learn from them. “They can open the stomach, the urinary tract, intestinal tract, and perform advanced abdominal surgeries in a safe, low-stress, teaching environment.”

Dr. Zenithson Ng, a Diplomate of the American Board of Veterinary Practitioners and clinical assistant professor at the college, is leading research to measure students’ confidence in their small animal surgical skills before and after working with the models. “We hope to demonstrate that these are helpful and more than just expensive, neat toys,” says Ng. “According to the American Veterinary Medical Association, students need to be competent in these types of advanced abdominal surgeries; before these models, our students’ exposure to advanced surgeries was from observation. By working with these models, the students should have a better understanding of what they observe during actual procedures.”

The simulation models available at the University of Tennessee also allow for a systematic approach to teaching and learning clinical skills at every level. Those skills will remain with students the rest of their professional careers. 🐾

Want to support student education?
Call 865-974-4379 or visit vetmed.tennessee.edu/give

In the Line of Duty

In August 2017, Cain, a K9 officer with the Crossville, Tennessee police department, ran into the woods pursuing a suspect who had crashed a stolen semi tractor-trailer. Cain emerged from the woods with stab wounds. Cain was stabilized at a local veterinary clinic before being rushed to the UT Veterinary Medical Center. His handler and a paramedic were on the phone with UT almost the entire way.





Using a Synder dog model, participants learned how to clear the airway, do cardiopulmonary resuscitation (CPR) with chest compressions, and intubate the animal.

Licensed veterinary medical technicians Leslie Wereszczak, Missy Smith, along with Dr. Desola Odunayo, members of UTCVM's Emergency and Critical Care (ECC) service, were on the other end of the line. "It was one of the most poignant moments of my career. I wanted to jump through the phone and help rather than talk someone through it," said Wereszczak, adding the paramedic did everything appropriately when the dog went into cardiopulmonary arrest. The veterinary team met them with a gurney in the parking lot of the John and Ann Tickle Small Animal Hospital at UT and rushed Cain into ICU. "I'll never forget the anticipation on the officers' faces as they watched us perform CPR." But the injuries were too significant and Cain succumbed to his injuries and died at 12:40 p.m. "These men who exude strength were crippled with grief; they had lost one of their own, a fellow officer who had gone into the woods to apprehend a criminal. It could have been one of them."

Cain's death weighed heavily on the ECC team; in Cain's case, he was treated by a paramedic, but what happens when the handler is faced with a crisis alone? "Does a handler hesitate to respond because he doesn't know what to do? We know that every second counts in an emergency. We began brainstorming ways to help those in the field learn to triage the animals before getting them to the veterinarian," says Wereszczak. With that, the Working Dog Conference for K9 handlers and first responders, now in its second year, was born.

One of the unique differences between human and veterinary medicine is the lack of pre-hospital care. Paramedics, firemen, or other first responders can begin life-saving treatments such as first-aid, IV fluids, or life-saving medications as soon as they arrive on the scene. In contrast, an owner transports the animal to the veterinarian which means lost treatment time at a time when prompt intervention matters the most.

"We want to equip the handlers and first responders with the knowledge they need to administer immediate pre-hospital care before they get to the veterinarian," says Dr. Shane Chumbler, an ECC resident and Major in the U.S. Army. He has been deployed several times and has witnessed



Stopping hemorrhage can help save a dog's life in an emergency situation. This workshop taught first responders and K9 handlers the proper techniques to apply pressure and stop bleeding.



Starting an intravenous (IV) line with fluids can help stabilize an injured dog. Using simulated limbs, participants learned how to locate a vein and insert an IV catheter.

how a military working dog's response has saved the lives of soldiers, airmen, sailors, and marines. The dog may have been injured while doing that and in turn, those handlers have been able to respond directly to the dog's injury and saved its life. "Because the first few minutes can make a difference, their response should be instinctive. Speeding up the process and their response time should improve the outcome."

Cain paid the ultimate price, but his memory could change the outcome of other K9 officers injured in the line of duty. "In an emergency it's a team effort," says Wereszczak. "Knowledge is power to save a life."

The Emergency Management of the Working Dog conference is provided free-of-charge to K9 handlers and all first responders in memory of K9 Officer Cain of the Crossville Police Department, Crossville, TN, whose watch ended August 2, 2017.

Raw Milk Consumption

Getting real about the risk of non-pasteurized milk

As more people embrace a “back to nature” lifestyle, it’s important to make decisions that will benefit and not harm your health. Consuming liquid milk or products made from raw milk such as soft cheese, ice cream, and yogurt can pose severe health risks, including death. Raw milk that has not undergone pasteurization can contain harmful bacteria such as *Brucella*, *Campylobacter*, *Listeria*, *Mycobacterium bovis* (Bovine Tuberculosis), *Coxiella burnetti* (Q-fever), *Salmonella*, and *E. coli*. Even though an animal appears to be healthy, this does not mean that the milk is free of harmful organisms. Systemically healthy animals can carry these organisms that contaminate milk and put the consumer at risk. Milk and milk products can also be contaminated with harmful organisms during milking or processing due to unhygienic practices.

Pasteurization is the process of briefly heating milk to a designated temperature for a duration of time to kill illness-causing bacteria present in the milk without changing or adulterating the milk content. Pasteurization along with hygienic handling is the only way to kill and prevent many of the bacteria in milk that can make you and your family ill. Each batch of a farm’s raw milk may be different from the last.

If tests come back negative from a single batch, there is no guarantee that the next batch will be free of harmful bacteria. Currently, it is illegal in Tennessee for a dairy farmer to sell raw, unpasteurized milk to the public for human consumption.

Raw milk offers no health benefits as compared with drinking pasteurized milk, and many studies have shown that pasteurization does not change the nutritional value of milk and dairy products. The risks of drinking raw milk far outweigh any possible benefits. The risk of becoming ill from drinking raw milk is greater for infants and young children, the elderly, pregnant women, and people with weakened immune systems such as those with cancer or HIV/AIDS. It is important to remember that healthy people of any age can get very sick or even die by drinking raw milk contaminated with harmful bacteria.

Milk contamination may occur from:

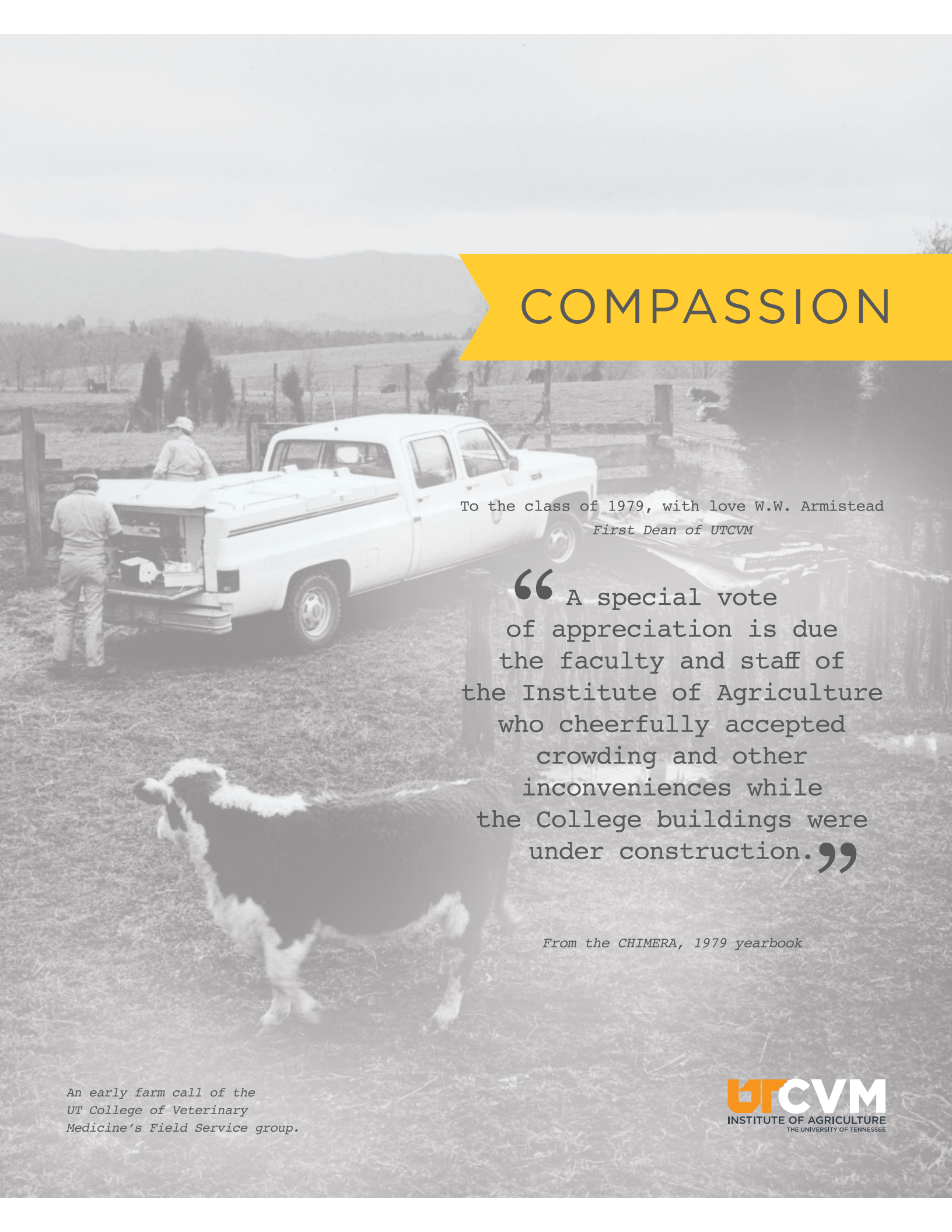
- Animal feces coming into direct contact with the milk
- Infection of the animal’s udder (mastitis)
- Ruminant diseases (bovine tuberculosis, brucellosis, listeriosis, and others)
- Bacteria found on skin of cows
- Environment (feces, dirt, equipment)
- Insects, rodents, and other animals
- Humans, for example, by cross-contamination from soiled hands and clothing

Dairy farmers work tirelessly year-around to ensure that their products are healthy, free of disease, and wholesome. Enjoy drinking milk safely by consuming processed, pasteurized milk.

Raising backyard dairy animals can provide families with milk and other dairy products. The quality of the milk and milk products produced and consumed is important in flavor, shelf life, and safety. The following practices can aid in maintaining good milk quality.

- **Practice biosecurity** between other livestock, including new herd additions, to prevent introduction and transmission of infectious diseases.
- **Wear latex or nitrile gloves** when handling the udder or milk products to prevent contamination with bacteria found on human skin.
- **Use sanitary milking techniques**, including hygienic cleaning of milking equipment and milking area, to minimize milk contamination.
- During milking, **visually inspect the udder** for evidence of swelling, irritation, or inflammation (redness).
- **Strip the teat** by squeezing a small amount of milk from each teat. This practice will break the keratin plug and discard debris that is located in the teat canal that has accumulated since the last milking. The milk should be white and smooth (not clumpy or discolored). A California Mastitis Test (CMT) should be performed according to test instructions before each milking to evaluate somatic cell (white blood cell) concentrations within the milk.
- **Treat each teat with a disinfectant** (i.e. betadine based products) for at least 60 seconds prior to milking to kill any organisms that may be present on the teat surface. After 60 seconds, wipe the teat with a clean paper towel or cloth towel.
- Once the milk has been emptied from the udder into a sanitized collection vessel, **apply a post-milking teat dip treatment**. After milking, it is imperative that the animal remain standing at least 1 hour. This allows time for the keratin plug to reform within the teat, thus blocking contaminants such as bacteria from entering the teat canal.
- **Cool the milk** to 45 degrees Fahrenheit as soon as possible after milking. This will minimize bacterial growth within the milk.
- **Perform at-home pasteurization** by heating the milk to 145 degrees Fahrenheit for 30 minutes or 165 degrees Fahrenheit for 15 seconds, followed by a quick cooling.
- Discuss the process and any questions you might have with your veterinarian.

Find more information at tiny.utk.edu/LargeAnimalResources



COMPASSION

To the class of 1979, with love W.W. Armistead
First Dean of UTCVM

“A special vote of appreciation is due the faculty and staff of the Institute of Agriculture who cheerfully accepted crowding and other inconveniences while the College buildings were under construction.”

From the CHIMERA, 1979 yearbook

*An early farm call of the
UT College of Veterinary
Medicine's Field Service group.*

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#NotOneMoreVet

“ Never **EVER**, say to a veterinarian,
‘All you care about is money.’ ”

This breaks the heart of all veterinarians, many of whom are in deep debt, and when a client cannot pay for the care the vet recommends and blames the vet for not giving free care, they are hurting the heart of the veterinarian. ”

- Dr. Elizabeth Strand

Dr. Elizabeth Strand, founding director of Veterinary Social Work (VSW), a joint program of the College of Veterinary Medicine and College of Social Work, is fiercely protective of those in the veterinary profession. “They have to watch the grief of a family that can’t pay for care. Not only can they not save the animal, but also then, they have to feel the grief of the family. It’s just too much.”

Recently there has been much discussion about suicide and mental illness among veterinarians. But is it a dangerous profession to enter? Dr. Strand says society as a whole is more comfortable talking openly about mental illness, and younger generations believe it is treatable much like physical illness. All health professions including physicians and dentists have elevated suicide rates, not just veterinarians. In a 2019 study published in the Journal of the American Veterinary Medical Association, researchers examined the death records of veterinarians and found they have a higher completion rate of suicide than even physicians. Research also indicates veterinarians think about suicide more than the general population. “There are two hypothesis: euthanasia is an accepted practice to end animal suffering, and they have access to means which is turning out to be one of the most important predictors to completing suicide. They routinely calculate how much euthanasia fluid it takes per body weight,” explains Dr. Strand.

Dr. Strand was one of the researchers involved in the 2018 Merck Animal Health Veterinary Wellbeing Study, which found veterinarians are generally more neurotic than the general population. “We used something called the Big Five Personality Assessment. Neuroticism is characterized by having more negative feelings such as sadness and moodiness a lot of the time, and vets seem to have a higher rate than the general population. It is associated with depression, anxiety and suicide; so there are some personality temperament issues associated with coming into the profession.”

Veterinary professionals are taking a stand to protect each other against suicide. Not One More Vet is an online veterinary support group created in 2014. More than 20,000 veterinarians from around the world help each other and lend a supportive ear to their colleagues. VSW is part of that stand, too. “We are working with Not One More Vet to deliver the Veterinary Interactive Screening Program (VISP) through the American Foundation of Suicide Prevention. This online tool anonymously connects people who are suffering with peer-to-peer counseling and mental health resources.”

VSW recently created the Veterinary Human Support Certificate for animal-related professionals for those who feel called to help. Part of the training includes emotional CPR and suicide prevention. What can people do to be part of the stand? “Never EVER say to a veterinarian, ‘All you care about is money.’” She adds, “Moreover, if you really want to help and have the means to take care of your own pets, ask if you can make a donation to your veterinarian’s Good Samaritan fund so the vet can take care of animals no one can take care of, and this protects the heart of the veterinarian. If you want to know the truth—that’s what you need to do.”



If you or someone you know is experiencing suicidal thoughts, please call the National Suicide Prevention Lifeline 800-273-8255 or text HELP to Crisis Text Line 741741.

The Wellness Owls used by Veterinary Social Work at the University of Tennessee are based on the Healthy Mind Platter, developed by Dr. Dan Siegel and David Rock. According to the Healthy Mind Platter website, The Healthy Mind Platter “has seven essential mental activities necessary for optimum mental health in daily life. These seven daily activities make up the full set of ‘mental nutrients’ that your brain needs to function at it’s best. By engaging every day in each of these servings,

you enable your brain to coordinate and balance its activities, which strengthens your brain’s internal connections and your connections with other people.”

More information on the Healthy Mind Platter and other works by Dr. Dan Siegel, a neuropsychiatrist, can be found here: www.drdansiegel.com/resources/healthy_mind_platter/ 🐼

Seven daily essential mental activities to optimize brain matter and create wellbeing.



FOCUS TIME

When we closely focus on tasks in a goal-oriented way, we take on challenges that make deep connections in the brain.



PLAY TIME

When we allow ourselves to be spontaneous or creative, playfully enjoying novel experiences, we help make new connections in the brain.



CONNECTING TIME

When we connect with other people, ideally in person, and when we take time to appreciate our connection to the natural world around us, we activate and reinforce the brain’s relational circuitry.



PHYSICAL TIME

When we move our bodies, aerobically if medically possible, we strengthen the brain in many ways.



TIME IN

When we quietly reflect internally, focusing on sensations, images, feelings and thoughts, we help to better integrate the brain.



DOWN TIME

When we are non-focused, without any specific goal, and let our mind wander or simply relax, we help the brain recharge.



SLEEP TIME

When we give the brain the rest it needs, we consolidate learning and recover from the experiences of the day.

In addition to the seven daily activities that the Healthy Mind Platter outlines, Veterinary Social Work has added two additional activities for optimal mental health: Good Food and Altruism.



GOOD FOOD

The food you eat affects your brain’s structure, function, and your mood. Eat good food for improved mental health.



ALTRUISM

Giving to others without expecting anything in return is personally fulfilling and leads to increased wellbeing.

Mobilizing Possibilities

• New grant helps fund spay/neuter initiatives in Tennessee

PetSmart Charities® is helping the Shelter Medicine Program and Spay-Neuter Mobile Service at the University of Tennessee College of Veterinary Medicine, through a \$67,700 grant. The service provides hands-on experience in surgery and shelter medicine to veterinary students while providing assistance and advice to animal shelters, humane societies, community cat programs, and rescue groups in Knoxville and twelve surrounding counties.

The Spay-Neuter Mobile Service is a required, two-week medical rotation for each fourth-year veterinary student at the college. Funds from the PetSmart Charities® grant will be used to provide spay and neuter surgeries, vaccinations, exams, shelter evaluations, and additional medical services as necessary to support an average of 17 partner shelters and rescues in east Tennessee. The service only works with organizations that provide care for unowned animals.

“This mobile clinic will not only provide invaluable training for veterinary students, but also necessary health and wellness services to shelter pets – many who have never received basic veterinary care,” said Kelly Balthazor, regional relationship manager at PetSmart Charities®. “By promoting a healthier pet population, more pets will be prepared to find loving homes.”

The Washington County-Johnson City Animal Shelter, an open-admission municipal shelter, took in five thousand animals last year. Tammy Davis, shelter director, says having access to the mobile service has been a lifesaver for the animals. “Being able to transport multiple animals at one time to be spayed and neutered is not only time saving, but it is also critical in helping us adopt animals out quickly. This enables us to adopt an animal out and let it leave the building the same day, which makes room for the next animal coming into the building.” April Kennedy, Loudon County Animal Shelter, says the opportunity to work with the mobile service has been life-changing for the community. “The adoptable animals are ready to go to their new homes quickly, and their shelter stay time has been cut in half. We are so grateful for this partnership.”



4th year veterinary student, Benjamin Powell, holds puppies that were recently cared for on board the Spay-Neuter Mobile.

Six years ago, the Companion Animal Initiative of Tennessee (CAIT), an outreach program of the veterinary college, established the college’s first spay-neuter rotation. The rotation’s success led to the purchase of a mobile surgical unit with the help of a generous grant from PetSmart Charities®.

“The support of PetSmart Charities® has been crucial to training aspiring UTCVM veterinarians in fundamental medical and surgical skills while exposing them to important issues of pet overpopulation and animal welfare in our region. Between three and four thousand animals will be spayed/neutered and ready for adoption as a result of this funding in 2019 alone,” said Jennifer Weisent, DVM, PhD. 🐾

PETSMART
Charities®



Virtual Fur Fix

— HABIT visits via video teleconference during COVID-19

In mid-March, Human Animal Bond in Tennessee (HABIT) suspended visitations due to COVID-19. That included its programs in the Nashville-area.

“Sorry I’m late to the call,” says Whitney Blanton, Director of the Jean Crowe Advocacy Center. “I just wanted to pop in and see if anyone is still—oh, look! There’s Hubert!” Hubert is a Zoom participant, a HABIT volunteer at the Family Safety Center (FSC) in Nashville, Tennessee, and an employee of the month. Hubert is also a 106.8-pound bloodhound and member of the Hannaway family.

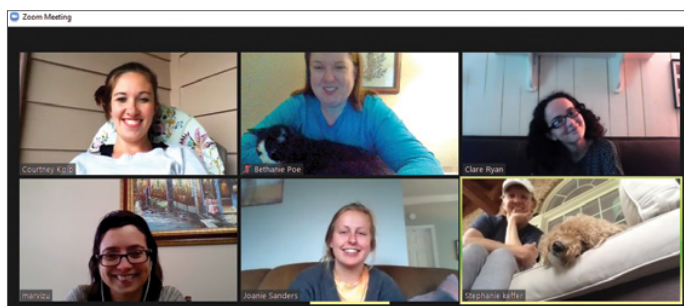
Two HABIT volunteer teams, Hubert with his humans, Nicoll and Stephen, and miniature Goldendoodle Polly with her human Stephanie Keffer, began weekly in-person visitations at the FSC, one of the largest family justice centers in the country, in 2019 as part of a grant from the Tennessee Office of Criminal Justice Programs. The FSC provides free and confidential services to victims of all sorts of interpersonal violence.

For many clients and staff members, the HABIT visits are the highlight of the week. “They are part of the family,” says Maria Arvizu, an advocate at the FSC. “Mental health is such an important part of what they do, providing vital support that we need to keep our sanity and keep the joy in our work.”

Joanie Sanders agrees. The FSC advocate says it’s therapeutic to watch children playing with Hubert and Polly. “They play with them and read books to them. These kids may be coming from an incredibly traumatic



Polly, the HABIT dog pictured above, was recently able to help calm a client who was having a panic attack that could not otherwise be deescalated through FSC counselors; they were on the verge of calling an ambulance, but within minutes of Polly’s arrival, the panic attack subsided and counselors were able to continue their conversations with the client.



event that just happened and are experiencing joy in just a few hours!”

Resource Coordinator Courtney Kolb, says the HABIT visits have surpassed her expectations. “I know the healing power of dogs and animals, but there have been so many clients who, out of nowhere, have laid on Hubert and just cried and cried; it’s such an emotional release.”



The FSC mission includes caring for the caregivers, a role the HABIT dogs fill without hesitation. During a particularly traumatic time last fall, the one thing staff members asked for to help them cope were HABIT dogs. Three additional HABIT teams, as well as Polly and Hubert, dropped everything to make sure the FSC got the support they needed. Staff described the dogs as the hope and light at the end of the tunnel each day.

While in-person visitations are suspended this spring, the dogs continue to comfort during virtual HABIT visits with FSC staff. Usually a handful or so join the visit for their virtual fur fix and get to see the dogs in their natural habitats. The focus is on the dog, but the staff have a chance to see each other during this time of being physically apart.

While Hubert enjoys being a Zoom expert, Hannaway says he’s ready to head back to FSC. “He’s really leaned into this role. When I put on his HABIT bandana he hops off the couch and knows it’s time to go to work.”

Want to help reach our community?
Call 865-974-4379 or visit vetmed.tennessee.edu/give

Emotional CPR

A reboot for mental health

There are first aid and CPR classes to teach you what to do if someone is choking, can't breathe or is suffering a heart attack, but what do you do if you come in contact with someone suffering from an emotional crisis? Dr. Elizabeth Strand, UT Veterinary Social Work, was recently interviewed about Emotional CPR.

First, what is and what can cause an emotional crisis?

An emotional crisis disrupts the way you think and act. It can be triggered by an acute situation such as the death of a loved one, or be triggered by an accumulation of events.

What are symptoms of an emotional crisis?

They can vary but may include lack of personal hygiene, a change in sleep habits, a change in weight, declined work performance, mood changes, and withdrawal from routine activities.

What is emotional CPR?

eCPR is an educational program designed to teach anyone to assist another person through an emotional crisis by three simple steps of C=Connecting, P=emPowering, and R=Revitalizing. The Connecting section of eCPR involves deepening listening skills. The emPowering section helps people better understand how to feel empowered as well as to assist others to feel more hopeful and engaged in life. In the Revitalizing section people re-engage in relationships with their loved ones or their support system, and they resume or begin routines that support health and wellness. This final step reinforces the person's sense of mastery and accomplishment, further energizing the healing process.

Veterinary Social Work conducts an Emotional CPR training event each year. While it's veterinary-specific, all are welcome. To learn more about Emotional CPR and other Veterinary Social Work events, visit vetsocialwork.utk.edu.

What are the goals of the training?

We hope to provide training for veterinarians to help others through emotional crises with increased efficacy and without self-harm. We also hope to develop a group of veterinarians who, having been trained in eCPR, are willing and prepared to reduce stigma about mental illness in the profession by telling their own stories of adversity and healing. 

C Connecting P emPowering R Revitalizing

Emotional CPR is a set of tools that equip practitioners to aid one another, such as staff members or clients, in a mental health crisis.

Using the skills of emotional CPR you will be able to deepen relationships, develop a calm listening presence, and increase your cultural understanding.

To learn more, visit www.emotional-cpr.org



DISCOVERY

To the class of 1979, with love W.W. Armistead
First Dean of UTCVM

“The fundamental character of the UT College of Veterinary Medicine now is established. Its objectives are clear. And its future prominence seems assured.”

From the CHIMERA, 1979 yearbook

Dr. Mickey Sims uses cutting-edge technology in the classroom to teach the veterinary medicine students.

UTCVM
INSTITUTE OF AGRICULTURE
THE UNIVERSITY OF TENNESSEE

Itching To Find A Better Way



Even before Zika began making international headlines, Dr. Andrea Lear, assistant professor in UTCVM's department of large animal clinical sciences, was unwittingly laying the groundwork to study the virus.

The 2016 Summer Olympic Games held in Rio de Janeiro, Brazil brought athletes and spectators from all over the world. Although the Olympics symbolize global peace and connectivity, the 2016 games also helped bring Zika virus, a mosquito-borne illness, to the forefront by contributing to the spread of the virus to previously unaffected countries, including the United States. According to the Centers for Disease Control and Prevention (CDC), prior to 2015, there were no known cases of the Zika virus in the United States. However, by 2016, there were 5,168 symptomatic Zika virus cases reported, with 4,897 of those cases originating from travels to highly infected areas, like Brazil.

The Zika virus got its name from the Zika forest in Uganda, where it was first discovered in 1947. The virus is primarily centralized in tropical locations, specifically Africa, Central and South America, and Southern Asia. It can be transmitted in two ways: most commonly by the *Aedes* species mosquito (*Ae. aegypti* and *Ae. albopictus*) and secondarily through sexual intercourse with an infected partner. Although typically asymptomatic, Zika has been known to produce flu-like symptoms in some infected persons, such as fever, rash, headache, and joint and

muscle pain. However, the most frightening aspect of Zika is the effect it has on fetal development. Zika has a direct link to microcephaly, a disorder that causes the head of a fetus to be significantly smaller than normal, leading to a lack of brain development. Zika can also contribute to other kinds of birth defects, along with miscarriages and still births.

Zika can have a negative impact on fetal development because it is able to travel across the maternal-fetal barrier. The maternal-fetal relationship is established in the placenta. The purpose of the placenta is to maintain the pregnancy, to prepare nourishment for the offspring, to conduct nutrient exchange, to initiate fetal programming, and to establish a barrier for fetal and maternal protection. Scientists know that extracellular vesicles, known as exosomes, transfer proteins, lipids, DNA, mRNA and miRNA from the mother to the fetus. Although exosomes are found in non-pregnant persons, the number of these packages explode when a woman becomes pregnant, becoming five times more prevalent and act as a communication device between the maternal and placenta cells. Exosomes may also transfer viral RNA to susceptible cells. However, it is unknown how to prevent this viral transfer from taking place.

Since the recent global outbreak of the Zika virus, scientists have been searching for an appropriate animal model to study Zika in order to translate their findings to human medicine. Recent animal model studies include mice, primates, guinea pigs, and pigs. Although mice and primates appear to be the most promising models, both have significant shortcomings. For example, mice do not naturally become infected with Zika and require a manipulated immune system in order to effectively use them for experimentation. Therefore, a manipulated immune system may not accurately translate to human medicine. On the other hand, primates, although a close genetic relation, are very expensive to maintain for experiments, and their use is morally controversial.

At UTCVM, Dr. Andrea Lear, who has researched Bovine Viral Diarrhea Virus (BVDV), has taken an interest in finding an appropriate and cost-effective animal model to study Zika. Through research and experimentation, Dr. Lear has found sheep to be a perfect match! In fact, Dr. Lear is the first to utilize livestock animals for research in



Aedes albopictus female mosquito photo above courtesy of the UTCVM Parasitology Laboratory.



exosomal relations and viral studies. Sheep offer many advantages for studying Zika: they are cost-effective, their immune systems do not require manipulation to become infected with the disease, and the fetal development and the maternal-fetal nutrient exchange mirrors the human condition. Moreover, sheep have been used in other scientific endeavors, including inter-uterine growth restriction and fetal alcohol syndrome.

In her lab, Dr. Lear has begun experimenting with sheep as an animal model for Zika by inoculating sheep with the virus in three ways: intra-vascular (injections into the blood stream), intra-amniotic (injections into the amniotic fluid), and intra-vaginal (injections into the vaginal canal). She hypothesizes that pregnant sheep with Zika will be permissive to viral replication, resulting in maternal antibody production. Throughout her experiments, Dr. Lear monitored fetal outcomes, including cranial measurements and mortality. She also determined viral dynamics through blood, urine, vaginal secretions, and clinical signs in the dams. All of these outcomes point to sheep as an appropriate animal model for studying Zika and its maternal-fetal connection.

Although still in the early stages of her research, Dr. Lear hopes to uncover the progression of the disease, deciphering the various points during gestation that the virus creates negative fetal outcomes, like abortions, microcephaly, and other birth defects. She is also interested in finding preventative strategies to monitor maternal-fetal interactions during pregnancy, specifically ways to block the exosomal transfer of viral RNA. 🐏

¹ Centers for Disease Control and Prevention. Zika Virus: Statistics and Maps. March 13, 2019. Available from: https://www.cdc.gov/zika/reporting/index.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fzika%2Freporting%2Fcase-counts.html

Dr. Andrea Lear

In 2011, Dr. Andrea Lear received her DVM from Auburn University and continued her education at Colorado State University, receiving a Master's degree in Clinical Science. After finishing her Master's degree, Dr. Lear completed a PhD at the University of Tennessee College of Veterinary Medicine, specializing in immunology and infectious disease. Currently, she is an Assistant Professor in the Department of Large Animal Clinical Sciences at UTCVM and works closely with the Farm Animal Field Service team. When asked why she chose to pursue her research at UTCVM, Dr. Lear replied, "I was drawn to the culture of scientific investigation amongst the faculty. Colleagues at UTCVM are willing to brainstorm and collaborate and the administration is happy to support young faculty investigators."

Dr. Lear's research interest began with Bovine Viral Diarrhea Virus (BVDV). Her interest in BVDV stemmed from the economic impact this virus has had on livestock around the world. For Dr. Lear, understanding this virus would not only improve animal health but also human wellbeing. While listening to news reports during the Zika epidemic, Dr. Lear recognized distinct similarities between the clinical features of the BVDV and Zika viruses. By recognizing these similarities, Dr. Lear was able to design and implement a study model for Zika. Outside of her work with BVDV and Zika, Dr. Lear also investigates other aspects of large animal pregnancy and gestation, including maternal-fetal interactions during pregnancy, placental immunity, and neonatal immunity.

Going Global

SARS-CoV-2, the novel coronavirus better known as COVID-19, has illustrated how a zoonotic disease that jumped species in Wuhan, Hubei Province, China, can spread across the globe with devastating consequences. Zoonotic diseases are diseases that spread between animals and people, and according to the Centers for Disease Control and Prevention, six out of every ten infectious diseases in people are zoonotic. Among the top zoonotic diseases of national concern for the United States are zoonotic influenza, salmonellosis, West Nile Virus, plague, emerging coronaviruses such as severe acute respiratory syndrome and Middle East respiratory syndrome, rabies, brucellosis, and Lyme disease.

Photo courtesy of Dr. Andrew Cushing.

A New World: Responding to COVID-19

Thousands of coronaviruses exist, and according to Dr. Melissa Kennedy, a UTCVM veterinary virology specialist, most domestic animals have their own version, “Dogs, cats, horses, cows, pigs. These viruses are all species-specific to a certain animal host and generally cause disease only in the very young of that species. One coronavirus of cats causes a lethal disease termed feline infectious peritonitis. All of these viruses are distinct from one another and are NOT related to COVID-19 or SARSV-2. They do not infect humans and pose no threat.”

In mid-March, to help protect the health of students, faculty, staff, clients, and community, the veterinary medical center limited its patient caseload to focus on patients in need of essential medical care, and to manage emergency patients. Patients were picked up curbside, on-site personnel in the college was limited, and student classes moved online.

Moving classes online, while cumbersome, was achieved; faculty and staff rose to the challenge to meet the clinical needs of the senior class. Wanting to acknowledge the achievements and culmination of years of hard work for the class of 2020, the college quickly re-imagined the hooding and commencement as a virtual ceremony.



In June, the class of 2021 transitioned into clinical rotations that have been adapted to allow for physical distancing, as well as virtual medical rounds. Our students are resilient and continue to adapt to changes within their immediate and global surroundings.



Clinical students, faculty, and staff meet for a combination of in-person and virtual medical rounds, keeping face masks on at all times.

Since diseases of both humans and animals can travel as quickly as we can, veterinarians play a crucial role in the early detection and prevention of zoonotic diseases. Global knowledge and presence are paramount.

Whether understanding the implications of a global pandemic, aiding conservation efforts worldwide, or bolstering veterinary education in developing countries, UTCVM engages the volunteer spirit to create **Real. Life. Solutions.**

Teaching the Teachers

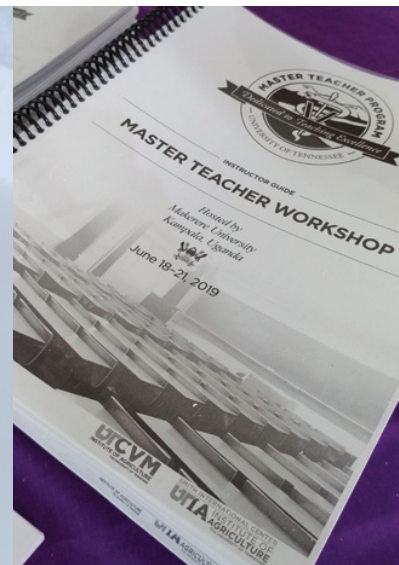
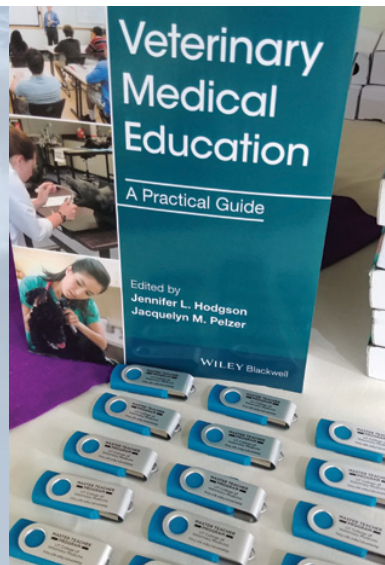
Last summer, members of the UTCVM Master Teacher Program, a program designed to strengthen the college's teaching program, traveled to Uganda to hold a Master Teacher Training Workshop at Makerere University. During the four-day workshop, Dr. Marcy Souza, Director of Veterinary Public Health, Dr. India Lane, professor of Internal Medicine, and Misty Bailey, Curriculum and Assessment coordinator, worked with twelve instructors from veterinary medical colleges from across East Africa to improve their teaching skills.

"Training veterinary educators to be better teachers leads to better veterinarians and better response to One Health problems such as COVID-19 or agricultural threats such as African Swine Fever and Foot and Mouth Disease," explains Souza. For many years, the veterinary community has embraced the concept of One Health, which is the interconnectivity of animal, human, and environmental health.

Among the many topics covered at the workshop were How People Learn, Course Coordination and Syllabus Design, Learning Outcomes, Effective Test Construction, and Principles of Constructive Feedback.

Participants agreed they could form a core of champions and effect positive change in veterinary medical education in East Africa. A memorandum of agreement was signed between veterinary colleges in Uganda, Kenya, and Ethiopia to continue to focus on teaching as a way to graduate better veterinarians.

Souza has also been awarded a USDA Foreign Agricultural Service grant award enabling her to lead a team of faculty and staff from UTCVM and the Herbert College of Agriculture in training 10 African faculty members in pedagogy for veterinary science.



Dedicated to Teaching Excellence

UTCVM

UNIVERSITY OF TENNESSEE



Photos courtesy of Dr. Marcy Souza, Dr. India Lane, and Misty Bailey.



UTCVM involved in groundbreaking conservation

The kakapo, also known as the owl parrot, is the world's only flightless parrot; now found on just three islands, the kakapo once thrived throughout New Zealand's forests before habitat loss and predation by introduced mammals almost wiped out the species. In June, Kakapo numbers were up to 210 (from a low of about 50 birds in the mid-1990s) due to a monumental effort to save the critically endangered bird. Last summer, Dr. Andrew Cushing, assistant professor of Zoological Medicine, traveled to a remote area of New Zealand to help with the Kakapo Recovery Plan. A Cessna plane had to deliver him for duty at low tide since the exposed beach was the airstrip. "In spite of the remoteness, it's a very engineered environment," explains Cushing. "There are no predators, and only those directly involved with the program are allowed on the islands."

The nocturnal birds, fitted with radio transmitters, are intensively monitored and managed during all their life stages. The eggs are pulled from the nests, incubated, hatched, and hand-raised for three or four days before being placed back in the nest, which is outfitted with a laser beam. When the mother leaves, she triggers the beam, signaling it's safe for a worker to take the chicks' measurements and assess their health.

Some of the nests are as far as five miles away from base camp and only accessible by climbing cliffs and crossing streams. "Being able to travel to New Zealand and work with critically endangered birds was amazing," says Cushing. But it was also about making contacts for future opportunities for UTCVM.



Photos courtesy of Dr. Andrew Cushing.

You Better Belize It

Located in the heart of the Neo-tropics, Belize is a conservation hot spot. Two years ago, Cushing was awarded a UTIA Faculty and Staff International Catalyst Grant to investigate potential sites for clinical year veterinary students and faculty to expand their education. He visited four sites in Belize and Guatemala to assess their suitability and chose to partner with the Belize Zoo because of its small veterinary clinic, support staff, and access to local wildlife rescue centers. Last fall, UTCVM faculty from zoological medicine, pathology, and anesthesiology, as well as eight veterinary students traveled to Belize with financial support from a UT Teaching and Learning Innovation grant as well as a study abroad endowment from the Smith International Center.

The Belize Zoo does not have an X-ray machine, ultrasound, or the capacity to run blood work. “Our students were able to experience what it’s like to practice medicine without the benefits and advanced technology available to them at a teaching hospital,” says Cushing. While the students received first-hand experience in wildlife conservation, rescue, and rehabilitation, the zoo in a developing country with little money and limited resources benefitted, as well. “We were able to teach the caregivers at the zoo how to do a proper necropsy and protocols to follow, how to take samples, and take appropriate photographs to aid in diagnostics,” explains Cushing – all helpful information when detecting

a disease outbreak. “Our zoological medicine resident, Dr. Peter Sojka, taught the native Belizeans about zoonotic diseases and simple ways to prevent it such as proper hand-washing; hopefully, they have taken that message to heart during this pandemic.”

Exposing veterinary students to other cultures helps them better understand how those cultures operate during times of crisis and will help them be more prepared to respond as veterinarians and be better global citizens.



Photo courtesy of Tracy Tomasko.

In Belize, veterinary students were able to treat species they wouldn't normally have access to in the United States including this coatimundi (above), tapir (left), and jaguar (below).



Photo courtesy of Tracy Tomasko.



Photo courtesy of Jessica Clowers.

Sharing Knowledge to Protect the Red Panda

The red panda has been the signature species for Zoo Knoxville for over 25 years, and the zoo has enjoyed an international reputation in captive red panda husbandry. Since 2000, Dr. Ed Ramsay, recently retired professor of Zoological Medicine, has been the zoo's Red Panda Species Survival Plan Veterinary Advisor; he's also published research on red panda medicine and given numerous presentations at national and international meetings. With funding from the Charles and Julie K. Wharton Faculty Development Fund, Ramsay, whose recent research has focused on canine distemper vaccination of non-domestic species, was able to attend and present at the Red Panda Global Species Management Plan (GSMP) meeting held in Darjeeling, India. This was the first time the meeting was held in a country where red pandas exist in the wild and also marked the first GSMP meeting where red panda veterinary advisors from Europe, Southeast Asia, and the United States were able to meet and discuss health issues.

Ramsay says relatively little is known about red panda health in the wild and infectious diseases are major concerns for both captive and wild

red pandas. "Canine distemper is the most serious infectious disease threat to red pandas, and continues to cause death of captive red pandas, particularly in developing countries," explains Ramsay. "Unfortunately, cases of vaccine-induced canine distemper have occurred in red pandas and resulted in many veterinarians, especially those in range countries, being reluctant to vaccinate red pandas. Safe vaccines for red pandas exist but they are not readily available in all countries, and information about red panda vaccination has yet to be widely distributed." Ramsay was able to share information about the safety of recombinant canine distemper vaccines in red pandas and also gained an appreciation of some of the cultural aspects that affect Indian zoos.

Earlier this year, Ramsay received the Emil Dolensek Award from the American Association of Zoo Veterinarians. The award recognizes exceptional contributions to the conservation, care, and understanding of zoo and free-ranging wildlife. 🐼

Photo courtesy of Sarah Jones, Red Panda Network.

Why Research?

- Meet recent graduate of the Class of 2020 **Nicole Szafranski**. She has a passion for parasites, and her favorite is *Diocetophyme renale*, a parasitic roundworm commonly referred to as the giant kidney worm that can grow up to three feet long. Even as a toddler, Nicole wanted to be a veterinarian. Her uncle and cousin are veterinarians; when she saw how much good they could do for animals and their owners, she knew it was the path for her. It wasn't until college at North Carolina State University she developed a love of the science behind veterinary medicine. Nicole explains the rest.



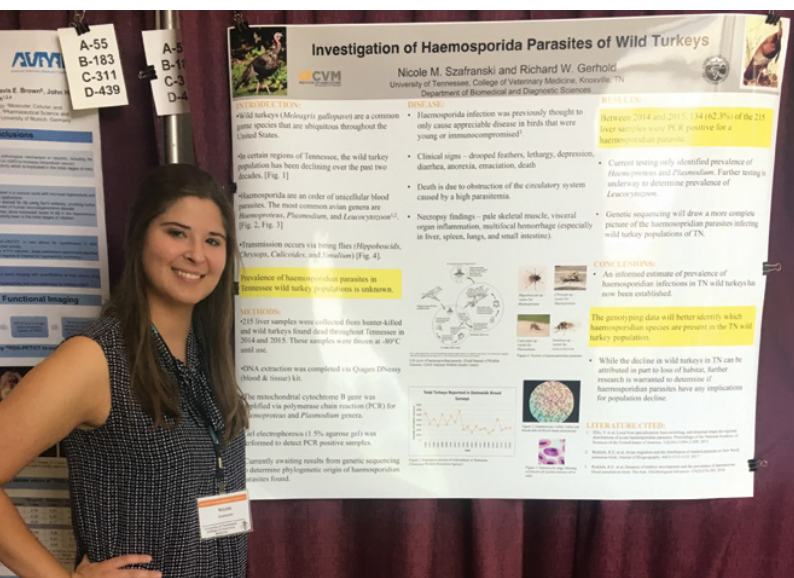
My first two years at UTCVM, I was strictly going for my veterinary degree. I'd hear about PhDs, or people working for the CDC and think, "That's really cool, but isn't really for me. I'm going to go practice clinical medicine." Then I thought about the opportunity to participate in the veterinary summer research experience and realized, "You know what? I have a lot of respect for the science that goes into the medicine and clinical applications we use every day, but I don't really know the process behind developing these procedures, methods, or pharmaceuticals." I wanted to delve into that, and the summer research program let me do that. In fact, I've actually changed my course a little bit and applied and was accepted in the PhD program through the College of Comparative and Experimental Medicine associated with the vet school.

Parasites? We need to look at all options. I studied the prevalence of the parasites in Tennessee's turkey population to try to determine if that could be one of the factors impacting the birds' fitness and lifespan. That summer led to my PhD focus – zoonotic parasites. The One Health concept has always appealed to me, and zoonotic parasites encompass all aspects of One Health – the interconnection of human, animal, and environmental health. There's not as much research on zoonotic parasites as there could be, so I see a niche I can fill.

I definitely recommend the veterinary summer research program not only to students interested in research but also to those who aren't. It's a great way to develop mentors and gain hands-on experience. It gave me a much deeper respect, admiration, and interest for what is behind the clinical medicine we practice every day. Our faculty and staff are incredibly open to students coming to them and asking questions regardless of where they work in the hospital or the college; that is one of the reasons I fell in love with UT and wanted to come here.

When I came here, I was determined to get the most out of the vet school experience as possible; research, clinical medicine, and parasitology are all very cool. Not being afraid to open new doors and step through is the best way to gain amazing experiences. Getting involved in things I never imagined is allowing me to pursue my passion. 🐾

Nicole completed the Boehringer Ingelheim Veterinary Summer Scholars Program at UTCVM in the Summer of 2018 under the mentorship of Dr. Rick Gerhold. She graduated with her DVM in May of 2020 and will continue immediately with her PhD program also under his mentorship. She has been awarded the first ever residency in parasitology at UTCVM, starting this summer. To learn more about the Summer Scholars program, visit tiny.utk.edu/VetSummerScholars.



During the summer, I studied a blood parasite in wild turkeys. The turkey populations in Tennessee and parts of the United States have been declining over the last decade or so and we're not really certain why. Is it habitat encroachment? Infectious disease? Virus? Bacteria?



FAMILY

To the class of 1979, with love W.W. Armistead
First Dean of UTCVM

“It marks the first, small transfusion of orange-blooded veterinarians into the mainstream of American Veterinary medicine. But even a little orange can make a big difference.”

From the CHIMERA, 1979 yearbook

(Left to right) Dr. D.J. Krahwinkel, Dr. Becky Gompf, and Dr. Robert Paddleford unload a truck of furniture to move into the newly constructed veterinary medicine building.

Isolation Learning

A graduate - moving on, but not forgotten.

Stephanie Steuri has always loved being around animals and had an interest in math and science and even competed on her school's robotic team. At age 16 she decided to combine those passions and become a veterinarian, so she shadowed a veterinarian in her home state of Hawaii where she was exposed to cuddly kittens and puppies as well as the serious aspects of the profession. That didn't scare her away, but made her appreciate the many roles veterinarians fill in society. After finishing her undergraduate degree at the University of Hawaii, Stephanie started the application process and picked Tennessee.

Why did you choose UTCVM?

I applied to several vet schools, but I have family in Nashville so that helped. However, and it sounds like a cliché, when I came to interview here there were signs everywhere screaming at me this is where I needed to go. That "family feeling" people talk about is exactly how I felt early on. When I received the acceptance letter there was no doubt where I was going to go! I will never forget a professor reached out to me for a "pulse check" over the holidays my first year here, because she knew how difficult it was being so far from home. As a fourth year student, I've told so many students coming to interview about the family atmosphere. One downside I've found is it's so much more difficult to leave and say bye for now.

You were in the second half of clinical rotations when the pandemic altered life at the college. How did that change your education?

Our class had spent three years in the classroom waiting for an opportunity for hands-on learning. When the pandemic hit, clinics went completely online with content delivered through Zoom. No longer any in-person training, and that's how I enjoy learning. The schedule on every clinical service was different, but typically I had morning and evening rounds. We would cover particular topics or a combination of topic rounds and a discussion on the current patients being treated at the hospital. All our professors were doing their best to provide content and keep learning moving forward; that is quite a challenge especially once you've had a taste of being on the clinic floor and immersed in the medical environment.

Has this experience made you stronger?

I could sit here and cry and be upset all day or try to focus on the positives and benefits. I don't mean to ignore the sad emotions, but this has helped me learn even more to be an adult and continue to function as such and roll with the punches. For instance, we still get content and



have been able to round on clinical rotations every day; sometimes rotations would be so busy

there wouldn't be enough hours in the day to round. I admit, to have graduation move online has been terribly difficult to cope with. We keep hearing it doesn't diminish our accomplishments or make us less of a doctor, but how many times during the challenging moments of vet school have I thought to myself, "To walk across that stage with diploma in hand and look out in the audience and see everyone's biggest supporters in the room will make this worth it!" COVID-19 has ripped away from us the symbolic moment of closing this chapter and recognizing the culmination of years of hard work.

Has that feeling of family at UTCVM helped you through this time?

Absolutely! I quarantined myself in the apartment, as an extrovert being cooped up is a nightmare. I am miles away from my family in Hawaii, but we still have clinicians, house officers, and technicians staying in touch with one another and providing support for each other. The feeling of family here is so blatantly obvious right now I wish prospective students could see all this background communication of individuals at every level in this program kind of reaching out. It makes you feel worthy and not forgotten. Forgotten is an easy sentiment for us graduating seniors to feel. When all of this is done, everyone else at UTCVM gets to stay, but the Class of 2020 is saying bye and moving on to hopefully bigger and better things.

Stephanie is completing a small animal rotating internship at Mississippi State University College of Veterinary Medicine and then plans to pursue a surgery residency. 🐾

First-year veterinary student. ICU nurse by trade. Tennessean through and through.

Hope Hunter has two bachelor degrees and is about ten years older than her classmates. She had been an ICU nurse for four years (two spent at Vanderbilt's medical ICU) when she applied a third time and was accepted into UTCVM's Class of 2023. To help pay bills while in veterinary school, Hope works four shifts a month at a local community hospital. After receiving her class schedule in January, Hope created her work schedule: it just so happened that some of the days she was scheduled to work were also some of the first days that hospital dedicated one of its units to COVID-19 patients. When she's not at work, she's in her house with her three dogs and two cats to keep her company.

What are some of the similarities between the nursing and veterinary professions that stand out to you?

What I learned about medicine in general is very useful, but also how to communicate with people in crisis. As a nurse, you learn to adapt to a certain level of stress and find your way through it, because if you remain stressed all the time you will just flounder and not be able to provide good care to your patients. It's the same way in vet school.

What is a typical school day for you?

I get up by 7:30, shower, get ready, sit down in front of the computer with coffee and start listening to lectures scheduled for that day as if I were going to the classroom. I don't try to get ahead and definitely try not to get behind! Sometimes the lectures spill over into the afternoon if I've gotten distracted. I spend an hour or two relaxing and then get back to working on study guides and flash cards until about 8pm, then I'm done for the day.

What are some of the advantages to this new learning environment?

Some days it's nice to be in my pj's, I'm not going to lie! It's also nice to be able to go at my own pace and get a snack without interrupting anyone. COVID-19 has challenged me to buckle down and focus. I'm much better in the classroom taking notes and listening to instructors with no distractions from my dogs or a load of laundry that needs to be done. It's challenging but I feel like I'm in the homestretch.

How have your professors transitioned to online teaching?

They have been so amazing in their ability to try to transform the curriculum and to make sure we have the information we need, whether by recording their lectures or uploading last year's lectures. They have been very present and available for office hours and email and have been incredibly supportive and helpful sending us well wishes and such.

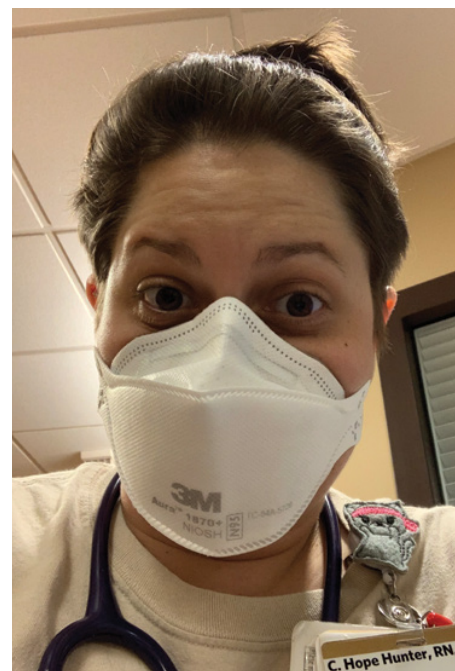
Do you feel these changes have made you stronger?

Absolutely! The decision to come to vet school and be on my own was a tough one; my family is in middle Tennessee, and my mom got really sick right before I moved. Being trapped in this bubble of my own away from my family challenges me on a daily basis and has forced me to grow and to be stronger in order to fulfill what I need to do here at school as well as try to maintain my sanity.

Do you feel there are any lessons learned?

I hope we can all be more empathetic and understand that our actions affect the lives of others. I hope people can be more adaptable and able to roll with the punches when things don't go their way. I hope people are more kind and thoughtful toward others.

Hope is the rising Wellbeing chair and Junior Delegate of the UTCVM chapter of the Student American Veterinary Medical Association. She hopes to be involved with the organization's efforts to help veterinarians find better ways to cope with the stresses life throws at them. She hopes to focus on shelter medicine with a community outreach component. 🐾



Always a **VOL**Vet

UTCVM Distinguished Alumni & Career Impact Awards

In 1994, the UTCVM Distinguished Alumni Awards were created to recognize some of the outstanding graduates of the college. Nominees are UTCVM graduates who excel in at least one of the five areas of veterinary medicine: private practice, teaching, research, public service, or organized veterinary medicine. In addition to these

two awards, an award for First Decade Achievement is also given to a graduate of UTCVM with a DVM degree within the last ten years. The awards are presented at the graduation and hooding ceremony each spring.

2019 FIRST DECADE ACHIEVEMENT AWARD CARA A. CLOUSE, DVM

Dr. Clouse (UTCVM '11) grew up in New Hope, Tennessee. After training with the National Institutes of Health she began working with Alpha Genesis Incorporated (AGI). While at AGI she led a team devoted to research and development support and was quickly promoted to Associate Veterinarian of Research and Sales. Dr. Clouse then pursued a more research-focused career at Wake Forest Institute for Regenerative Medicine as a strategic and tactical coordinator of animal-based pre-clinical research projects. Projects included investments from Department of Defense, National Institutes of Health, private

industries, and personal donations. Dr. Clouse also worked as a compliance officer and Institutional Animal Care and Use Committee liaison, editing protocols and training medical doctors and staff. Dr. Clouse is a Veterinary Medical Officer at-large in the USDA and a privately employed veterinary consultant. 🐾



2019 NON-PRIVATE PRACTICE AWARD LTC JENNIFER L. SCRUGGS, DVM

Dr. Scruggs (UTCVM '06) was commissioned as a Captain in the U.S. Army Veterinary Corps after graduation. After completion of Officer Basic Course in San Antonio, Texas she was assigned as Officer-in-Charge of the Fort Benning Veterinary Treatment Facility. From there, she moved to Andersen AFB, Guam, and deployed to Iraq in 2009. Dr. Scruggs was selected for a clinical pathology residency via the Veterinary Corps Long-Term Health and Education program, completed her residency at UTCVM, and obtained board certification in 2014. She was a faculty member at the Joint Pathology Center (JPC) where she trained

anatomic pathology residents in the Department of Defense Veterinary Pathology Residency Program from 2014-2017. Dr. Scruggs is currently assigned to the United States Army Medical Research Institute of Infectious Diseases, Fort Detrick, Maryland, as Chief of Clinical Pathology. Dr. Scruggs was promoted to Lieutenant Colonel in March of 2019. 🐾



2019 PRIVATE PRACTICE AWARD JACK UPCHURCH, DVM

"**Dr. Jack**" as so many of his clients call him (UTCVM '82), grew up in Pall Mall, Tennessee. After graduation, Dr. Jack worked for a year in Corbin, Kentucky before returning to Jamestown, Tennessee in 1983 to open his own private practice, Upchurch Animal Clinic, which was the first veterinary clinic in Fentress County. Dr. Jack took on veterinary responsibilities at the Jamestown Stockyard, Jamestown Rotary Walking Horse Show, and the Fentress County Fair Walking Horse Show. He also partnered with county health departments to offer annual rabies vaccination clinics. Dr. Jack worked for the USDA during the Newcastle

Disease outbreak in California and on the Pseudorabies outbreak in Fentress County and Monterey, Tennessee. Throughout the years, he has worked closely with many rescue groups and clients who have service dogs, and mentored several veterinary students. He is an active member of several groups and is the Vice President of the Fentress County Farm Bureau. 🐾



In 2019, the UTCVM Career Impact Awards were initiated to recognize faculty members who have positively impacted a UTCVM graduate's career in the ten-, twenty-, or forty-year period since graduation. The faculty member awarded for each period should be one that alumni would have called upon for advice, sent referrals, or

have influenced their life in some way professionally or personally. The impact of the faculty member may have been initiated during the time the graduate was a student or during their career. Recipients may be living or deceased. Recipients may be current or past faculty members.

10-YEAR CAREER IMPACT AWARD

MICHAEL SIMS, MS, PhD

One of the original faculty members, **Dr. Sims** retired in 2014, but continued to teach until July 2017. He received his Masters of Science from Memphis State University in 1969 and his PhD from Auburn University in 1974. In addition to teaching Physiology and serving as Department Head for Comparative Medicine while at UTCVM, Dr. Sims also helped establish both the Dog Bite Prevention program and the Master Teacher Program.

The Class of 2009 acted as the exclusive nominators for the 10-Year Career Impact Award, and had the following to say about Dr. Sims.

"Although it's impossible to pick just one of my professors to be the most influential in my career (as I love them all!), I would like to nominate Dr. Mickey Sims for the award. He was always available and happy to share his wisdom and insight, both in regards to veterinary medicine and life itself. He is one of many that deserves this award." 🐾



20-YEAR CAREER IMPACT AWARD

DIANNE MAWBY, DVM

Dr. Mawby is a 1986 graduate of the Western College of Veterinary Medicine, University of Saskatchewan in Canada. She completed a small animal internship and a small animal medicine residency with a Master of Veterinary Science also at the WCV. Dr. Mawby is a Diplomate in the American College of Veterinary Internal Medicine. She joined UTCVM as a faculty member in 1991 and is still serving and teaching in Emergency and Critical Care.

The Class of 1999 acted as the exclusive nominators for the 20-Year Career Impact Award, and had the following to say about Dr. Mawby.

"When I first graduated and was unsure how to treat some new and difficult cases, she always called me back and helped me with a treatment plan. She's such a busy person, and I was probably not the only graduate calling her, but she always helped. Dr. Mawby definitely deserves this award!" 🐾



40-YEAR CAREER IMPACT AWARD

D.J. KRAHWINKEL, DVM, MS

Dr. Krahwinkel, a founding faculty member of UTCVM, retired in 2005, and continued to teach and practice at the college until 2008. He has continued to be active in the veterinary community, particularly through the Tennessee Veterinary Medical Association, and the American Veterinary Medical Association. He graduated from Auburn University College of Veterinary Medicine in 1966, and is board-certified by the American College of Veterinary Surgeons, the American College of Veterinary Anesthesiologists, and the American College of Veterinary Emergency and Critical Care.

The Class of 1979 acted as the exclusive nominators for the 40-Year Career Impact Award, and had the following to say about Dr. Krahwinkel.

"As an instructor and clinician, his patience and ability to teach were unsurpassed. He was never too busy to teach or answer questions."

"Dr. Krahwinkel's laugh, smile, and joyful enthusiasm were ever present in school and for all our years since graduation. You could always depend on him for encouragement and to help give a balanced, down-to-earth perspective on challenges you faced. He also always remained a ready source of dependable knowledge in consultation of cases we struggled with after graduation." 🐾



It Takes **Two** To Serve

• The story of the family behind the family

For Jane New and Cathy Henton, the UT College of Veterinary Medicine is more than just their late husbands' former employer. It was the backdrop where they built their life and a place that still benefits from their generosity.

Jane, along with most of the spouses, was actively involved in the college and "sponsored" the younger group of veterinarian spouses. "We kept it together, had parties, and filled in the gaps and made it a family. In the early days there weren't many of us so it was a chance to get to know each other." Everyone was coming to Tennessee from other places and weren't Tennessee people to begin with." Jane says she is "Tennessee people" now.

Veterinary professors John New and John Henton are well-known names among alumni and faculty. Each dedicated more than thirty years of their professional career to building the College and its programs to

what it is now. They were devoted student advocates. The legacy of New is seen in the HABIT (Human-Animal Bond in Tennessee) and CAIT (Companion Animal Initiative of Tennessee) programs that extend UTCVM's outreach into the community. He finished his career as head of the college's Department of Comparative Medicine, now called the Department of Biomedical and Diagnostic Sciences.

You may well recognize Henton from December's "last chance" Continuing Education conference that now bears his name and carries along with it his passion for lifelong education. John Henton was an advocate of lifelong education and focused his career on large animal veterinary medicine.

What you may not know is the impact of the ladies behind the professors. When New and Henton joined the fledgling faculty in the early years of the College in the late '70s, it was common for wives to not



• Cathy and John Henton created a family atmosphere for UTCVM starting from the very beginning. That legacy continues to influence the culture of our college every day.

“WE KEPT IT TOGETHER, HAD PARTIES, AND FILLED IN THE GAPS AND MADE IT A FAMILY.” – JANE NEW

work outside the home and direct some of their free time toward volunteer ventures.

“When my husband started, all of the faculty were men,” said Jane New. “The wives grew a close bond in support of the work of their husbands.”

However, the magnitude of dedication and service that Jane New and Cathy Henton devoted to UTCVM was uncommonly generous. While neither were on the payroll at UT, the students, faculty, and countless others owe these women, and many of the other faculty wives, a debt of gratitude.

If you were among the graduates of the 80’s and 90’s, perhaps you were invited to the infamous Henton Thanksgiving potluck dinners or included in the monthly mentor meals.

According to Cathy Henton, her husband was the one who cooked, but the hospitality and welcome that guests received was a joint effort. The couple viewed the students as family. Students were encouraged to use their house phone to call family on holidays, and there was no shortage of cookies and goodies brought to the college by Cathy and other professor wives.

“It was fun to learn about the traditions from all over the country,” Cathy said. “We would get nice comments from the parents, knowing it was their child’s first year away during a holiday like Thanksgiving. It was very rewarding.”

John and Jane were both supportive of each other. Jane has a love of animals but nothing that could touch the passion that John had for them; he understood the importance of the human-animal bond and that motivated him to establish programs such as HABIT and CAIT.

Jane is still involved in those programs, and continues to help manage the volunteers. She has worked in nursing homes, schools, and hospitals.

“Often times, people need the visit as much from the pet as they do from the people visiting with the animal, especially in nursing homes,” New said. “In schools, I’ve seen children that would never go near a dog, but over the course of the visit, they will warm up to the animal and look forward to the next visit.”

John New, who passed away in 2014, had a dream to see the HABIT program develop throughout the state. Recently, the HABIT program expanded to Middle Tennessee.

John Henton passed in 2010. In 2016, the faculty at UTCVM honored his memory and his wife by renaming the informally named “Last Chance Seminar” held each December to the “Henton Veterinary Conference.”

The New and Henton families established scholarships at UTCVM many years ago to support and promote education in subjects which were of most importance to them. Their endowments will ensure that students in all future classes will know about these dedicated professors and their generous wives whose impact on UTCVM will extend far into the future. 🐾



After his death, “Working Hard to Fill Big Shoes” was a sentiment taken up by the programs that Dr. New started. Jane New continues to support those programs and the individuals who are still working to fill his shoes.



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Beginning *Our* Legacy



A note from Dr. D.J. Khrahwinkel, original UTCVM faculty member

It was the summer of 1975.

A small group of faculty was on the University of Tennessee campus to establish the College of Veterinary Medicine. The Tennessee legislature, with encouragement from the Tennessee Farm Bureau, had previously approved the formation of a new veterinary school. Dean W.W. Armistead, associate deans Charles Reed and Bill Grau, and the department heads had arrived on campus earlier. The majority of the small group of faculty came from Michigan State University or Texas A&M University. Dr. Armistead had served as dean at both of those colleges. His stated vision was that UT would have a small but “high quality” program. The challenge was to take one year to establish a curriculum, plan and work on a building to house the college, and choose a group of students for the first class to begin studies in the fall of 1976.

On numerous occasions, the small, but dedicated faculty discussed the unique opportunity to be a part of establishing a new college. There would be no traditions, no history, no previous classes, and no old exams for students to use. We would get to assemble a new curriculum, complete a new building of our own design and choose the best 40 students from a large pool of applicants whose previous opportunity was to be one of the fourteen men and women per year to be admitted to Auburn University. Many of these applicants were near the age of the faculty; some were older. Despite being young, all the faculty had teaching experience at other schools. We were not rookies! I had spent the previous 6 years at Michigan State and was tired of cold winters and short days. When Dr. Armistead called to offer me a job, I was away at a meeting in Canada, but my wife called to tell me that she had accepted a new job for me at UTCVM.

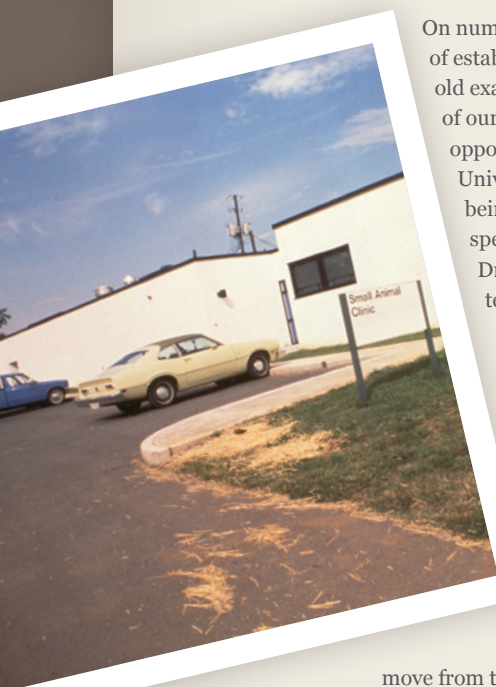
We were going to squeeze a traditional 4-year veterinary education into a 3-year, 11-quarter calendar without summer breaks. We were not sure the students or faculty would survive this very strenuous, compressed experience. Most of the faculty had experience with 3-year programs which had been used at both Michigan State and Texas A&M.

With no building of our own, we held classes and labs in the UTIA print shop, animal science pavilion and plant science classrooms. Our offices were plywood cubicles hastily thrown together in McCord Hall and the print shop. Lastly and most important, was the challenge to convert young naïve minds into educated and competent veterinarians.

It was definitely a “one time” experience. With the new W.W. Armistead Veterinary Teaching Hospital completed in the winter of 1979, that first class had the “honor” of helping move from temporary facilities on Cherokee Farm to this brand new, never-been-used modern hospital!

Now 40 years have passed, though it seems like it was yesterday! Most of the original administration and faculty are deceased or have gone on to different careers. A few liked it so well in East Tennessee that they stayed, retired, and raised children and grandchildren in “Rocky Top.”

I have had the great pleasure of maintaining contact with many of that first class for the past 40 years. I still remember many of their names and all of their faces. Most of them went on to significant practicing careers all over the U.S. Others completed graduate training and had a career in academia. A few joined the military while a few others got into private business and politics. Many are retired, but memories of each of them still roam in the minds of old faculty like myself. I had the pleasure of helping educate some of their children who followed their parent’s footsteps through the hallways of UT College of Veterinary Medicine. 🐾



The day we threw
5 gallons of water

A note from Dr. Pat Hackett, class of 1979 president

June 12, 1979

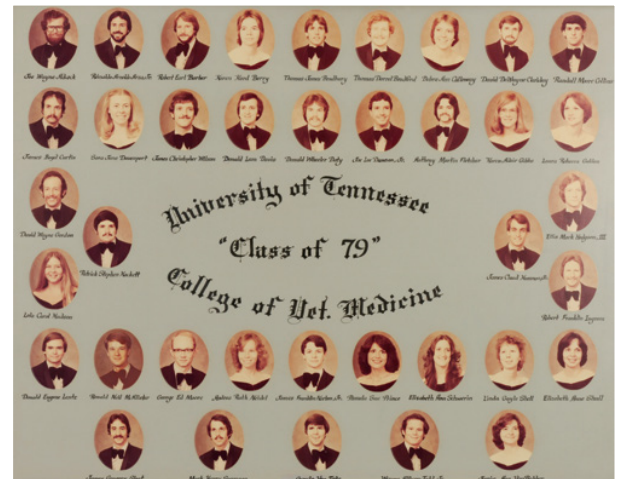
Yes, it was my 24th birthday,
but I don't remember it for that.

It was the day when thirty-nine tough, intelligent young people in their twenties or early thirties started a process that continues every year to this day. They were fortunate or stubborn enough to graduate from the University of Tennessee College of Veterinary Medicine. They had technically become doctors in late May at the hooding ceremony, but this day was the university graduation.

It all began in 1976. We were asked to go to veterinary school year-round for three years unlike any other veterinary school in the country. That is the first unusual situation. The second was we didn't have a building, we just used whatever space was available. That was fine for classrooms because there were always some that we could borrow. Anatomy lab was a little tougher! So, they remodeled the area below the seats in the Brehm Arena. It was temporary, so no need for heat or air. We wore shorts and t-shirts in the summer and dissected our cadavers in coats with gloves on in the winter. There were sinks but they froze up in the winter. There was only thirty-nine of us after we lost one before we hardly started. I am sure that sent a shock wave through us and stiffened our resolve.

It wasn't all bad. We had more professors than students, so help was literally over your shoulder at all times. Those were the days of formaldehyde-infused cadavers. Late night study sessions in anatomy lab always ended with cooler-chilled beer, complete with the distinct flavoring of formaldehyde. Who knew it would penetrate a can? Must explain why we are all so well preserved forty years later. I remember a night study session when we decided to "borrow our dog cadaver." Yes, it was probably against the rules, but rules were yet to be delineated. The cadaver was spread out on the apartment kitchen table by one student as he awaited the group's arrival. A knock on the door was greeted by a cheery "come in." The poor girl was selling magazines for something, she never explained what for, as she ran down the stairs and across the parking lot screaming past the other group members as they arrived.

Our second year saw the addition of 60 new first-year students to the veterinary college. We soon discovered the professors paid our class less attention. It was like adding a younger sibling; less attention meant more freedom. We were quizzed constantly by the class of 1980 about classes, professors, and what type of tests they should expect – information which was sorely lacking to us during the previous year. We continued to use open classrooms and attend class year-round. As college students will often do, we frequented pizza buffets for lunch and went back to non-air-conditioned rooms for lectures. This brought about my usual excuse for not remembering some factoid from school, “that must have been taught during the summer after lunch.” Ninety degrees and a stuffed stomach did not sharpen the memory. The winter of our second year we had snow. Our professors had a temporary office building and the back of that building was tasked with being our student surgery lab area. Several classmates and I drove to the building for our lab. We parked and started to exit the vehicle, only to find our “friends” were waiting with snowballs. Being the brave lads that we were, we jumped back in the car and tried to speed back up the hill behind the temporary office building. There was shade, there was ice, and there was the air conditioning unit for the professors’ office building. Who knew a Ford Pinto could push an air conditioning





unit off its pad and rip the unit from the building? I was in surgery only to be removed from the lab by the UT Police. My professors will be glad, and my classmates surprised to learn that the police have not taken anyone from surgery again in the last forty years! Of course, my insurance paid for the repair, but because the new building would be done “soon”, the repair was deemed unnecessary. That summer, every warm day in class I was greeted by a string of visibly sweating professors, each informing me of the current temperature in the temporary office building.

Our third and final year brought the clinical rotation portion of our curriculum. We still had no building, but it was under construction and each day offered new hope that we would enjoy the new facilities soon. In the meantime, we were placed in two small rectangular white buildings with a blue roof as I recall. It was before their introduction, but I am sure that they were the forerunners of today’s ubiquitous pods. They were cinderblock, had very few windows, and only one chair for the receptionist. Imagine 39 students divided into two groups, 20 in the large animal pod and 19 in the small animal pod. Throw in a gaggle of professors and an occasional client who stumbled to the facilities. Yes, they were hard to find, behind the University of Tennessee Hospital with our nearest neighbor being the now-famous Body Farm. You might say just a brief breeze away.

Then heaven on earth arrived, a new building, from a pod to the Taj Mahal! They moved us into the new digs with two quarters to go until graduation. The first issue was that no rooms had labels on them to identify their purpose. The bathrooms had different handles but no men or women signs. This caused some interesting moments such as several male students changing into their coveralls only to have the door opened and five or six women round the wall into the bathroom. After the apologies and quick coverups, the students looked again at the urinals and felt relief that this wasn’t their error. We were all cramming for the national board exams. Once again, it sure would have been nice not to be the first class. The nearest we could get to advice about the test was from hear-say and rumor. I did hear that we had the first safe place for college students. It was rumored that the hay storage in the large animal area had been reshaped to include a hollow center accessed by climbing over the top. The safest place to study for the national boards and avoid those pesky professor interruptions. That was just a rumor, but I did manage to pass those boards somehow.

Well, all 39 of us graduated, we spread out all over the state and country. It has been a great forty years. I always thought of our professors as being much older than the students, but as time has passed, I grew to realize they were only a few years older than us. Many were starting their careers. They did a great job under difficult conditions and, in some cases, we may not have always been helpful. I enjoyed working with Dr. Bob DeNovo and Dr. John Henton for many years on the East Tennessee Veterinary meeting in Gatlinburg. I miss John as I know many of my classmates do as well. I established a wonderful friendship with Dr. Leon Potgeiter many years post-graduation. We have shared motorcycles and all things western. I thank these three men and all the wonderful men and women who taught and gave me the opportunity to explore and enjoy this fantastic profession. 🐾



The UTCVM Class of 1979 was recognized on the field at the Vols Homecoming game in Neyland Stadium this past fall.



“He shaped our profession and guided our college.”

That is how Dr. Ed Claiborne (UTCVM '80) describes Dr. Willis William (W.W.) Armistead, founding dean of the UT College of Veterinary Medicine.

Dr. Armistead did that, and much more. He actually guided three veterinary colleges, serving as dean at Texas A&M University from 1953-57 and then at Michigan State University from 1957-74 before being appointed founding dean at UTCVM in 1974. Dr. Armistead took the helm of the University of Tennessee Institute of Agriculture in 1979 as vice president, a position he held until his retirement in 1987.

Dr. Armistead was a respected representative of and well-recognized voice for the veterinary profession and was asked to serve in an advisory capacity for more than twenty-five state and national organizations. Perhaps Dr. Armistead's most significant impact on the veterinary profession began in May 1973, when he was asked by the Tennessee Higher Education Commission to conduct and lead a feasibility study for the establishment of a veterinary medical school in Tennessee. His report to the state legislature on the prospects for a veterinary college ultimately became the planning document for the design and construction of our veterinary college. On January 31, 1974, TN Senate Bill No. 1522 authorized the Tennessee Higher Education Commission to establish the College of Veterinary Medicine at the University of Tennessee in Knoxville and to begin operations no later than September 1976. Dr. Armistead was appointed dean, and the rest is our history.

“He did far more than watch and approve what the architects and builders did,” says Dr. Armistead's son, Jack. “He actually drew up first drafts of the floor plans, traffic flow patterns (human, animal, and vehicular), and equipment specifications that would be needed. But

his vision did not stop there.” Dr. Armistead was far ahead of his peers when, starting in the 1970s and extending into the next three decades, he identified the rising cost of veterinary medical education as a major threat to the profession. The primary goal of Dr. Armistead's three-year curriculum was to contain these costs for the benefit of the students, the college, and the state. In his words, “There is nothing magical or sacred about the use of four years as the standard for university degrees. It is time that veterinary educators, increasingly pressed by spiraling costs and too little time, begin to think outside the box of traditional curriculum formats.” (JAVMA, Vol 221, No. 12, December 15, 2002).

Dr. Armistead's leadership skills were legend among those who knew and worked with him. Most significant in this regard was his selection of the first nineteen members of the UTCVM administration and faculty. His ideals for the conduct and appearance of veterinary faculty were clearly articulated, and he hand-picked individuals who shared his values for teaching excellence and professionalism to guide the college through its formative years. He chose well, and the college today still enjoys a reputation as being a place where teaching is job number one, and collegiality is a core value. His well-known and uncompromising standard for excellence was best illustrated to me when, in welcoming a new class of students to the UTCVM, he told them that “among other things, you will learn that ‘VETERINARIAN’ is a six-syllable word.” He was not hesitant to correct anyone at any time who mispronounced the name of his profession. 🐾

Congratulations!

Dr. Barry Rouse, veterinarian and immunologist in the Department of Biomedical and Diagnostic Services at UTCVM, received the American Veterinary Medical Association's Lifetime Excellence in Research Award at the National Veterinary Scholars Symposium held at Texas A&M University in the fall of 2018. The national award is given annually in recognition of outstanding contribution to the veterinary or biomedical professions through basic, applied or clinical research.

Named a Distinguished Professor in 1994 and a UTIA Institute Professor in 2017, Dr. Rouse is world-renowned for his immunopathology research discoveries involving HSV-1 and ocular disease. His research has been continuously funded by the NIH since 1978, garnering more than \$20 million in funding and producing more than 400 peer-reviewed scientific manuscripts.

Passionate about training and developing the next generation of scientists, Dr. Rouse has mentored over 75 graduate students and post-doctoral fellows who have enjoyed successful academic careers at places like the Whitehead Institute for Biomedical Research, Stanford



University, and the Centers for Disease Control and Prevention. His past and current students identify him as not only tough on them but tough on everybody; he questions the status quo and counts among his hobbies “making people discuss and defend their views.”

In January 2019, it was announced that **Dr. Elizabeth Strand** has been selected by the Association of American Veterinary Medical Colleges as the recipient of the 2019 Billy E. Hooper Distinguished Service Award.

This national award recognizes those whose leadership and vision have made a significant contribution to and helped transform academic veterinary medical education. Nominations for this award are submitted to the AAVMC Executive Committee who review many qualified individuals under stringent criteria. Dr. Strand has been instrumental in changing the way educators and the veterinary profession tend to

the human needs in veterinary medicine. She developed the term “veterinary social work” and is the founding director of our VSW program. Dr. Strand has been recognized and received many awards including an endowed professorship and the UT President's Award.



At the 2019 International Veterinary Emergency & Critical Care Symposium (IVECCS), **Dr. Tom Doherty** was recognized as the recipient of the Career Achievement Award by the American College of Veterinary Anesthesia and Analgesia (ACVAA), which recognizes a Diplomate for accomplishments throughout a long career of outstanding performance in advancing the art and science of veterinary anesthesia and/

or analgesia. Dr. Doherty joined the UTCVM faculty in 1993 and has been teaching anesthesia to students, residents, and interns for 25 years. He has authored over eighty publications in the field of veterinary anesthesia with original research, review articles, and clinical commentary and served as editor in the publication of two major textbooks.



Dr. Ed Ramsay was presented with the Emil Dolensek Award by the American Association of Zoo Veterinarians (AAZV) in 2019. This award is presented in appreciation for exceptional contributions to the conservation, care, and understanding of zoo and free-ranging wildlife reflecting Dr. Dolensek's commitment to these purposes. Dr. Ramsay served as president of the American Association of Zoo

Veterinarians and is a member of the Wildlife Disease Association. He joined the faculty at UTCVM in 1991; his clinical interests are captive and free-living wildlife medicine and non-domestic field medicine.

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The University of Tennessee Institute of Agriculture publicly launched its most ambitious capital campaign ever. "Together We Grow" has a goal of raising \$175 million to extend **Real. Life. Solutions.** to new generations. The ten-year campaign that began its silent phase in 2012 will conclude December 31, 2022.

For more information about these giving options, or to discuss donating to UTCVM in a different way, please get in touch with us!



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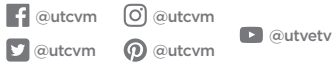


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Mule Days

Meet Dr. Kathy Kunkel's beloved "Rosie Lulubelle", a gaited Tennessee Walking Horse Mule. They are decked out in their Big Orange & White in honor of the University of Tennessee at the Annual Mule Day Parade in Columbia, Tennessee. Mule Days has its roots back in the 1840's; the annual parade was started in 1934 in an effort to increase community participation. The parade, which typically runs on the first Saturday in April every year, includes all types of mules and floats to honor not only the mule but also its history in the Volunteer state. It is a wonderful event and worth the trip to Columbia.

"Rosie Lulubelle" is a cross between a male donkey (a jack) and a female Tennessee Walking Horse. This type of mule is known around the world for its smooth gait, hardiness, intellect, and good nature. Rosie is registered with the American Gaited Mule Association, a group based in Tennessee. Dr. Kathy Kunkel, a 1989 graduate of the UT College of Veterinary Medicine, is obviously a very proud UT alumna. Dr Kunkel serves on multiple boards at UT and looks for any opportunity to share her love of her alma mater. 🐾