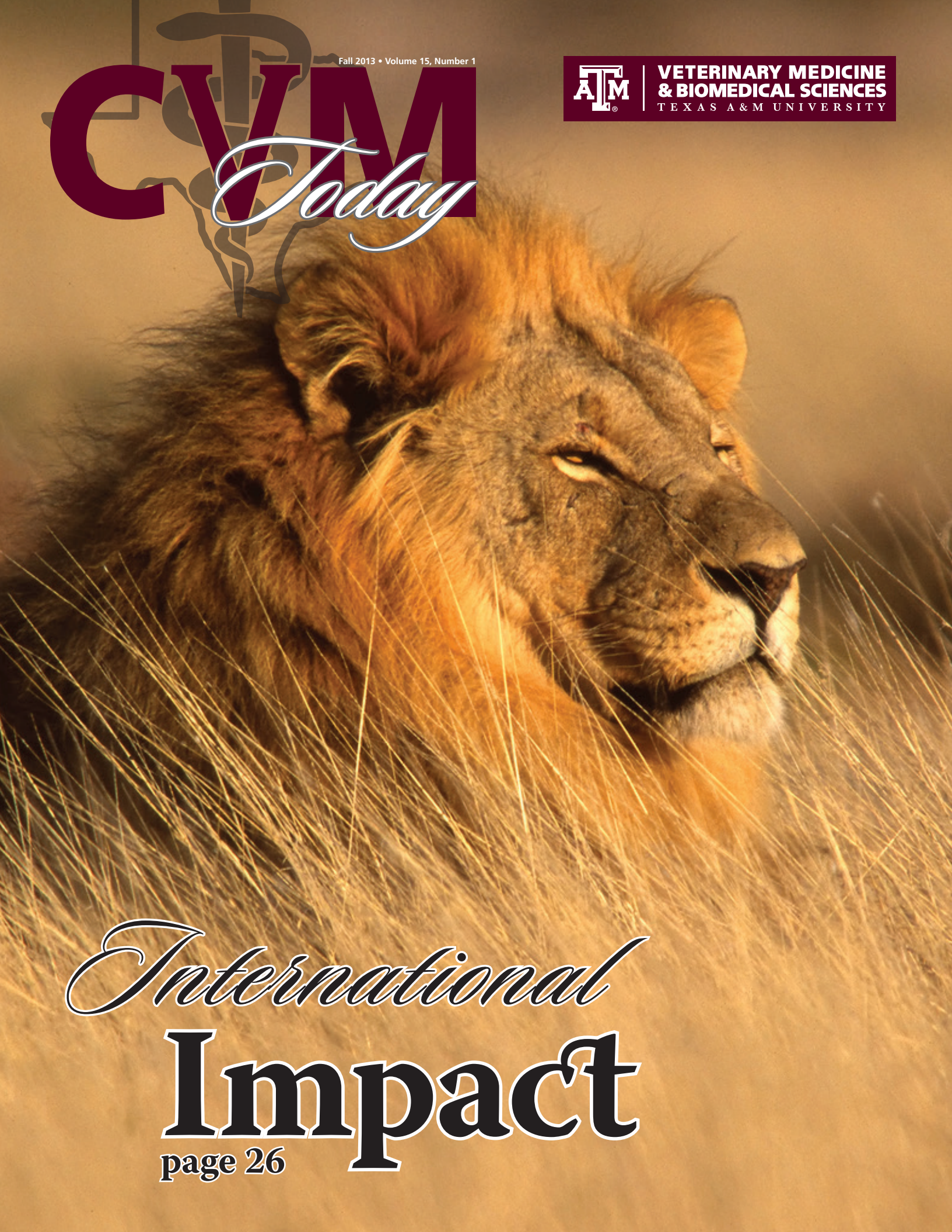
Fall 2013 • Volume 15, Number 1

CVM Today

VETERINARY MEDICINE & BIOMEDICAL SCIENCES
TEXAS A&M UNIVERSITY



International Impact

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Dean's Message

Howdy! The fall semester has arrived in College Station and the faculty, staff, and students of our college have been busy extending our mission of excellence in teaching, research, and service across the State of Texas and beyond. In early February, we shared our story with state legislators in partnership with members of the Texas Veterinary Medical Association, further engaging our elected officials in defining the future of our profession. We continue to reach out internationally through collaborative relationships to assist developing nations in addressing animal health and welfare with dynamic and innovative programs delivered here at the CVM and oversea, while at the same time learning from our international colleagues.

We also have celebrated the beginning of new programs and construction projects, from the groundbreaking for a world-class equine facility to the designation of the CVM as the lead college for Texas A&M University's One Health Initiative. In addition, design work continues on developing our new Veterinary Education Complex that will be the centerpiece of our veterinary campus. Combined with leading-edge research and award-winning faculty and staff, the CVM continues to push the boundary in veterinary medical education and research.

To support great people and outstanding programs, we have actively sought out and received private funding from generous donors who are committed to investing in the future not only of our college, but also animal, human, and environmental health. Without their contributions, we would not be able to achieve the vision we have before us. These relationships are important for our progress, and we are so appreciative of everyone who has supported our development efforts.

We have recently welcomed the next class of veterinary medical students to our college. New graduate students have begun learning in the research labs of their mentors. First year undergraduate BIMS students are settling into college life.

Remember, if you find yourself in Aggieland, stop by for a visit and see what's new. Come experience our enthusiasm and be a part of our grand vision to build the future of veterinary medical education.

Thanks and Gig 'Em!

Dean Eleanor M. Green, DVM, DACVIM, DABVP
Carl B. King Dean of Veterinary Medicine

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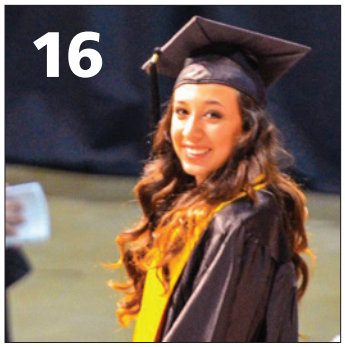

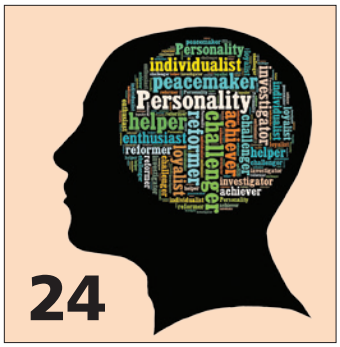

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CVM Today is published by Texas A&M Veterinary Medicine & Biomedical Sciences for alumni and friends. We welcome your suggestions, comments, and contributions to content.

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2014 Continuing Education Schedule

All dates subject to change.

VETERINARY MEDICINE & BIOMEDICAL SCIENCES
TEXAS A&M UNIVERSITY

March 7–23, 2014
2nd Annual African Wildlife Medicine Chemical Immobilization Course
Chair: Dr. Jim Derr

April 5–6, 2014
20th Annual Veterinary Technician Conference
Chairs: Katy Waddell & Katrina LaCaze

April 25–26, 2014
18th Annual Feline Symposium
Chair: Dr. John August

May 17–18, 2014
3rd Annual Canine Para-medicine Conference
Chair: Dr. James Barr

June 6–8, 2014
23nd Annual Food Animal Conference
Chair: TBD

August 22–24, 2014
6th Annual Canine Conference
Chair: Dr. Audrey Cook

October 17–19, 2014
16th Annual Emergency Medicine & Critical Care Conference
Chair: Madera Pashmokova

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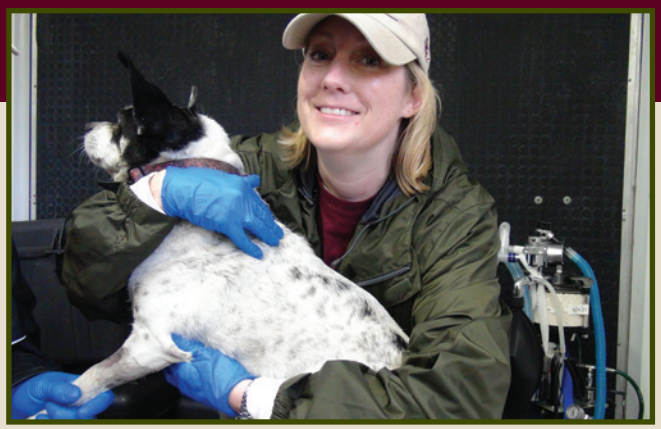
Search and Rescue team members left notification for a pet's owners after searching the house and evacuating the family pet to safety.

VET WEST DEPLOYMENT

by Angela Clendenin '91

Animal control officers brought a dove to the Veterinary Emergency Team's base of operations. Its wing had been blown off by the blast from the fertilizer plant explosion.



Veterinary Technician Dana Whitaker holds Dottie, one of the first pets brought to the Veterinary Emergency Team for examination as a result of the response effort in West, Texas.

Early on a Wednesday evening, an explosion rocked the small Texas town of West. Residents, many of whom were returning home from work, were forced to find shelter, unable to return to their homes. In the days that followed, an area containing more then 200 homes would be barricaded as an investigation was launched to determine the cause of the explosion at the West Fertilizer Plant. Families were left unsure of the status of their houses and their pets. Recognizing the need for veterinary support for the search and rescue operation, as well as for the pets left at home, the call was made to deploy the Texas A&M Veterinary Emergency Team (TAMU VET).

Eighteen members of the VET, including four senior veterinary students, gathered for deployment from the college at 4:30 a.m. on April 18, 2013. Their primary mission was to provide veterinary medical care for the search and rescue dogs from Texas Task Force One and Two and the resident animals affected by the blast.

In addition to the veterinary students, five veterinary faculty, four veterinary technicians, and five support staff also made the trip, taking with them a trailer-based veterinary medical examination unit, veterinary surgical platform, and four vehicles.

After checking in with emergency management officials and receiving a designated operations site, the VET was operational by 12:15 p.m. Located adjacent to the Texas Task Force 1 base at the West Middle School, the VET operated within the blast zone, which provided easy access for the first responders working in the area. Within five minutes of set-up, the word was out that a veterinary support unit was available, and a McClennan County deputy delivered the first patient.

The animal rescue chain began development during the first day of deployment. Animals processed through the TAMU VET operation were rescued and delivered by members of Texas Task Force One and the McClennan County Sheriff's Department, as animal control officers had not been allowed into the area at that time. The TAMU VET triaged and stabilized eight companion animals during the first day, while also working to develop an evacuation chain to move the triaged and treated animals to a shelter. The TAMU VET also examined six Texas Task Force One canine team members and treated several large animals in the field.

On the second day of operations, an organized and fully operational animal rescue system, similar to the one used in the 2011 Bastrop Complex Wildfire, was in place. In this system, search and rescue teams and law enforcement officers reported animal locations to the VET, and then that information was relayed to the animal control officers to rescue the animals and deliver them back to the VET base for triage, treatment, and evacuation to a shelter. This integrated system dramatically increased the number of animals processed through the facility on the first full day of operations. In some cases, injured animals had to be decontaminated before being treated. The most common types of injuries treated by the team were lacerations and soft-tissue injuries. In addition, team members helped rescue and evacuate horses, sheep, and cattle.

Working with shelter partners in nearby Waco and local veterinarians, the VET coordinated movement of stabilized patients to the Central Texas Humane Society and the Mid Texas Veterinary Clinic in West. Reuniting animals with their owners is a key component of emergency response, and working closely with response partners, VET members coordinated the transfer of each animal with accompanying identification documents to maximize the number of reunions.

Texas Task Force One completed its mission on April 19 and returned to College Station early the next morning, signaling an end to part of the VET mission. The number of animals needing care decreased on the third day of the deployment, and VET leadership decided to demobilize the operation. Remaining patients were transferred to our local partners, and the team returned to Texas A&M on Saturday.

During the deployment, the VET triaged 75 animals. These included 51 dogs, eight cats (three of which were kittens), 10 birds (including four chickens), one bearded lizard, one guinea pig, three rabbits and one horse. In the field, VET members assessed or aided in the evacuation of the following animals for the Texas Animal Health Commission and the Game Wardens: seven horses, three goats, six birds, 20 pigs, one cow, three calves, five sheep, and one pony. The grand total of animals assisted was 121. Injuries included lacerations, hernias, abrasions, and dehydration.

While in West, the VET played a critical role in ensuring that the search and rescue dogs could complete their mission. Faculty, staff, and students worked tirelessly to make sure that animals injured in the blast were cared for. In doing this, Texas A&M University played a major role in putting families back together and helping a traumatized community begin the recovery process.

Veterinary Technicians Caleb Coursey (left) and Dana Whitaker (center) are assisted by senior veterinary medical student Brittany Thames (right) with the examination of one of the 51 dogs treated and triaged by the Veterinary Emergency Team in West.

Pier, posing with members of his medical team and representatives from Scouth's Honor, before leaving the Small Animal hospital.

Standing Strong Through Choppy Waters

Pier, the Labrador

by Christina Sumners '11

Pier, a severely burned Labrador retriever who captured the hearts of animal lovers around the world, found a new lease on life thanks to the efforts of Scout's Honor, a Houston-based rescue organization, and the love and care provided by the veterinarians and veterinary medical students at the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM).

> ***"He's just such a sweet dog, and so smart. He loves to be close to people, and if you sit on the floor with him, he starts to think he's a lap dog. He is why we do what we do."***
>
> ***~ Dr. Britany Thames***

Pier was brought to the Small Animal Hospital's emergency room in March 2013 with severe burns on much of his body. When he was found, Scout's Honor volunteers immediately took him to a Houston-area veterinary hospital, VERGI, for emergency care. Dr. Kathryn Garcia, a 2011 CVM graduate, soon determined that Pier needed the specialty expertise available at Texas A&M.

After a lengthy recovery that included long days of treating his wounds and waiting for them to respond to treatment, Pier was eager to show the audience gathered for his send-off all the toys and treats he had acquired while at Texas A&M. While clinicians went over Pier's discharge plan, he ran from person to person, played happily with a tennis ball, and wagged his tail excitedly.

"He doesn't even know he's sick," said Dr. Lara Wilson, second year resident on soft tissue surgery service at the CVM and a member of Pier's treatment team.

"He's had an uphill journey," Wilson said, "but he continues to get better and continues to impress us." Wilson was working in the emergency room when Pier arrived. She said that when she first saw his extensive injuries, she wasn't sure he would survive. His progress during his multi-week stay at the CVM was largely thanks to the work of a dedicated team of clinicians, residents, and students committed to his recovery, Wilson said. They cared for his wounds, changed his bandages almost daily, and kept an eye on him 24 hours a day.

Dr. Brittany Thames, a second year resident in the intensive care unit at the CVM, noted that Pier's recovery was made possible by the tremendous encouragement and support of everyone at the Small Animal Hospital. Thames and the other members of the treatment team also recognized the important role that Scout's Honor and the veterinarians who first saw Pier in Houston played in his successful recovery.

"Those first treatments were critical, and they did everything possible to give Pier a chance," Thames said. "We were able to continue those efforts when he arrived here."

Supporters followed Pier's progress through YouTube and Facebook updates, and hundreds of people from around the world posted encouraging messages.

For most of Pier's stay at the CVM, Thames was attentively by his side. She noted how remarkable Pier's recovery has been.

"He's just such a sweet dog, and so smart. He loves to be close to people, and if you sit on the floor with him, he starts to think he's a lap dog," Thames said. "He is why we do what we do."

Dr. Kelley Thieman Mankin, clinical assistant professor, spent time with Pier when he moved from emergency care to the soft tissue surgery service. She seemed to summarize the sentiments of everyone who cared for Pier. "All of our patients are special here at the CVM, but Pier really captured our hearts. He has had such a great attitude, and is so affectionate, we've all become attached. We're going to miss him, and we wish him all the best," she said when representatives from Scout's Honor came to take Pier home.

Scout's Honor to the Rescue!

Scout's Honor Rescue, Inc. is a nonprofit animal rescue organization providing courage, character, and compassion to Houston's homeless pets. Scout's Honor, formed in May 2006 by six volunteer rescuers, is often the last resort for animals left abandoned to die in pounds or on the streets.

Scout's Honor does not limit their program to healthy animals or particular breeds, and they often save animals from abusive situations. Scout's Honor provides these beautiful creatures with a second chance to be placed in loving, permanent homes so that they can receive the love and attention they sorely deserve. Since their formation, Scout's Honor has rescued over 2,500 animals and currently has over 80 dogs and cats in their program.

For more information, visit: *www.scoutshonor.org*.

Veterinary Technician Sandra Nunn leads Reno through the Large Animal Hospital with a stop to see his mother.

Reno represented a complicated case that crossed multiple disciplines and services within the Large Animal Hospital. Posing with Reno are some of the veterinarians, veterinary technicians, interns, residents, and veterinary medical students that assisted in his care.

A Miracle in Reno: A Journey Home to Kilgore, Texas

by Angela Clendenin í91

After a month of surgeries and careful treatment, Reno, a three-month-old Quarter Horse/Welsh Pony colt, was well enough to go home. On June 19, 2012, Reno was brought to the Veterinary Medical Teaching Hospital (VMTH) at the College of Veterinary Medicine & Biomedical Sciences (CVM) after he sustained blunt force trauma to the head, with bone chips embedded in his brain. However, today Reno is thriving thanks to the teamwork and dedication of multiple specialists and caring staff and students at the CVM.

The owners, Jody Baton and her daughter, Whittany, of Kilgore, Texas, brought Reno to the VMTH for treatment as quickly as possible after their referring veterinarian, Dr. Robert Thoni, head of Kilgore Veterinary Associates, identified a skull fracture on an x-ray image. Baton was no stranger to the Large Animal Hospital; 11 of her horses had previously been brought here for specialty treatment or surgery.

"It's like a family reunion when I come in. These veterinarians are angels," Baton said.

When Reno arrived at the VMTH, he was very depressed and had difficulty walking. Dr. Keith Chaffin, professor of equine internal medicine, was assigned to lead Reno's case. After rapid stabilization therapy, Reno was immediately sent for MRI and CT scans.

"The magnitude of brain swelling was much worse than we predicted, and the CT scan showed more than 20 bone chips embedded in the brain," Chaffin said. "We couldn't have known the extent of Reno's injuries if it weren't for the new Diagnostic Imaging and Cancer Treatment Center. What we can now do with brain and head injuries is state-of-the-art, and we can better diagnose and develop therapeutic treatments, and Reno is a great example of that."

Reno's only chance for survival was surgery, and Baton did not hesitate before making the decision to proceed.

"He is an extraordinary colt, and we didn't think twice about agreeing to surgery because we knew he would be in good hands," Baton said. "Besides, how do you put a price tag on a family member?"

Dr. Joseph M. Mankin, clinical assistant professor of neurology and neurosurgery at the CVM Small Animal Hospital, performed the surgery.

"What sets the CVM apart is our access to many specialties. The team effort for Reno has been phenomenal," Chaffin said. "This type of surgery was somewhat uncharted territory for the Large Animal Hospital, and Dr. Mankin did an excellent job."

Mankin removed about 25 bone fragments, a piece of skin with hair, and most alarming for the team, a pus pocket. The pus pocket indicated that an infection was already present, increasing the possibility of a more extensive infection after the operation. However, an infection in the brain wasn't the team's only concern after surgery. Reno reacted violently as he awoke from anesthesia. The team was forced to anesthetize him again. This scenario repeated itself twice more, and on the third attempt Reno awakened calmly. Unfortunately, though, Reno tore the top of his urinary bladder during the process and needed surgery to repair the tear. Dr. Carolyn Arnold, assistant professor of equine soft tissue surgery, led Reno's second surgery that week.

Reno's bladder surgery and recovery went well, with no violent episodes, but colic and a fungal infection of the tongue slowed his recovery. Gastric ulceration was the cause of colic, and he responded to therapy with a proton pump inhibitor. The tongue infection, candidiasis, was successfully treated with antifungal agents.

"Reno just had crisis, after crisis, after crisis," Chaffin said. "He was a challenging case, but a very special little foal."

A month of careful monitoring and the teamwork of the specialists at the VMTH allowed Reno to make a full recovery. Baton, who stayed by Reno's side almost the entire month, was joined by her two daughters and mother to take Reno home.

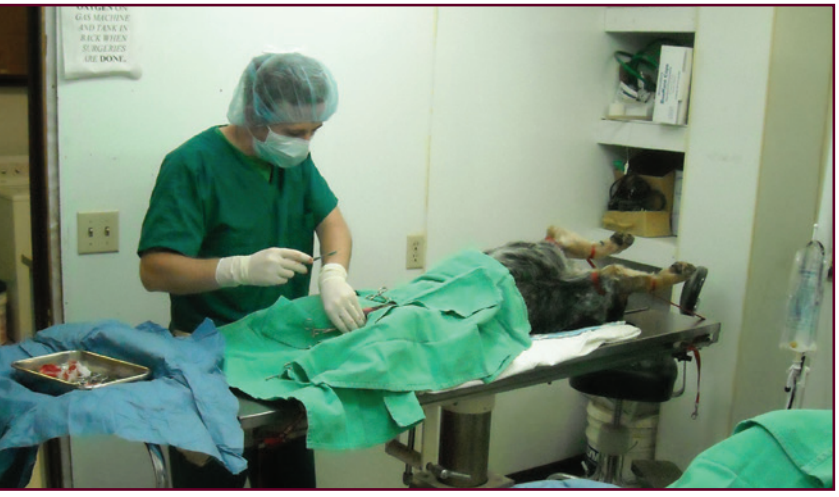
"We are just so very thankful for everything A&M has done for Reno and our family," Baton said. "We call him our miracle foal."

Aggie Students Visit Navajo Nation

by Christina Sumners '11

Many veterinary students complete summer externships in faraway countries to improve their skills and learn how veterinary medicine is practiced in different locales. Some students, though, get the same opportunity without leaving the United States. In June 2012, 32 people, including five Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) students, traveled to Fort Defiance, Arizona on a mission trip to the Navajo Nation. The trip was organized by St. Andrew's Episcopal Church in Bryan, Texas, and included elements, such as the veterinary care provided by the group from the CVM, without a religious component.

The four current CVM students—Lauren Quast (DVM '14), Melissa Appel (DVM '14), Stephen Turek (DVM '14), and Rebecca "Becky" DuBose (DVM '15)—worked under the direction of Dr. Wayne Crouch, CVM class of 2000 (and husband of CVM faculty member Dr. Elizabeth Crouch) and recently-graduated CVM student Amanda Mills (DVM '12).



Operating on a patient at the clinic.

The students at the Fort Defiance clinic.

Although Fort Defiance has a veterinary clinic, it is understaffed and often too expensive for those in the community. Therefore, the team from the CVM performed procedures for greatly reduced fees to enable more people to afford services, with all proceeds going to the Fort Defiance clinic.

"It was definitely a crash course in time and patient management in an underdeveloped area," Quast said. The team found the parking lot full of people with dogs, cats, horses and sheep. Because of the huge feral animal problem on the reservation, the team's primary goal was to perform neuters and spays, and they performed about 30 surgeries during their four days at the clinic. Drs. Mills and Crouch also educated tenants of a nearby mobile home park about feral animal population control and public health. By the end of the meeting, many of the residents who feed stray dogs agreed to catch them and bring them to be spayed or neutered.

"We were able to accomplish a lot in our short time there," Quast said.

"Horse trailers lined the parking lot," said the Rev. Sean Cox, who was at St. Andrew's Episcopal Church in Bryan, Texas when he led the trip and is now Rector of Faith Episcopal Church in Cameron Park, California. "Word of the 'Horse Doc from Texas' spread quickly around the community."

Window Rock at Najavo Tribal Park & Veteran's Memorial

"Everyone was very excited to have us with them," Du Bose said.

"Since most information is spread via word of mouth on the reservation, the first day we had only a couple of appointments, but by the last we were doing surgery from 9 a.m. to 9 p.m. straight, often with two surgery tables going at the same time in addition to many general appointments as well," Quast said. "We didn't want to turn anyone down, so we just ate when we could find a moment and kept on going."

A new clinic was being completed last summer, but was not yet ready, so the students worked in the "old" Navajo vet clinic, Du Bose said. "The outside of the clinic was falling apart and covered in graffiti. The inside of the clinic was worn and ancient. The floor was peeling up in places and there were random holes in the walls. Most of the equipment at the clinic was dated and well-worn."

"The clinic was a far cry from what I'm used to," said Turek. "The anesthesia machine looked like it was older than me, and the floor of the clinic was mostly fallen in and weak in places that didn't have holes. I was overwhelmed and wondered how veterinary medicine could possibly be performed in a place like this."

"The new clinic is a very pretty facility," said Quast. "It is many years in the making and has plenty of room for the growth that the area needed. The next set of students will most likely stay here, as they have two rooms with bunk-beds, a full kitchen, and bath in the upstairs of the clinic."

"Another challenge that we ran into was a language barrier," Quast said. "Although everyone spoke English, many of the elders spoke Navajo as their first language, and several needed a grandchild or the receptionist to come in to translate what was going on."

Canyon de Chelly

"None of us, other than Amanda, who had just graduated, had performed even basic surgeries like spays and neuters," Du Bose said, "so we were slow and unsure of our work."

During one particularly long and complicated surgery, Mills and Turek, who was assisting her, were growing concerned about their patient, so they phoned Dr. Mark Stickney, a clinical professor at the DVM, for guidance.

"I always tell my students that they can call me if they ever find themselves in a situation where they need help," Dr. Stickney said. "We were able to troubleshoot what to do in this particular situation, and the dog ended up being just fine."

"Amanda really did all of the work and handled everything very well," Stickney continued. "I was just here to help where I could and tell her it was all going to be fine."

"Even through the many adversities that presented themselves, the people were nothing but nice and welcoming to us," Quast said. "One client even brought us watermelon as a thank you!"

The students were quick to point out that the trip wasn't all just work. They had time to hike to Window Rock and in Canyon de Chelly. They also visited local bead and farmers' markets.

"If someone is considering going, I would encourage them to do it," said Turek. "It was a wonderful and eye-opening experience. Even though you are still in the USA, you are truly in a different world that is unlike our own in Texas. It was hard work, but I loved it."

by Angela Clendenin '91

Second Biennial Veterinary Day at the Texas Legislature

With the beginning of a new biennial legislative session in Texas, representatives from the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) partnered with members of the Texas Veterinary Medical Association (TVMA) for the Second Biennial Veterinary Day at the Texas State Capitol on February 26, 2013. Participants included veterinary medical students, who went with faculty and TVMA members, as they met with senators and representatives. These scheduled sessions allowed participants to discuss regulatory and funding concerns that affect the college and the veterinary profession.

Past TVMA President John Morton, DVM (left) with State Senator Robert Nichols.

Key components of the TVMA's advocacy efforts included supporting legislation allowing Registered Veterinary Technicians (RVTs) to become Licensed Veterinary Technicians (LVTs) through the Texas State Board of Veterinary Medical Examiners (TSBVME), and the supporting of the Uniform Emergency Volunteer Health Practitioners Act, which allows veterinarians and other healthcare practitioners to provide assistance across state lines in times of emergency. Bills that did not pass, that the TVMA and the CVM opposed, included a relaxing of the requirements on who may administer rabies vaccinations.

Two major bills that the TVMA and the CVM supported did not pass, however. The first was the granting of peace officer status to members of the TSBVME, which would have supported the investigative authority of the TSBVME in investigating unlicensed veterinary practices. The second was the establishment of the veterinarian-client-patient relationship in terms of shelter medicine, which would have established the animal shelter as caretaker of the animal, whether it owns the animal or not.

The college efforts strategically focused on supporting the funding request developed by the Texas A&M University Office of Governmental Affairs. This request included funding to construct a biocontainment research facility, including a Biosafety Level 3-Ag facility, that would benefit Texas A&M and the livestock industry. Many units—including the CVM, Texas Veterinary Medical Diagnostic Laboratory, and Texas A&M AgriLife—were advocates for this facility. Although funding was allocated for this project, the issuance of the debt to begin construction was not approved by the legislature, so as the session ended, so too did the ability to begin planning and construction of this facility.

After a full day of visits with elected officials, a reception was held at Texas A&M's Hirschfeld-Moore House near the capitol. In addition to Legislative Day participants from TVMA and the CVM, members of the legislature and their staffs also attended.

Legislative Day is only one way the CVM and the TVMA continue to support each other. The college is fortunate to have a strong professional organization committed to the success of our students.

(l-r) Elizabeth Choate; Incoming TVMA President Tracy Colvin, DVM; David Sessum, RVT; Sandra Nunn, RVT; and Cindy Dittmar, RVT.

Community Connections Rotation Enters Second Year

by Angela Clendenin '91

A new required rotation, "Community Connections", for fourth year veterinary students began in May 2012 and completed its first year in May 2013. Thought to be the only such required rotation at any vet school, it combines disaster preparedness and response activities with daily structured experiences at an established animal shelter facility (Aggieland Humane Society). Using interactive simulation technology and practical hands-on application, this unique educational experience is beginning to gain recognition across the country. Most recently, the members of the instructional team on the rotation published an article in the Journal of Veterinary Medical Education outlining how this innovative integrated approach is helping to address the seven core competencies developed by the North American Veterinary Medical Education Consortium (NAVMEC): commitment to life-long learning, collaboration, communication, leadership, management, diversity, and adaptation to changing environments.

The disaster preparedness segment of the rotation is a series of interconnected situations in which students are faced with an impending disaster and a county animal issues plan that is incomplete. The students are paired together as "practicing veterinarians" in a specific county and are approached by their county authorities to help develop the county's animal response plan, including its functional annexes for evacuation, safety, sheltering, and veterinary medical operations. Students are assigned the development of a personal preparedness plan using a template developed by the VET. In addition, they are assigned to groups representing different veterinary practices in a designated county. The students in each virtual practice must work together to define the type of practice (small animal, mixed, or large animal); identify resources in the assigned county available to address animal issues; locate potential hazards in the county (chemical plants, etc.); and develop a practice preparedness plan.

Students further enhance their communication skills through risk communication training and assignments. By recognizing the diversity that exists in different communities, and even within a client base of a given practice, students learn how to deliver important messages in a way that is culturally relevant to both clients and the public. As the rotation progresses, each student is assigned a role within a veterinary emergency team. Every morning, the students must prepare a briefing according to his/her assigned role, in addition to information and guidelines provided by the instructional team. These briefings are presented to the other students and instructors, providing an opportunity to practice presentation skills. Every student is given an opportunity to serve in a leadership role and is expected to manage time wisely.

An integral part of addressing animal issues in a disaster is ensuring the continuity of care beyond veterinary medical intervention. Working with Aggieland Humane in Bryan, Texas provides students the ability to learn more about shelter medicine and the resources needed to provide shelter for displaced animals during a disaster.

An added benefit is the ability of students to work alongside an actual search and rescue team with their canine members during a training session. Ensuring the health and well-being of these special animals helps keep them working in the field longer, which enhances their ability to save lives of humans and animals. A strong partnership with Texas Task Force 1, an elite search and rescue unit located at Texas A&M University, enables students on the rotation the opportunity to spend a weekend assisting with the care of these dogs during the training exercises.

The lessons learned through didactic lecture, written exercises, and hands-on opportunities at the shelter and with the search and rescue dogs all come together when students enter a virtual community in Second Life®, an online virtual world, where the VET has established a community hit by a disaster. The students are presented with space set-up as a mobile veterinary hospital and triage center, complete with injured animals for which they must make medical decisions. A team of students and instructors also have seven assessment sites to visit where animals are injured and in need of care. At the same time, the students must address visitors to the site—such as elected community leaders, search and rescue personnel in immediate need of attention, reporters, and nefarious characters determined to relieve the team of needed supplies—who interrupt medical operations. Teams in the field must deal with downed fences, severely injured animals, toxic environments, and injured humans. Disasters create chaos, and the simulated environment challenges students to think about safety, situational awareness, and maintaining control of processes and resources, all while providing veterinary care.

The students make all clinical decisions while in Second Life, and unlike other rotations in the teaching hospital, are not assisted in these decisions by interns, residents, or faculty. They must be able to rely on each other and live with the results of their decisions.

When an actual disaster strikes during a rotation, those students who are currently participating in Community Connections are able to deploy with the VET. Not only are these students able to practice what they have learned in a real life situation, but also the impact of participating in the response effort affects these students' perspective on themselves and veterinary medicine.

As the Community Connections rotation continues to evolve, the instructional team is committed to developing students into leaders equipped to lead efforts addressing animal health and welfare issues in the communities where they practice.

Stills from the VET's Second Life® online virtual teaching space.

BIMS graduating senior wins prestigious award

by Christina Sumners '11

Graduating biomedical sciences (BIMS) student Stephanie Florez Pollack received the Brown Foundation-Earl Rudder Memorial Outstanding Student Award during commencement ceremonies in May 2013. This award is the highest honor bestowed upon a graduating senior at Texas A&M University. Only two Brown-Rudder awards, which include cash gifts of $5,000 each, are presented at Texas A&M each year.

The award honors top students who exemplify the leadership and related traits of the late General Earl Rudder, a World War II hero who served as president of Texas A&M from 1959 until his death in 1970. To be eligible for the Brown-Rudder award, a student must demonstrate outstanding academic achievement, leadership, be a member of an honor or professional society and have participated in extracurricular activities, including community service, with dedication to Texas A&M and its principles.

Pollack was born in Colombia and immigrated to the United States with her family as a child. She graduated with a major in biomedical sciences from the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM), a second major in chemistry from the College of Science, and a minor in neuroscience.

"Stephanie added a second major in chemistry when her honors organic chemistry professor, David Bergbreiter, recommended that an undergraduate degree in chemistry was an essential prerequisite for a Ph.D. in chemistry, a route she was considering," said Holly Gaede, Pollack's advisor in the Chemistry Department.

"Winning the Brown-Rudder Award represents the passion, dedication and work I have given to Texas A&M University through my leadership roles and academic endeavors," said Pollack. "It also honors the effort behind all the organizations that I have represented while at Texas A&M."

Pollack is the founder and former president of Salsa Fusion Latin Dance Company, a Latin dance student organization on campus. She is also a former Legislative Committee director of the American Medical Student Association, was a coordinator of International Week on campus, a member of the Colombian Student Association, and a member of the Phi Kappa Phi and Phi Beta Kappa honor societies. Furthermore, she volunteers at the Texas A&M Family Medicine Clinic in Bryan. Pollack also worked as an undergraduate researcher in the laboratory of Karen L. Wooley in the Department of Chemistry, and published an undergraduate thesis in 2011 under Dr. Wooley's mentorship.

"She contributed significantly to the intellectual excellence of Texas A&M, while gaining experiences that will be critical to her continued development," said Karen L. Wooley, W.T. Doherty-Welch Chair in Chemistry. "For the past two and a half years, she has been undertaking research in my laboratory through a position as a Fellow of the Honors Undergraduate Research Program. Former students who received this training in my laboratory are leading scientists in the chemical industry. I consider Stephanie to be one of the top few among them."

"If there is something that A&M has taught me in these five years," Pollack said, "is that any goal can be accomplished with hard work and a positive attitude. I started out as a typical freshman student, trying to adapt to the college life and find my interests. At the time, I never would have thought that three years later I would become a leader in several organizations, coauthor two scientific publications, and add a second major to my curriculum. I am also glad that along my journey, I had the chance to create a positive impact in my community"

"The excellence that she displays in her life makes others want to follow," said Dr. Elizabeth Crouch, Director of the BIMS program. "Stephanie is a rare student who will succeed at whatever she sets her mind and she will do it with grace and style."

"My mentors, such as Dr. Elizabeth Crouch, always encouraged me to dream big and to work towards higher goals," said Pollack "This led me to discover my passions, as well as to succeed while staying true to myself. I love science, but at the same time, I have a passion for medicine and culture. Texas A&M provided me opportunities to get myself involved in all of these interests while completing my undergraduate studies."

Pollack intends to spend the next year continuing her work in Dr. Wooley's lab as a research assistant while applying to medical schools. She hopes to eventually become a physician specializing in visual system disorders.

"Winning the Brown-Rudder Award is a dream come true," said Pollack, " I am very honored to have been the nominee from the College of Veterinary Medicine & Biomedical Sciences, and furthermore to be chosen as a top student at this excellent institution."

"I feel that Stephanie embodies Texas A&M core values of excellence, integrity, leadership and respect," said Crouch. "She will represent BIMS and Texas A&M well throughout her life and will always reflect the very best that Texas A&M University offers to the world."

Note: Pollack received the award under her maiden name, Stephanie Florez-Malaver.

BIMS graduating senior, Big Event director honored for leadership

by Christina Sumners '11

Justin Cardenas, a May 2013 graduate of the Biomedical Science (BIMS) program in the Texas A&M College of Veterinary Medicine & Biomedical Sciences won the Robert Gates-Muller Family Outstanding Student Award. Established through a gift from the Muller family of Galveston, the award provides a $5,000 gift and public recognition to a Texas A&M graduating senior who has demonstrated those qualities of leadership, patriotism and courage exemplified by Robert M. Gates, who served as president of the university from 2002 until 2006, prior to being named U.S. Secretary of Defense.

"I am honored to have won this award and thank all the people who supported me in doing so," Cardenas said. "This award is humbling as it was made possible by the support of those around me. Throughout college, the financial and emotional support of my family gave me freedom to get involved and study hard, without having to work while in school. This award shows me that I have been blessed with great advisors, mentors, and friends that have challenged me and worked with me through college to be the best I can be."

Cardenas served as director and director of development for The Big Event, the student-led community-wide service project. Cardenas was a Texas A&M Foundation Maroon Coat, a role in which he functioned as a student ambassador for the fundraising organization, and was a member of the Aggie Men's Club, Fish Aides, and various honor and professional societies.

"Justin Cardenas is an outstanding student and citizen," said Dr. Eleanor Green, Carl B. King Dean of Veterinary Medicine, who nominated Cardenas for the award. "He went on a Service and Learning trip to Uganda and works at the Bryan Community Health Center and he was a passionate volunteer at the MSC Fall Leadership Conference, the Spencer Leadership Conference, Aggie Muster, the National Character Leadership Symposium and Gilbert Leadership Symposium."

"Justin is a humble servant-leader who is focused, seeks to learn and develop himself and is always willing to take time out of his day to assist anyone in need," said Melissa Shehane with the Department of Student Activities, another nominator. "He is respected among his peers, leads by example and sets the bar high."

Cardenas, a first generation college graduate, plans to spend the next year working as an Emergency Room scribe in Dallas at Parkland Hospital and to apply for medical school, with hope of beginning in fall of 2014.

"Justin was a joy to work with during his undergraduate career," said Dr. Elizabeth Crouch, Director of Biomedical Sciences Undergraduate Program. "He was humble, genuine and an outstanding leader who significantly contributed to our community. I expect Justin to do great things in life."

"I see this award as an encouragement to continue living a life of service after graduation," Cardenas said. "I have ended my time as a student at Texas A&M with a greater desire to live life with the Aggie core values ingrained in my spirit."

Undergraduate Research: Learning locally, sharing globally

by Christina Wilcox

Marc Caragea, a junior Biomedical Sciences (BIMS) major, recently had the opportunity to do what most undergraduate students cannot fathom: attend an international conference to present a poster of his research. While most students were starting their winter holiday break, this past December Caragea was on a plane to San Francisco, California to attend the annual meeting of the American Society for Cell Biology. About 8,000 scientists attend this conference each year to present and discuss their research about the smallest unit of life—the cell.

Caragea's research focuses on a protein called desmin, which helps maintain skeletal and heart muscle cell structure. When desmin is mutated, it can lead to a fatal heart condition called desminopathy, which can cause skeletal muscle weakness. This muscle weakness can force patients to become wheelchair dependent. To shed light on this disease, Caragea investigated how healthy desmin is assembled into long, rope-like chains compared to mutant desmin.

"It's exciting, it's different than anything I've ever done," commented Caragea as he described his research experience at Texas A&M University.

Caragea has long planned to attend medical school to become an orthopedic surgeon. During BIMS 101: Introduction to Biomedical Science, a course designed to expose freshmen to healthcare professions, Caragea realized that his path to medical school would take an enlightening detour: research. He said he recalls listening to a medical school Dean of Admissions stress the need for students to participate in research.

Inspired, Caragea began volunteering in Dr. Gloria Conover's lab during the 2011 fall semester. Conover has been a research assistant professor in the Department of Veterinary

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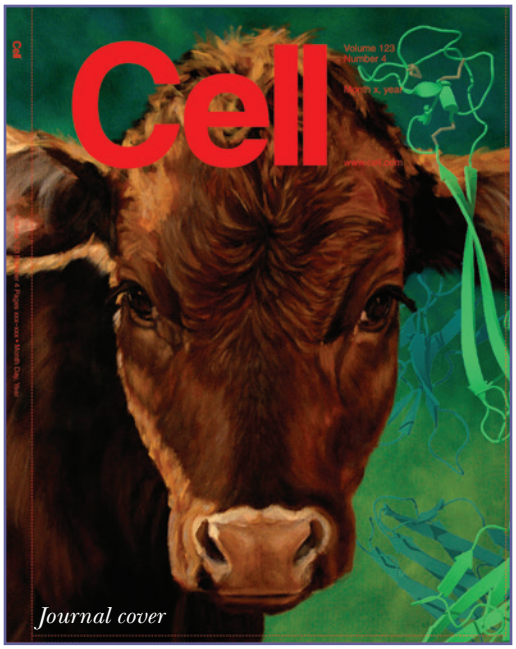
RESEARCH SPOTLIGHT

Unusual antibodies in cows suggest human therapies

by Christina Sumners '11



Journal cover

Humans have been raising cows for their meat, hides and milk for millennia. Now it appears that the cow immune system also has something to offer. A study of an extraordinary family of cow antibodies, led by researchers at The Scripps Research Institute (TSRI) and coauthored by three investigators from Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM), points to new ways to make human medicines.

The CVM's faculty members' expertise in immunology and infectious disease, as well as their easy access to a herd of cattle, made them a natural fit as collaborators.

"These antibodies' structure and their mechanism for creating diversity haven't been seen before in other animals' antibodies," said Vaughn V. Smider, assistant professor of Cell and Molecular Biology at TSRI and principal investigator for the study, which appears in the June 6, 2013 issue of the highly prestegious journal *Cell*.

Antibodies, large proteins in the immune system, resemble lobsters with a tail and two identical arms for grabbing specific targets, called "antigens," often parts of pathogens like bacteria or viruses. At the end of each arm is a small set of protein loops called complementarity-determining regions (CDRs), which actually do the grabbing. By rearranging and mutating the genes that code for CDRs, an animal's immune system can generate a vast and diverse population of antibodies—which, collectively, can bind to just about any foreign invader.

In humans and in many other mammals, most of an antibody's specificity for a target is governed by the largest CDR region, CDR H3. Researchers have been finding hints that an unusually long version of this domain can sometimes be the key to a successful defense against a dangerous infection, such as HIV.

Waithaka Mwangi, Assistant Professor in the Texas A&M College of Veterinary Medicine and Biomedical Sciences (CVM) and an author on the Cell paper, suggests thinking of these long CDRs as a probe on a thin extended scaffold that can fit narrow crevices to reach and bind unique hidden pathogen determinants that ordinary antibodies cannot.

As Smider's area of research includes finding new ways to generate therapeutic antibody proteins, reports of long CDR H3 use caught his interest. "We started thinking about how we could make these long CDR3s that are so rare in humans, and we knew from the literature that cows make even longer ones all the time," he said.

Although the structure of the long CDR H3 protein in previous studies of the human anti-HIV antibody had seemed unusual, the corresponding structure in the cow antibodies turned out to be unique in the known world of animal antibodies: a long "stalk" element topped by an antigen-binding "knob." Sequencing of the DNA that codes for the knob region revealed an unusual abundance of cysteine—a sulfur-containing amino acid that is apt to bond to a nearby cysteine on the same protein chain, thus forming a loop.

Analyses of these DNA sequences, some of which were conducted at Texas A&M, also indicated that, in the cow B-cells where these antibodies are made, the knob-coding gene segments are extraordinarily likely to develop point mutations that either add or subtract cysteines. The effect of these tiny mutations is to create or remove—often radically—antigen-grabbing loops on the structure.

In the cows, binding of these antibodies to viruses is almost entirely done by the knob on the long CDR H3, which shows that these antibodies do have an important function in the immune system. "For the very first time we have an ultra-long CDR3 antibody binding to an actual pathogen," said Mwangi, an expert in immunology who completed the initial assays that determined the binding target for these antibodies.

One question that remains is why the cow immune system evolved to make such antibodies. Smider suspects that it has to do with cows' unusual, four-chambered, grass-fermenting stomach, with its extensive collection of bacteria and other microorganisms. "If some of these escape from the stomach and get into the bloodstream or other tissues, there could be some pretty serious infections; so that's our starting hypothesis for why cows have this unusual immune defense," he said.

The stalk-and-knob structure of the CDR H3 loops on these antibodies, which resemble structures found in some insect poisons and other proteins, also suggest that they


Cows used in the study

evolved to grab a particular type of target. "What comes to mind are ion channel or pore structures in the walls of cells," Smider said. "In any case, we're hoping to find out whether any of the structures targeted by these knobs exist on microorganisms that cause human disease."

"Potentially, the outcome of this research is going to be huge," Mwangi said, "not only for cattle but also for human health."

Michael F. Criscitiello, Assistant Professor at the CVM and one of the study's authors, said this was a wonderful chance to contribute to such a groundbreaking study, as researchers at the CVM had experience with—and access to—cows. The entire project was made possible through collaborations of various people and labs each contributing their expertise to add pieces to the puzzle.

"Such collaborations bring together specialists in diverse fields and certainly facilitate future research," said Terje Raudsepp, Associate Professor at the CVM and another of the study's authors. "This is expected to lead to new collaborative projects in the future."

The study was supported by the American Cancer Society, National Institutes of Health, Skaggs Institute for Chemical Biology, Scripps Translational Science Institute, Texas A&M College of Veterinary Medicine & Biomedical Sciences, and United States Department of Agriculture.

CVM researchers sequence Scarlet macaw genome

In a groundbreaking move that provides new insight into avian evolution, biology and conservation, researchers at Texas A&M University have successfully sequenced the complete genome of a Scarlet macaw for the first time.

The team was led by Drs. Christopher Seabury and Ian Tizard at the Schubot Exotic Bird Health Center in the College of Veterinary Medicine & Biomedical Sciences at Texas A&M. Their work is published in the current issue of the open access and peer-reviewed scientific journal PLOS ONE.

The bird selected for the sequencing was a female named "Neblina" who lives in the Blank Park Zoo in Des Moines, Iowa. Neblina is believed to be from Brazil. She was confiscated during a raid on illegally imported exotic birds by the U.S. Fish and Wildlife Service in 1995.

Tizard says that a blood sample was taken from Neblina, DNA was extracted for sequencing, and after a series of steps, the sequence of the genome was assembled by Seabury and his team.

"The final analysis showed that there are about one billion DNA bases in the genome, which is about one-third of that found in mammals," Tizard explains. "Birds have much less DNA than mammals primarily because they do not possess nearly as much repetitive DNA."

The final completed genome demonstrates some similarities to that of the chicken. "But there are significant differences at both the genome and biological level," he adds. For example, "Macaws can fly great distances, while chickens can't. In addition, brain development and volume are very different in macaws, which is unsurprising since they are very intelligent birds compared to chickens. Likewise, macaws can live many years, while chickens usually do not, and therefore, our macaw genome sequence may help shed light on the genetic factors that influence longevity and intelligence."

Tizard notes that a Scarlet macaw was selected for the first such sequencing of its type because Texas A&M researchers have been studying the bird for many years. Working primarily at the Tambopata Research Center in Peru, Texas A&M bird experts have been investigating macaw diseases, behavior and genetics.

"We now have the ability to initiate large-scale, genome-wide approaches for population and phylogeography studies," explains Seabury, who is a collaborator of Donald Brightsmith, director of the Tambopata Macaw Research Project in Peru.

Seabury and Brightsmith add that the array of research possibilities regarding the Scarlet Macaw has now been significantly broadened by this research initiative.

Macaws are found in tropical Central and South America, from southern Mexico to northern Argentina. Trapping of the birds for the pet trade, plus loss of habitat due to deforestation in their native lands, has severely decreased their numbers since the 1960s.

There are 23 species of macaws, and some of these have already become extinct while others are endangered.

Macaws can live 50 to 75 years and often outlive their owners.

"They are considered to be among the most intelligent of all birds and also one of the most affectionate – it is believed they are sensitive to human emotions," explains Tizard.

"Possessing stunning feathers that are brightly colored, some macaws have a wingspan approaching four feet. They also usually mate for life and can fly as fast as 35 miles per hour."

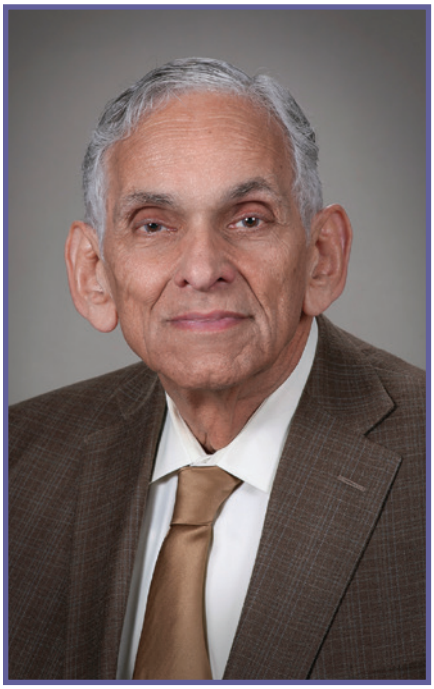
The Schubot Center at Texas A&M is dedicated to studies on disease and conservation of exotic birds, both in captivity and in the wild.

Scarlet macaw

RESEARCH SPOTLIGHT

Research leads to test, treatment for preeclampsia

by Angela Clendenin '91



Dr. Jules B. Puschett

Many of the health problems in the world today impact not only humans, but also animals and the environment. To find solutions, researchers have increasingly taken a "One Health" approach leading to the development of collaborations as unique as the answers they seek.

One example of this One Health approach involves the work of physicians, veterinarians, and environmental scientists at Texas A&M University and Texas A&M AgriLife Research. Dr. Jules B. Puschett, a physician and research professor in the Veterinary Pathobiology Department at the College of Veterinary Medicine & Biomedical Sciences (CVM), along with researchers at Texas A&M AgriLife Research, have developed an animal model they hope will lead to a way to predict and prevent preeclampsia in humans.

Preeclampsia, a pregnancy-specific disorder seen in 3-10 percent of pregnancies, is the second leading cause of maternal and fetal death in the United States. It is also a leading contributor to the most common cause of maternal and fetal death in developing countries. Presently, there is nothing physicians can do to predict, prevent, or cure this disorder.

Since there is no cure, the most common treatment for this disorder is bed rest until the physician decides whether or not to preform a cesarean section. If the mother and child survive delivery, the mother is at risk for having high blood pressure and diabetes later in life, and the baby has a risk of developing mental abnormalities.

Using a rat model, Puschett's team discovered an elevation in a substance in preeclamptic rats that can be detected in the first few days of pregnancy in urine and blood. In conjunction with the discovery of this substance, these researchers have also developed a compound that prevents preeclampsia when given to pregnant rats with this elevated substance. Currently, the team is in the process of collecting more data to receive U.S. Food and Drug Administration (FDA) approval for human clinical trials.

The team found that an elevation of the substance marinobufagenin (MBG) not only indicates, but is a potential cause of the later development of preeclampsia. A diagnostic test to measure MBG was developed in collaboration with Drs. Luc Berghman and Daad Abi-Ghanem from the TAMU Department of Poultry Science. After this discovery, Puschett and his team, who have been working on this project for six years, measured the blood and urine of human patients and found that MBG was elevated in those patients with a diagnosis of preeclampsia.

"Our intention was not only to measure MBG in the blood, but also in the urine because if we end up trying to screen thousands of patients, it is much easier for the patient to give you a urine specimen than blood," Puschett said.

Their next step was to determine when the level of MBG becomes elevated. In the preeclamptic rats, elevated levels of MBG were present in the first few days of pregnancy.

"At that time in the pregnancy, the rats didn't yet have high blood pressure or an excess of protein in the urine," Puschett said. "So this is a forecast of the later development of preeclampsia in the rat."

With this discovery, Puschett explained that, potentially, every pregnant woman could be screened for preeclampsia through an examination of MBG levels in urine. Once the team realized they could predict this illness, they decided they needed to try to prevent it, too.

Puschett approached chemists from the Laboratory for Innovative, Chemistry, and Natural Products-Based Interdisciplinary Drug Discovery (LINCHPIN) at Texas A&M University, Dr. Daniel Romo, a chemistry professor and director of the laboratory; Dr. Jing Li, co-director of the laboratory and Dr. Xinzhong Lai, who previously worked with Romo; and asked them to create a compound that would block MBG's effects, thus preventing preeclampsia.

"The goal of the ongoing collaboration is to broaden the studies of preeclampsia in the Puschett group to investigate all possible predictive agents, which appear in the blood and urine of preeclamptic patients, in order to identify a reliable predictor which can be used to diagnose this disease at its earliest developing stage," Romo said.

The group discovered resibufogenin, or RBG, may be a compound that could be used to prevent the onset of preeclampsia. Although it differs little from MBG, RBG binds to the MBG substance, preventing MBG's effects.

"Collaborating with Dr. Puschett, we have discovered a potential predictive agent (MBG), as well as an antagonist (RBG) to this agent, which can be used to prevent preeclampsia," Romo said.

To test RBG, the compound was given to rats in early pregnancy. Puschett said the compound completely prevented preeclampsia, high blood pressure, and abnormal protein levels in the rats' urine.

Currently, the team is in process of gathering enough data and funding to present to the FDA for approval to start providing RBG to human patients. Puschett said it would probably take two to three years before enough data is collected to present to the FDA. After the FDA approves the drug, the human clinical trials for RGB will begin for pregnant volunteers who have elevated MBG levels to see if preeclampsia is prevented.

If RBG does not prevent preeclampsia in human patients, Puschett said there are approximately 200 compounds similar to

RBG that could be evaluated as antagonists for MBG. These compounds, he said, could be used to help in an effort to establish a method for "personalized medicine" in preeclampsia. Personalized medicine is medication and treatment tailored toward the individual needs of the patient.

"We are now planning to broaden these studies to investigate other compounds in this family to identify additional antagonists to these agents, which can potentially prevent and/or treat preeclampsia," Romo said.

Puschett and his team also said they think elevated MBG levels could be a problem in other illnesses such as brain disorders.

For right now, though, the main focus for Puschett and his team is generating enough data to present to the FDA for approval of human trials of RBG.

"First, we are focusing on preeclampsia patients, then we are going to branch out to test the waters in other illnesses," Puschett said.

Dogs needed for Fragmented Coronoid Process trial

by Christina Sumners '11

Researchers at the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) are conducting a clinical trial to evaluate the role of limb alignment in the pathogenesis of Fragmented coronoid process (FCP).

FCP is a developmental problem in the dog's elbow joint that commonly affects large and giant breed dogs, particularly Retrievers, Rottweilers, Mastiffs, Bernese Mountain dogs, and German Shepherds. In this disease, the medial coronoid process (a small portion of the ulna, one of the forearm bones) separates from the parent bone and interferes with normal joint function. This results in lameness, joint instability, pain, and osteoarthritis.

Although there are a number of theories about FCP, including the idea that there is probably a genetic component, the exact cause remains to be determined. Researchers at the CVM, led by Dr. W. Brian Saunders, Assistant Professor of Orthopedic Surgery, believe that FCP may develop from altered forelimb mechanics (i.e. a situation in which excessive loads are repetitively placed across the medial coronoid process).

They have developed a technique using horizontal beam radiography (x-rays) to determine how the bones and joints of the dog's foreleg interact when standing. These interactions are referred to as "thoracic limb alignment," because forelimbs are also often called thoracic limbs.

The first part of the study determined thoracic limb alignment values for healthy Labrador retrievers to establish normal, baseline values. The researchers described the elbow Mechanical Axis Deviation (eMAD), which represents the degree to which the elbow is displaced laterally away from a medially positioned weight-bearing axis. The greater the eMAD value, the more the medial compartment of the elbow is loaded, which may result in the development of FCP and secondary osteoarthritis.

"We are now ready to evaluate limb alignment and eMAD in Labrador Retrievers affected by FCP and osteoarthritis of the elbow," said Saunders. If they are able to determine that dogs with FCP do, indeed, have altered limb alignment and increased eMAD values, they may be able to use their system to predict if individual dogs are at risk for FCP or predict which dogs with FCP will develop rapidly progressive osteoarthritis. Eventually, they may even be able to develop specific surgeries to correct eMAD to back within a normal range, thus redistributing loads to the healthier portions of the affected joint.

In order to accomplish these goals, the researchers are looking for Labrador Retrievers with elbow dysplasia, specifically FCP. A Labrador retriever might be eligible for the study if he or she has:

1. reached skeletal maturity, which generally occurs when the dog is at least 15 months old,
2. foreleg lameness due to FCP, elbow dysplasia, or elbow arthritis in one or both legs,
3. normal shoulders, carpi, and digits, and
4. no conditions such as epilepsy, heart failure, or other systemic disorders that would make it difficult or dangerous to undergo heavy sedation with alpha-2 agonists.

Dogs qualifing for the study, will receive a complimentary orthopedic examination, standing and recumbent x-rays of both forelegs, and a CT scan of both forelegs; owners will be given a CD containing all of these images. Although participation in the study does not come with complementary surgery for the dog, these scans are vital for determining the best approach for treatment, and the researchers will be happy to assist you with recommendations and advice.

"We would be very grateful if you would be willing to partner with us as we attempt to further understand and eliminate this debilitating disease," said Saunders. "We can't complete this phase of the study without widespread enrollment."

For more information, or to enroll your dog in the study, contact Dr. Saunders at 979-845-2351 or bsaunders@cvm.tamu.edu.

Dr. Brian Saunders and his team examine a dog in their lab.

RESEARCH SPOTLIGHT

Treating Horses' Injuries with Stem Cells

by Ashlee E. Watts, DVM, PhD, DACVS

Regenerative medicine is the process of harnessing natural healing processes to improve upon tissue repair for a more functional healed tissue. The holy grail of regenerative medicine would be to mimic fetal development, resulting in healed tissues that cannot be distinguished from uninjured tissue.

Muscle, tendon, cartilage, and bone are efficiently built during embryonic development in mammals, and injuries that occur before birth will heal into a completely functional structure that cannot be distinguished from uninjured tissue. Unfortunately, healing of musculoskeletal tissues is not as efficient or precise after the animal—in this case, the horse—is born. Scar tissue, with its alterations in cells and tissue structure, leads to less than optimal performance and a high rate of persistent lameness and re-injury.

Although veterinarians cannot yet completely prevent scar tissue, there is potential to substantially improve outcomes with regenerative techniques, such as stem cell therapy.

Stem Cells - Definition

Stem cells are 'mother' cells that can replicate themselves and form differentiated cells for adult tissue. The ultimate stem cell is made at fertilization after the sperm and egg fuse to form the zygote. Stem cells within the zygote are able to form all three basic tissue types as well as placental tissue (totipotent stem cells). Once the zygote becomes a pre-implantation blastocyst (eight days after fertilization), the stem cells can no longer form placental tissues, but can still form the three basic tissue types (pluripotent stem cells). At this point, the stem cells are considered embryonic stem cells. As the embryo continues to mature, the cells become either differentiated cells or remain stem cells that are now committed to a single basic tissue type (multipotent stem cells). Because they are multipotent, these stem cells are considered adult-derived, despite their presence in fetal tissues. Areas of multipotent stem cells remain in adult tissue throughout the animal's life for normal tissue replacement and repair.

Additional categories of stem cells can be created by laboratory modifications. For example, a fetal-derived multipotent stem cell can be manipulated to act more like an embryonic stem cell. One such product has been developed and tested in equine tendon injury with remarkable results, but clinical availability is still pending FDA approval. Another modification under development in the horse is the induced pluripotent stem (iPS) cell, where laboratory manipulations are applied to adult cells—such as skin cells—to induce a stem cell-like state.

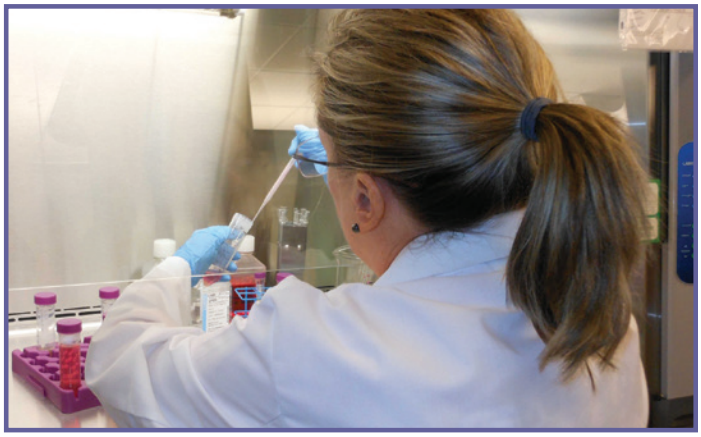
Adult-derived mesenchymal stem cells (MSCs), a type of multipotent stem cell, work well for musculoskeletal therapies because they are readily available and are of the appropriate lineage for musculoskeletal tissues. Furthermore, they have anti-inflammatory and healing properties. MSCs can be collected from many tissues including fetal, umbilical cord, and adult tissues, such as bone marrow or fat.

Stem Cells - Autologous or Allogeneic

Autologous therapy, meaning that the horse's own stem cells are used, has been the most common approach to date. However, unless cells have been banked prior to injury, veterinarians have to wait two or three weeks for the cells to grow in the laboratory before they can be used. One way to avoid this delay is to use patient-side kits to concentrate stem cells from bone marrow or fat samples. Another method to avoid delay would be to use allogeneic cells—in other words, cells from another horse.

Unlike most cells in the body, mesenchymal stem cells (MSCs) are immune-privileged and therefore allogeneic (non-self) cells can generally be used safely in nonrelated individuals without immune testing as they will not induce graft versus host disease like other cell or organ transplants.

Use of an allogeneic stem cell line would allow use of an 'off the shelf' stem cell product and would have several advantages. First, it may reduce the variability among MSC treatments. Second, it may shorten the time between diagnosis and treatment. Third, it will allow for younger stem cells from fetal, adolescent, or young adult tissues to be used in aged horses, increasing stem cell potency and possibly enhancing the treatment effect. Finally, it may reduce costs by minimizing procedures, patient visits, and cell preparation time. However, allogeneic stem cells are considered a drug by the Food and Drug Administration, and as such, are required to undergo the same safety and efficacy trials and manufacturing processes that are required of pharmaceuticals. In contrast, the use of autologous (self) stem cells in veterinary patients is not currently regulated by the FDA.



A technician prepares bone marrow derived mesenchymal (MSC) stem cells, 19 days after bone marrow collection, for injection to a deep digital flexor tendon injury.

Stem Cells - Current Uses

Mesenchymal stem cells (MSCs) from bone marrow that have been taken—from both the horse and human—and grown to increase in total cell number in the laboratory over the course of two to three weeks have been the most thoroughly studied to date. In the horse, laboratory expanded stem cells are commonly used in tendon injury. Using ultrasound for guidance, clinicians will inject between 10 and 50 million MSCs into the core lesion of a bowed tendon. In one study of 105 Thoroughbred

Ultrasound-guided injection of bone-marrow-derived mesenchymal stem cells to a core lesion within the deep digital flexor tendon.

racehorses, there was a lower recurrence rate of bowed tendon in injured tendons treated with stem cells, compared with traditional therapies.

The injection of stem cells to a joint (also called intra-articular injection) is used after surgical treatment of joint injury for the minimization of osteoarthritis (OA) progression. In the horse, studies have shown improved healing of cartilage defects that are treated by surgical microfracture followed by intra-articular MSC injection. There is also evidence for reduced lameness after stifle joint injuries are treated by intra-articular MSC injection, particularly those with injuries to the medial meniscus, a poorly healing fibrocartilaginous structure within the stifle joint.

Stem Cells - The Future

Stem cell therapy has enjoyed some initial success in equine tendon, cartilage and intra-articular musculoskeletal therapies. However, researchers note that continued study is warranted. The answers found by continued research will likely change what conditions are treated with stem cells and by which stem cell source, when they are applied, by which route, how often they are administered, and the dose of cells used.

An example of where stem cells might play a very pivotal role in the future is in equine fracture repair. Stem cells, especially from bone marrow, have robust bone-forming potential and may prove to be an important breakthrough in fracture fixation and arthrodesis. Through an increased rate of bone production, stem cells may help to achieve adequate healing prior to implant loosening or fatigue failure.

Combined with good diagnostics, surgical care (when necessary) and a careful rehabilitation program, stem cell therapy is helping equine athletes with musculoskeletal injuries to return to, and stay in, the same level of performance as they were in prior to injury.

Stem Cell Terminology

- ***Stem cells:*** *'mother' cells that can replicate themselves and form differentiated cells for adult tissue*
- ***totipotent stem cells:*** *cells within the zygote that are able to form all 3 basic tissue types as well as placental tissue*
- ***pluripotent stem cells:*** *embryonic stem cells, within the pre-implantation blastocyst, that can no longer form placental tissues, but can still form all 3 basic tissue types*
- ***multipotent stem cells:*** *stem cells that are now committed to a single basic tissue type and considered adult-derived (despite their presence in fetal tissues)*
- ***induced pluripotent stem (iPS) cell:*** *an adult cell (such as a skin cell) in which laboratory manipulations have induced a stem cell-like state*
- ***Adult-derived mesenchymal stem cells (MSCs):*** *cells that can be collected from many tissues including fetal, umbilical cord, and adult tissues (such as bone marrow or fat)*
- ***Autologous (self) cells:*** *cells from the patient*
- ***allogeneic (non-self) cells:*** *cells from another animal*

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Pathobiology at the Texas A&M College of Veterinary Medicine and Biomedical Sciences (CVM) since 2008.

"Young people who want to do research should be given a chance," said Conover. Since 2009, Conover has welcomed over a dozen undergraduate students in her lab. Conover explained that she looks for students with curiosity and motivation, because these qualities are essential to succeed in research.

Fueled with a desire to learn, Caragea continued in Conover's lab by enrolling in BIMS 485: Independent Study, a course that allows students to acquire hands-on experience in a research lab.

"There's no answer key. There's no right or wrong answer," Caragea said about research. He explained, "There's no predetermined right answer; that's the beauty of it."

Dr. Sumana Datta, Executive Director for Honors and Undergraduate Research, stressed that all students, such as Caragea, can benefit from research experiences, regardless of their career goals. Datta pointed out that in a classroom, students do not get hands-on experience, but in a lab they do. Research allows students to take abstract concepts taught in class and apply them hands-on to better understand.

"It's changed the way I think of things," Caragea said about his research experience. "It's changed the way I solve problems."

Shortly into the independent study course, Conover asked Caragea if he would like to attend the American Society for Cell Biology annual meeting to present his research.

"A few days can change you," Conover said. Conover stressed that conferences expose students to a bigger context and allow students to see how a scientific community works. She continues by saying conferences are a good avenue for students to receive feedback, learn how to network, interact face-to-face, and explain experiments to other people.

"Before [the conference], I looked at presenting a poster as something I have to do, but now, it is something I want to do," Caragea said. He explained how at the conference scientists were truly interested in his poster. He said that interacting with scientists from different disciplines helped him get feedback on his research. Overall, he added, he was able to get another point of view and look at his research from another angle.

"I definitely don't feel like an undergrad," Caragea admitted. He said that research has helped him look at more than just earning a degree. Caragea plans to complete his research project and publish his results. He will continue in Conover's lab by pursuing an undergraduate thesis.

For undergraduate students interested in research, Caragea advises them to do it, to get involved.

"There are all sorts of ways to get involved," Datta encouraged. She advised attending the annual Sigma Xi Undergraduate Student-Faculty Research Expo, typically hosted during the fall semester. This event allows faculty members from various departments to set up tables and posters so that students can walk around and see different areas of research offered. Also, Datta suggested, students can find research opportunities by asking their academic advisor or browsing the faculty websites.

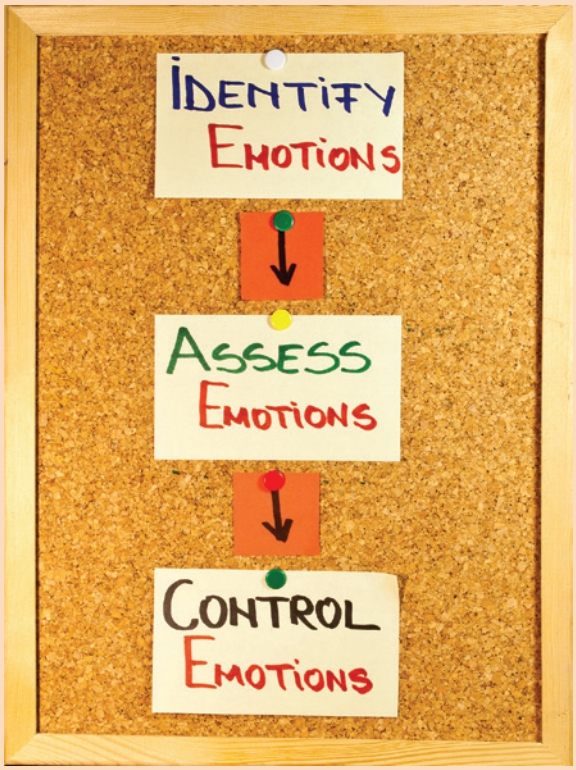
Caragea looked at the CVM website that lists faculty members and a description of their research. "I looked for something I was interested in. I liked it so I stuck with it."

How did that go so wrong?
How is your Emotional Intelligence?

by Dr. Dan Posey '82

It's another fine day in your life and you are living the dream. You know that there are things that could be better about your job, but on a scale of 1 to 10, you are a solid seven to an eight most of the time. You have lots of things that are pressuring you….projects due, research proposal, partnership relationships to maintain, clients to see, students to teach. It's a very busy life, filled with lots of opportunities every day.

This morning you are participating in another staff meeting. You know these weekly meetings with your numerous colleagues and full agendas, and you really don't have much time to devote towards this effort, but it's required. Your week has been very hectic. You have put in a great deal of time between clients, looming research proposal dates and student responsibilities. You are tired. The staff meeting is uneventful. You know the routine: you check your email, the meeting progresses, the minutes approved, the up and coming dates announced, sectional reports and summaries are given, and then the new business area is presented. Here is when your brain wakes up from the monotony of reports and you realize they're talking about your area, your area of expertise. You find yourself compelled to jump into the conversation and add in your opinion. Your passion for the subject is obvious to everyone in the room. And then, the conversation turns heated.



Most of us find ourselves moments later in our office thinking about the turn of events that just occurred. That cascade of events was regretful and really made us look bad to our colleagues. You may even ask why you become so impassioned by those events. Your mind races on how you're going to handle this next time, proclaiming it's going to be different at the next meeting. You decide just to be quiet the next time and not speak your mind. Then you realize that this isn't the best approach. Isn't this an open discussion of importance to our program? How does this go so wrong?

Emotional intelligence (EI) refers to the ability to perceive, control and evaluate emotions, personally, interpersonally and socially. The term is a relatively new term that has gained popularity in the corporate world and has expanded to the educational field and into veterinary medicine. The conventional wisdom of some researchers is that emotional intelligence can be learned and strengthened, and the importance of understanding EI is imperative for professional success.

This is not a new concept in the psychology domain, which entered into research in this field in the early part of the last century. Psychologists such as Edward Thorndike suggest that there are factors that influence success that are beyond cognitive ability. Since 1990, Peter Salovey and John D. Mayer, leading researchers on emotional intelligence, defined emotional intelligence as, "the subset of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions."

The ability to understand yourself and other people and the ability to cooperate with them has great value in life. The words may have changed over the years, but the concept of Emotional Intelligence has not. Your success in your chosen profession is influenced not only by your IQ, but also by your ability to perceive, control, and evaluate emotion—your EI.

There is no doubt that having highly developed non-technical competencies will help you in your professional endeavors. The National Commission on Veterinary Economic Issues established a template for developing EI through the art of communication and understanding leadership as a pathway to success. Developing these nontechnical aptitudes is an important step towards attaining success in veterinary medicine.

The problem arises in the personal and social awareness of emotion. According to Bradberry and Greaves, authors of the book Emotional Intelligence 2.0, "Only 36% of people are able to accurately identify their emotions when they occur." This is a huge problem because that means 64% of the population cannot accurately identify their feelings. This is a critical fact because in today's world, as EI can account for up to 58% of performance in jobs. Bradberry and Greaves also state that your EI is closely linked to your earnings; 83% of people who are the top performers are highly self-aware. So developing your Emotional Intelligence level can be very beneficial in your quest to be successful.

If you are interested in developing your EI, check out these resources:

- ***Emotional Intelligence*** **by Daniel Goleman, Bantam Books, 1995.**
- ***How Does Emotional Intelligence Fit into the Paradigmn of Veterinary Medical Education?*** **by Richard Timmins, JVME 33 (1), 2006, pgs. 71-75.**
- ***Emotional Intelligence 2.0*** **by Travis Bradberry and Jean Greaves, TalentSmart, 2009.**

So how does one become more Emotionally Intelligent? It all starts with educating yourself about EI. There are four components that make up your emotional intelligence skill set. The first category is your personal competency that has two attributes: 1) your self-awareness and 2) your self-management. These attributes are about you. The second category, your social competency, also has two attributes: 1) social awareness and 2) relationship management. These attributes are about you and other people.

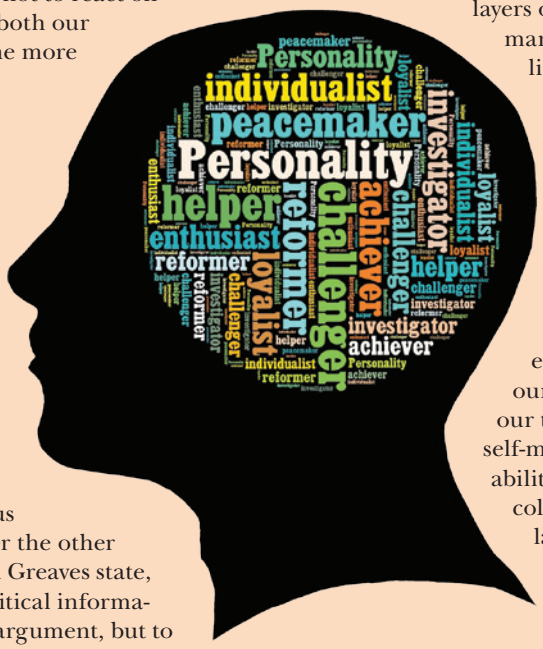
Personal Competency of EI

Self-awareness is the ability to recognize your emotions and understand your emotions across many situations. According to Bradberry and Greaves, the best way to accomplish self-awareness is spending time thinking through your emotions through self-discovery. Understanding what causes you to react and how you react to different stimuli or situations can have a profound effect on increasing your EI. Bold professionals have no problem focusing on their emotional mistakes, so they can discover emotional trigger points. Self –discovery to attain self-awareness is one of the first steps to increasing your EI.

Self-management is making daily decisions on your EI journey and is the second part of personal competency. Once you are self-aware of your emotions, you can manage them, giving yourself flexibility in your attitude and the direction of your behavior. You have to learn to put off your emotional needs and to hold yourself accountable not to act on your tendencies. This is a very difficult step in your EI journey because your self-management will be tested time after time. You need to be very frank with yourself, and when failure occurs in handling your emotions then embrace this failure through self-discovery. Why did this happen? Why did I react so strongly? What was the trigger that caused the cascade of events? The better we understand ourselves, achieving our ability not to react on our emotional triggers and embrace both our victories and our disappointments, the more emotional intelligence we gain.

Social Competency of EI

The first component of social competency is social awareness. Social awareness is the ability to accurately perceive others' emotional states and responses and understand what is really happening in their world. We have been working on this awareness since the first day we stepped onto a playground. A great book on this subject is Robert Fulghum's "All I Really Need to Know I Learned in Kindergarten." It is easy in the routine dialog of business for us to focus on ourselves and not consider the other person's point of view. Bradberry and Greaves state, "You must stay focused and absorb critical information." Of course, this isn't to win the argument, but to listen to and consider other points of view so you might gain understanding. This reminds of us of Steve Covey's Fifth Habit: "Seek first to understand, then to be understood." It takes great patience and discipline to accomplish this feat. We have to stop talking long enough to effectively and actively listen to gain understanding of the other person's emotion that we are observing. It is extremely difficult not to act upon our own triggers in these intense encounters. The socially aware person can perceive the other's emotional state as well as manage his or her own.



The second component of social competency is relationship management. This component utilizes all of the previous EI skills: self-awareness, self-management and social awareness. The combination of these skills is used to ensure clear communication and to manage conflict to resolution. The basis of all business is establishing a valued relationship between two parties. The ability to manage a relationship is based on the strength of the connections. Conflict sometimes arises because the relationship is weak. Both parties don't see the value of investment, even though the relationship can be mutually beneficial. Remember that sometimes the only reason a relationship should be invested into is to establish a collegial environment.

Establishing a collegial environment is one of the most difficult parts of your emotional intelligence quest. Stress is a killer of relationships because it causes us to revert to self-involvement. According to Bradberry and Greaves, 70% of people tested by them had difficulty in handling stress. Conflict in the workplace is a large contributor to stress and because people avoid conflict at all cost, it adds layers of complications in our relationship management. An Emotionally Intelligent workplace is an important aspect of getting relationships established that are productive and avoid heated conversations and emotional outbursts that undermine the collegial environment.

When we find ourselves self-reflecting in our offices after another impassioned argument with a colleague or client we should encourage ourselves to develop our self-awareness so we can discover our triggers, exercise our ability to self-manage our emotions, advance our ability to be socially aware of our fellow colleagues' emotional journey, and lastly invest time in our personal and professional relationship to improve the quality and depth of these connections.

East African veterinary delegation

International Impact

by Angela Clendenin '91, Christina Sumners '11, & Kristin Burlingame '09

Every day there are reminders of just how small the world has become. What affects one nation's economy subsequently affects the economic environment globally. This is particularly true with developing nations as they work to grow their economies and create opportunities for their citizens. Many of these countries rely on the import and export of agricultural products as a significant percentage of their gross domestic product. These factors, combined with ongoing trade in wildlife for both hunting and conservation initiatives, veterinarians are finding themselves in a pivotal role on the global stage.

Although the World Organization for Animal Health has established guidelines regulating the movement of livestock and other agricultural products across international borders, many developing nations are not financially able to implement these standards and, in many cases, neighboring nations have conflicting regulations. To support the growth of agricultural endeavors in developing nations, the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM), working with partners in the Borlaug Institute in the College of Agriculture and Life Sciences and the United States Department of Agriculture, has been working with veterinarians and agriculturalists overseas to develop continuing education programs and partnerships that provide ongoing training in the development of import and export standards for livestock.

In addition, an innovative continuing education (CE) program led by the CVM but conducted in South Africa exposed American veterinarians to the safe and appropriate handling of African wildlife and the need for ongoing conservation efforts. As the number of exotic animals continues to grow in the United States, American veterinarians' abilities to work with these animals safely will become increasingly important.

What follows is an inside look at three international programs that demonstrate the benefits to be realized from the wealth of international faculty expertise at Texas A&M working in collaboration with partners around the world.

East African Veterinarians and Scientists Learning about Safe and Secure Livestock Trade

Devastating disease outbreaks among livestock in the United States are relatively rare and can generally be rapidly contained when they do occur. However, in the countries of East Africa, livestock disease outbreaks are common. Like our 50 states, the countries of East Africa are separate entities that nevertheless have a lot of cross-border movement—of both people and animals. They currently lack a unifying system of animal disease prevention and control. Furthermore, when diseases do occur in East Africa, the results can be devastating to livestock producers. Cooperative, safe, and stable livestock trade would lead to improved incomes, economic stability, and therefore a better quality of life for many in the region.

Therefore, veterinary leaders from many of these countries—with help from the United States Department of Agriculture, the United States Agency for International Development (USAID), and the African Union Inter-African Bureau for Animal Resources—are working to create a Standard Methods and Procedures in Animal Health (SMP-AH) that may then be implemented in East African nations.

As part of this effort, chief veterinary officers (CVOs), epidemiologists, and other leaders from six countries in East Africa (Djibouti, Ethiopia, Kenya, South Sudan, Tanzania, and Uganda), who collectively share oversight for more than 300 million animals, recently spent two weeks in the United States, with a week in Oregon and Washington state and a week in Texas—during which the group visited the CVM.

The East African delegation heard from Dean Green and other faculty members before touring CVM facilities.

"The CVM is expanding its international programs and taking a lead role in the One Health Initiative, the recognition that animal, human, and ecosystem health are all inextricably linked," said Dr. Eleanor Green, Carl B. King Dean of Veterinary Medicine. "It is through collaborative projects such as this that we are able to build a global partnership that improves the quality of life for people and animals in other parts of the world."

The visit, hosted by both the Norman Borlaug Institute for International Agriculture at the Texas A&M College of Agriculture & Life Sciences and the CVM, included a welcome from Dean Green, a tour of the facilities—including the large and small animal hospitals and the necropsy facility—and lectures by several CVM and AgriLife faculty members. The group then spent the afternoon visiting the Texas A&M Veterinary Medical Diagnostic Laboratory and the National Center for Foreign Animal and Zoonotic Disease Defense (FAZD Center) before boarding a bus to tour livestock operations, visit regulatory agencies, and see a Texas-Mexico border crossing.

Dr. Derik Venter prepares to treat the wound of an injured rhinoceros.
Photo courtesy of Kristin Burlingame.

"We're showing them how the United States manages disease control in livestock in a wide variety of ecosystems, on large ranches and small ones," said Jeff Austin of USAID-East Africa. CVM faculty Dr. Guy Shepherd, Director of Development; Dr. Dan Posey, Director of Special Programs and clinical associate professor; and Clay Ashley, Director of Veterinary Medical Park, led the tours of the CVM complex and answered questions about the practice of veterinary medicine in the United States. Dr. Kenita Rogers, Associate Dean for Professional Programs, provided an overview of the CVM veterinary curriculum; Dr. Michael Chaddock, Assistant Dean for One Health and Strategic Initiatives, lectured about the One Health Initiative; Dr. Jason Cleere, associate professor in the Department of Animal Science in the College of Agriculture & Life Sciences and Extension Beef Cattle Specialist, spoke about the Texas beef industry and the effects of drought; and Dr. Thomas Craig, Professor in the Department of Veterinary Pathobiology (VTPB) at the CVM, discussed parasite management in small ruminants.

"There are so many resources at Texas A&M we can take advantage of," said James Wabacha, SMP-AH Manager, African Union–Interafrican Bureau for Animal Resources. "I really enjoyed going through the clinics. They're such great facilities. I have taken photos to share with other faculty members in my country."

Creating standard methods must be a bottom-up approach, several people noted, that the producers themselves understand and support, rather than regulations imposed from the top down by the United States, or any other country. Furthermore, simply taking US procedures and using them in Africa would not work, because their needs, and the diseases, are different, there said Andrew Clark of USAID-East Africa.

"You have to Africanize [the control methods] to match the diseases," Clark said.

Several of the visiting veterinarians mentioned the need for partnerships between their countries and the United States.

"I expect some relationships to develop," said Nicholas Kauta, CVO of Uganda. He, and several other CVOs, mentioned that one of the most useful parts of the trip for them was the opportunity to meet veterinarians and researchers who might later be a source of help and advice.

Peter Ithondeka, CVO of Kenya, noted that Texas is a perfect place to study procedures because it has similar weather to much of East Africa.

"We can take the good things here," said Bewket Siraw, CVO of Ethiopia, "and bring change in our own environments." Even when they can't apply them directly, the methods used in the United States can then be adapted, he said.

"We have found many things we want to take back to our own countries," said Kauta.

"One of the goals of this trip was to provide the East African CVOs with knowledge and experiences that they can adapt to benefit their entire region," said Logan, who was one of the organizers of the visit. "Livestock production is a key to food security in East Africa. Developing a system to promote safe livestock trade was the objective of the program. Although many had been to the United States before, this was the first time many of the CVOs had seen United States livestock production systems firsthand."

Continuing Education and Conservation in South Africa

In March 2013, Dr. Linda Logan, professor and head of the Department of Veterinary Pathobiology and the Director of International Programs at the CVM, and Dr. James Derr, professor, led a group of seven veterinarians on a CE African Wildlife Medicine Chemical Immobilization Course (CIC) in the Mpumalanga district of South Africa. Participants ranged from those with extensive practice working with African animals to those with limited familiarity with wildlife species.

The group experienced multiple hands-on learning opportunities. With teaching led by Dr. Cobus Raath of Wild-

Continuing Education correspondent Kristin Burlingame learns how to give an injection to a sedated rhinoceros. Photo courtesy of Heath Culp.

lifevets South Africa, both veterinarians and non-veterinarians gained hands-on working skills with wildlife, from cleaning the wounds of an immobilized wild rhino to trapping, immobilizing, and relocating impala, blesbok, blue wildebeest, and zebra. Additionally, participants treated a wound on a young eland, ran diagnostics on a wild dog, removed a porcupine quill from the ear of a sable antelope, and sedated crocodiles in order to measure, weigh, sex, and draw blood as part of an ongoing research project.

Dr. Kim Rasmussen and Dr. Susan Culp transport two sedated blesbok for relocation. Photo courtesy of Heath Culp.

"The African Wildlife Medicine CIC course is valuable in providing practical hands on experience to US veterinarians who work with these animals in their practice or who would like to start working with them," Derr said. "Texas offers a similar climate to that of South Africa, and therefore, many people here have started up successful breeding, conservation, and hunting operations for these animals."

Like the native species of the United States, exotic animals require veterinary care, and this course provided the opportunity for American veterinarians and wildlife managers to work with health care professionals who are experts with these species in their natural habitats. The resulting transfer of knowledge across continents should help ensure the best possible veterinary care for these animals in breeding facilities and on ranches here in the United States.

"We are excited to offer this international course as an option for veterinarians looking for something different while earning their CE hours," Logan said. "The course has been approved for next year, so we look forward to bringing more participants to the Republic of South Africa and introducing them to veterinary care for these species from local experts."

In addition to the learning experiences, the travelers also took time to get to know southern Africa. During the middle of the course, the most of the group took a day off and traveled to Kruger National Park, where they saw hippos, elephants, giraffes, kudu, and other animals. The chance to see these animals interact in their native habitat was extraordinary, particularly when the group stumbled on a pack of wild dogs enjoying the spoils from a recent kill.

"One of the charms of the continuing education course being offered through the CVM CE office is that everything is completely taken care of by the staff," added Derr. "Flight arrangements are made through us so that the group is kept together. Meals and travel throughout Mpumalanga are provided by the Ngongoni Game Lodge. This CE course is all-inclusive, offering participants the chance to just come and learn, without logistical or travel-related worries."

Along with interacting with South African veterinarians, the group worked with other local wildlife experts. For example, since rhinoceros poaching is such a major issue (668 were poached in South Africa in 2012), members of the group met with law enforcement officers who direct canine operations to track wildlife and protect the park, reserves, ranches, and breeding facilities from poachers. In addition, some members of the team flew in a game capture helicopter and observed the skill and courage of the pilot and veterinarian when capturing animals under extreme conditions.

"The value of being able to work with and see endangered species in their native habitats is a unique opportunity, and this course makes one realize just what a vanishing natural resource rhinos, lions, and wild dogs really are," Logan said. "The importance of wildlife conservation cannot be more apparent than when you are walking through the bush in search of an injured rhinoceros, keeping an eye out for poachers and other predators."

With the many animal procedures, including an unscheduled checkup on a sick wild dog, the week passed quickly. The last day of the course included a lesson on the different types of dart guns available—and how to safely use them to immobilize wild animals—from Dr. Derik Venter and Mr. Louis Van Wyk. The group then spent a few hours in target practice, trying out the different guns and technologies used when darting and capturing wildlife.

"The knowledge gained through Dr. Raath's course is unparalleled," Logan said. "He will have plans for one day, only to receive a call that a rhino has been sighted injured, thus changing his schedule. You simply do not know what you will encounter until you are on the way to the field, which enhances learning through these unexpected and unanticipated opportunities."

The beauty of South Africa awaits anyone ready to come and see it. From sunsets on top of mountains, to early morning adventures working with many exotic species, this CE experience promises to be amazing and educational to all who participate.

Preparing Pakistan for World Trade

The Center for Educational Technologies at the CVM is leading a three-year project to create a training program to assist agriculture officials involved in the import/export of agricultural commodities in Pakistan. The project is

designed to help boost Pakistan's agricultural capacity by showing how to operate effectively within the World Trade Organization's sanitary and phytosanitary regulations. The overarching goal is to increase Pakistan's ability to trade its agricultural products on the world market.

Through the WTO regulations, all member countries, which include both the United States and Pakistan, must comply with the Agreement on the Application of Sanitary and Phytosanitary Measures (or SPS Agreement) to import or export agricultural products. Under this agreement, the WTO also requires member countries to have in place certain policies relating to animal and plant health (phytosanitation).

Pakistani officials attending a workshop. Photo courtesy of the Center for Educational Technologies.

This nearly 1.5 million dollar program, established in fall 2011 in conjunction with the United States Department of Agriculture (USDA) and CABI (an international not-for-profit science-based development and information organization with offices in Pakistan), is a three-year pilot program. Currently 25 Pakistani officials are enrolled in the course, which consists of 24 distance education modules, delivered in batches via flash drives, each holding approximately four hours of course content that participants complete independently.

Using the flash drives and delivering content via distance education has enabled course instructors to provide a significant amount of content for participants in a cost-effective manner. Every three months, participants meet for a three-day workshop, led by USDA instructors, where they apply the information they learned in the modules through a series of hands-on activities and laboratories focusing on building their professional skills. Participants are also tested during the workshops to assess their mastery of the course material.

Dr. Jodi Korich, clinical assistant professor in the Veterinary Integrative Biosciences (VIBS) Department and the founding director of the Center for Educational Technologies at the CVM, and her team have designed a variety of surveys and exams, including pre-tests, post-tests, and an end-of-workshop skills test, to measure outcomes. If outcomes demonstrate that this blended learning curriculum is an effective educational model, similar programs will potentially be established in other developing countries. Pakistan was chosen as the first recipient of this pilot course to promote the United States government's strategic objectives to assist Pakistan in building its economy.

"They are not so different from us," said Korich. "Most people in Pakistan want a better future for their families, and they are working hard under some very difficult conditions."

The mission of the CVM's Center for Educational Technologies, which was established in 2010, is to research and develop innovative veterinary educational solutions. The center's team members work hand-in-hand with faculty and veterinarians from around the world to design, develop, and deliver world-class instructional materials.

"Large projects like this can be overwhelming," Dr. Korich said, "but, after visiting with agricultural officials in Pakistan to kick off this project, I think we walked away with a real sense of purpose that has helped sustain our energy and enthusiasm for this project.

The educational modules are delivered on USB drives to the Pakistani officials.

International Impact: The CVM's Continuing Commitment

Through international programs and initiatives, the CVM extends its commitment to encouraging safe livestock trade and improving the health and welfare of animals beyond the walls of the college. As the world continues to become more connected, the CVM will continue to engage in international collaboration to ensure a safe and secure food supply for the United States and other nations, as well as a viable economic enterprise upon which developing nations can build. These learning opportunities not only provide additional continuing education for practicing veterinarians, but also enhance the learning experience for veterinary students as their professors engage in international collaborations that can then be discussed in the classroom.

The SWVS Connection:

Southwest Veterinary Symposium inspires vets from both sides of the Rio Grande

by Dr. Jed Ford, TVMA President

The relationship began quite simply. At the very first Southwest Veterinary Symposium (SWVS), Fort Dodge and Hills Science Diet sponsored several veterinarians from Mexico to attend the meeting near Dallas. One of the veterinarians wanted to stay a few days after the symposium to tour local veterinary clinics. Former Texas Veterinary Medical Association (TVMA) President, Dr. Ron Stried, introduced me to Dr. Sergio Gutierrez Sotres and asked to visit my clinic near Fort Worth.

That Monday afternoon, Dr. Sotres called me. His English was understandable but broken. My Spanish was very weak and limited to a few short phrases. He had rented a car and wanted to come to my clinic. He had never been to Texas before, let alone driven a car here. I told him it should take him about half an hour to get to my clinic. This was before GPS systems were commonly in cars, and four hours later, he finally found my clinic. I think he saw more of Texas than he bargained for. I gave him a tour, and he seemed impressed and very appreciative. As I walked him to the door to bid him farewell, he turned and said, "I brought my suitcase." Not knowing this man from Adam, I took him to a Motel 6 rather than to my house.

The next day, he spent half the day at my clinic and half the day with Dr. George Moses. About an hour before we closed, Dr. Sotres came back to my clinic. It became obvious that I was his host for the week. I recruited the help of some local drug representatives, and he traveled with them to area clinics. On Thursday, I had him over for dinner. On Friday, I took him to a high school football game. On Saturday, he returned to Mexico. The following year, he convinced me to come to the World Small Animal Veterinary Conference in Mexico City. Following the convention, he drove me to his hometown of Cholula. It is a beautiful old city two hours southeast of Mexico City. When we arrived at his clinic, his entire staff was genuinely happy to see him and ran out to greet and hug him like daddy had come home. My first thought was, "Man, my staff doesn't greet me like that!"

There are more than 300 beautiful churches in Cholula. Most were decorated with gold. His clinic is within walking distance of an ancient pyramid. The hospitality that I had extended to him the previous year was returned a hundred-fold. I have now been to his town three times, most recently to attend his daughter's wedding.

Dr. Sotres has a heart for veterinary medicine, and he has a progressive clinic. There are 14 veterinary clinics in this town of 100,000 people, and Dr. Sotres has the only x-ray machine. The other veterinarians in town bring their cases to be radiographed at his clinic and then return to their clinics to do the repair. He is computerized and often sends home digital photo records of procedures. He has returned to SWVS seven of its 10 years and encouraged other veterinarians to accompany him.

> WVS has provided an environment that has inspired veterinarians from both sides of the Rio Grande to grow and improve.

In 2012, SWVS was held in Dallas. Once again, Dr. Sotres came, along with four other Mexican veterinarians. The veterinarians toured six small animal hospitals and three equine facilities. Dr. Sotres' passion lays in improving the level of veterinary medicine in Mexico. One way he does so is by encouraging veterinarians to attend SWVS, stay afterward to tour, be amazed by the quality of veterinary medicine in Texas and then go back to Mexico to make it better.

I often give Dr. Stried a hard time about that introduction, but in reality, I am very grateful. I have made a lifelong friend and have been eyewitness to a unique positive effect of SWVS. SWVS has provided an environment that has inspired veterinarians from both sides of the Rio Grande to grow and improve. I don't know what may come of this connection with Mexico and SWVS, but Dr. Sotres, for one, sees great value in SWVS and for the future of veterinary medicine south of the border.

Dr. Sotres has a heart for veterinary medicine, and he has a progressive clinic. There are 14 veterinary clinics in this town of 100,000 people, and Dr. Sotres has the only x-ray machine. The other veterinarians in town bring their cases to be radiographed at his clinic and then return to their clinics to do the repair.

TVMA's 100th annual meeting deemed a success

Special Thanks and Recognition

TVMA would like to recognize the Texas A&M University College of Veterinary Medicine & Biomedical Sciences for allowing us to host the 2013 Texas Veterinary Medical Association (TVMA) Annual Conference in their facility. Dean Eleanor Green's commitment to building and maintaining a strong relationship between the College of Veterinary Medicine & Biomedical Sciences and the Texas Veterinary Medical Association is evident and plays a key role in the success of this conference.

We were pleased to welcome more than 500 veterinarians, veterinary students, hospital staff and exhibitors who helped make the TVMA Annual Conference a resounding success! Below is just a snapshot of what took place at the 100th annual meeting of the Texas Veterinary Medical Association.

Attendance Numbers

241 DVMs
67 Hospital Personnel
219 Veterinary Students
527 Total Attendees

In addition, there were 112 exhibitor representatives who worked exhibit booths at both the Hilton Hotel and the College of Veterinary Medicine. These individuals represented more than 40 companies and nonprofit organizations.

Leadership Meetings

Many volunteer leaders serving on the TVMA Executive Committee, the Board of Directors, committee members, Veterinary Political Action Committee (VPAC) Board of Trustees and the Texas Academy of Veterinary Practice (TAVP) Board of Directors met to discuss multiple issues pertaining to the veterinary profession. TVMA leaders approved and set a new strategic plan into motion that will expand and improve member services and guide our association over the next five years.

Award Recognition

Designed to recognize and encourage outstanding practice and exemplary service in the veterinary profession, TVMA recognized a number of members for their contributions to various fields of veterinary medicine (Companion Animal, General Practitioner, Recent Graduate and Medical Specialty) at this year's annual conference. In addition to these awards, a longtime member was hailed for a lengthy distinguished career, and a Registered Veterinary Technician was honored for her dedication and hard work. All of these honorees were nominated by their peers and recognized at an awards ceremony. In addition, four clinics were presented Heritage Practice Awards for longevity and contributions made to their communities. TVMA was proud to establish this recognition program in 2009 starting with the A&M College of Texas, established in 1888.

Continuing Education

TVMA is fortunate to have access to speakers from the College of Veterinary Medicine & Biomedical Sciences to provide practical and up-to-date information on the latest advances in veterinary medicine, including Johnathon "Bert" Dodd, DVM; Kevin Washburn, DVM; Leslie Easterwood, DVM; and Deb Zoran, DVM; along with presenters from around the state and country. Sessions included Behavior Tips, Feline and Equine Dermatology, Diabetic Cat and Injection Sarcomas, Maxillofacial Trauma and Emergency Oral Medicine, Tick-Borne Disease, Business Life Cycle of a Practice and much more.

Special Veterinary Student Events and Programming

One of the primary reasons the TVMA Conference remains in College Station is our commitment to the veterinary student body at the College of Veterinary Medicine & Biomedical Sciences. The programming committee purposefully looks for opportunities to draw both the practitioner and the student together for a unique and meaningful learning experience. Two panel discussions were created to provide students with insight into life after graduation and life as a large animal practitioner. The Recent Graduate Panel consisted of TVMA members who graduated within the last six years, truly allowing them to speak with authority on the world after graduation. The large animal practice panel consisted of three TVMA members who brought more than 50 years of experience to the table to share with students wanting to know the reality of being in the field of large animal medicine.

Veterinarians and interested students attended a "meet-and-greet" to discuss internships, externships and available summer positions, while the Dean's office organized job interviews between conference attendees and fourth-year students. Lastly, for the second year in a row, two student organizations implemented labs in which students and practitioners worked and learned side by side.

Special Events

The kick-off event for the 2013 TVMA Annual Conference was the Texas Veterinary Medical Foundation's Fifth Annual Clay Shoot. Thirty-plus shooters walked the 10-station course for a challenging day of marksmanship. On Saturday evening, the new TVMA president, Dr. Jed Ford, and his wife, Jerri, hosted a very merry Mad Hatter Celebration. Some rather unusually dressed TVMA staff members and a multitude of conference attendees who embraced the theme wholeheartedly attended this zany party. The Hilton ballroom was transformed into an Alice in Wonderland tea party complete with a skilled Mad Hatter craftsman, the Rad Hatter, Texas Jabberwocky (Armadillo) Races, flipbooks photo area and a game corner featuring flamingo and hedgehog croquet, The foundation held a live and silent auction, earning more than $7,000 to benefit their special programs.

We are excited to be back in College Station for the 2014 TVMA Conference on February 28 – March 2!

TVMA
TEXAS VETERINARY MEDICAL ASSOCIATION

What Your College Does For You

Provides the finest education possible to its graduates.

Provides the best continuing education.

Provides excellent associate veterinarians.

Trains first-class specialists.

Provides status as a graduate of a recognized world-class institution.

Conducts research that shapes the future of the health of people, animals, and the environment.

Provides referral and consultation services for you and your clients.

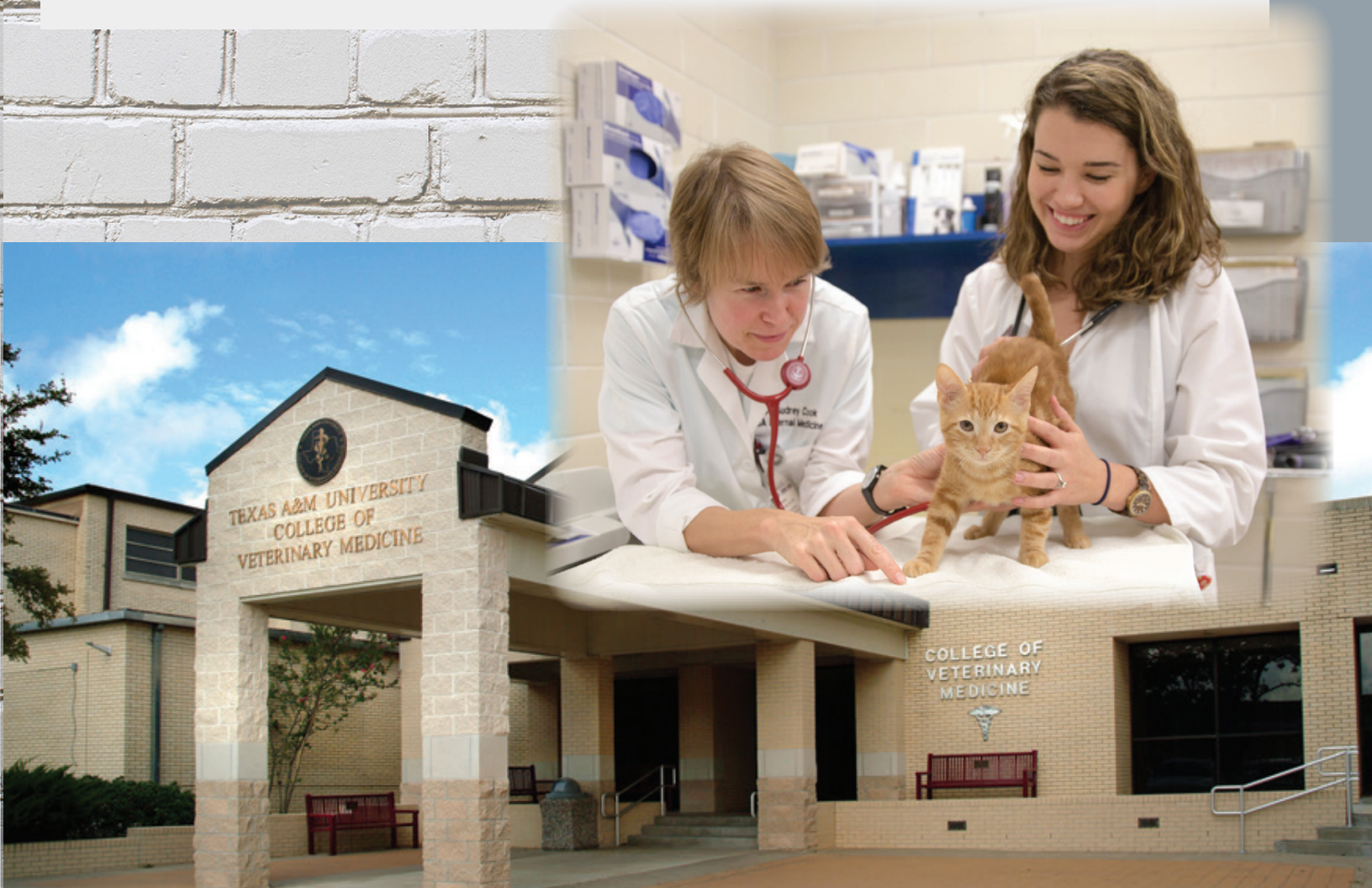
Provides a way for you to memorialize your clients' beloved pets.

Welcomes you back as valued alumni.

What You Can Do For Your College

Take an interest.
Return for visits.
Refer patients.
Attend CE offerings.
Spread the word to clients and friends about what is going on at your alma mater.
Encourage and mentor young people to become veterinarians.
Introduce potential supporters to the college.
Provide financial support.
Remember the college in your estate planning.

Become a member of our Centennial Committee: Pledge an endowment-level gift to lead the college into the next 100 years!



Governor Perry announces new $14 million grant to Texas A&M University and Texas Heart Institute, creating Center for Cell and Organ Biotechnology

"Houston, we have a solution," said Dr. Doris Taylor, Director of Regenerative Medicine Research at the Texas Heart Institute (THI), when she helped announce an exciting new partnership between the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) and THI.

Taylor was referring to the giant leap forward that is anticipated in stem cell research through the establishment of the Center for Cell and Organ Biotechnology, a $3 million investment by the state of Texas through a Research Superiority Award. Governor Rick Perry, joined by Taylor, Dr. James T. Willerson, THI's president and medical director; Dr. Eleanor Green, Carl B. King Dean of Veterinary Medicine; Texas A&M Interim Vice President for Research Glen A. Laine, professor and principal investigator in this collaboration; and Texas A&M President R. Bowen Loftin, announced the collaboration September 13, 2013 at THI in Houston. A symposium titled "Exploring New Frontiers in Regenerative Medicine" followed the announcement.

"The biomedical industry is one of the largest in our state, and has the potential to greatly improve many Texans' quality of life through innovative research programs such as the Center for Cell and Organ Biotechnology," Gov. Perry said. "This investment will promote the growth of the biotechnology sector in Texas, attract top researchers and outside investment to this newly formed Center, and help fight age-related and chronic disease that affect millions of lives and cost billions of dollars each year."

"We are bringing the best of the best together in synergy," said Green. "It was clear from the beginning that this partnership between two highly regarded institutions and the State of Texas was special. We know that the health of animals and people is inextricably linked and this unique center will advance both human and animal health. Texas A&M veterinary students, medical students, undergraduate students, graduate students in biomedical sciences and other students from the Texas Medical Center and beyond will benefit from participating in the use of advanced stem cell technologies in improving health on several fronts including cardiovascular science, personalized medicine, and organ replacement, regeneration and repair."

The new center will be led by Taylor and will include scientists, engineers, physicians, veterinarians, and business managers from THI, the CVM, and other colleges at Texas A&M University. Taylor is an internationally known researcher who is credited with growing the first beating heart in a laboratory. By stripping organs of their cellular make-up, leaving a decellularized 'scaffold' in place, Taylor has been able to utilize adult stem cells to regenerate the necessary tissue to create a bioartificial heart. This process has also been shown to work for other organs, such as kidneys, the pancreas, the lung, and the liver.

"Dr. Taylor is a world-class researcher and scientist who will continue to be a difference-maker at the Texas Heart Institute," said Texas A&M University System Chancellor John Sharp. "The team at Texas A&M, led by Dr. Eleanor Green, has done excellent work in creating this very unique collaboration. We are fortunate to live in a state where this type of investment can be a direct catalyst for discovery, today and into the future."

Loftin added, "We are pleased to join with our colleagues at the Texas Heart Institute to deepen our scientific understanding and apply this knowledge to improve lives in Texas and around the world."

The center will take a multi-faceted approach to chronic disease caused by cell and organ failure in both humans and animals. This includes:

- Predicting disease onset earlier to allow earlier intervention (diagnostics);
- Developing personalized cell and gene therapies to prevent chronic disease progression;
- Novel therapeutics to treat organ injury, and;
- New organ repair or replacement strategies when organ failure is present.

In humans, the risk and impact of numerous devastating health conditions—including heart disease, diabetes, kidney and liver disease, and cancer—increase with age, in large part because the body loses its capacity to repair ongoing tissue and organ damage. This failure to repair is due in turn to loss in the number and function of endogenous stem cells that exist in virtually every tissue and organ, including bone marrow. In the U.S. alone, one in three individuals suffers from some form of cardiovascular disease, at a cost of approximately $500 billion a year. In fact, increased age is

(l-r) Dr. Denton A. Cooley, surgeon-in-chief and president emeritus of THI; Dr. James T Willerson, president and medical director of THI; Dr. Doris Taylor, director of regenerative medicine at THI; Governor Rick Perry; Dr. Eleanor Green, Carl B. King Dean of Veterinary Medicine at Texas A&M University; Dr. Glen Laine, Interim Vice President for Research at Texas A&M University; and Dr. R. Bowen Loftin, president of Texas A&M University, gather for the September 2013 announcement.

VET meets Governor Perry at Austin Preparedness Expo

For the second year, the Texas A&M Veterinary Emergency Team (VET) participated in the Texas Preparedness Exercise and Expo held in Austin and coordinated by the Office of the Governor and the Division of Emergency Management. The event, held on May 31st in recognition of the beginning of hurricane season on June 1, brought together emergency response and support agencies from around the state. Each organization set up a display featuring rescue and response equipment and tools.

Governor Rick Perry, elected officials, and members of the media toured the different displays and thanked members of the organizations for their service to the citizens of the State of Texas and beyond. Governor Perry stopped at the VET set-up and toured the medical platform trailer and a tent that had been set up as a triage tent. Fourth year students on the Community Connections rotation during the Expo were able to travel with the team and meet with the Governor and emergency response personnel from around the state. In addition, members of the VET leadership team were interviewed by area media about the importance of caring for animals in times of disaster.

Photos (clockwise from top left): Governor Rick Perry (left) and Texas Division of Emergency Management Chief Nim Kidd (center) thank Dr. Wesley Bissett, VET Director, for the service the VET provides to the state. Dr. Wesley Bissett interviewed with Austin area media about the capabilities and capacity of the VET. Invited rescue and response agencies assembled on a tarmac adjacent to the National Guard Armory at Bergstrom International Airport to display the tremendous depth of emergency response and rescue resources in the State of Texas. Governor Perry took time during his tour of the VET display to visit with students (l-r: Alyssa Rahaim, Marsh Zajicek, Governor Perry, and Rachel Gelbar) and to encourage them in continuing to find ways to serve the citizens of Texas.

the greatest risk factor for developing cardiovascular disease and chronic renal disease. Furthermore, as a result of these types of chronic disease, more than a million people die of end-stage organ failure each year, and more than 100,000 individuals are waiting for an organ transplant.

"Dr. Taylor is certainly one of the stars in the adult human stem cell field, and we feel extremely fortunate to have her at the Texas Heart Institute," said Willerson. "With the work already underway at Texas A&M, Dr. Taylor will be able to draw from expertise at both institutions to position the Center for Cell and Organ Biotechnology as a world leader in adult stem cell research, organ transplantation, and personalized medicine."

The Texas A&M CVM is home to the Michael E. DeBakey Institute for Cardiovascular Sciences, which is directed by Laine, who currently serves as interim vice president for research at Texas A&M. The Institute is known as a leader for biomedical research programs in vascular studies and cardiovascular devices, making it a natural fit for the partnership. The DeBakey Institute brings together cardiovascular scientists, engineers, and clinicians from Texas A&M and the Texas Medical Center in Houston to fight cardiovascular disease in both human and veterinary patients.

Chancellor Sharp and guests celebrate the 'Day of the 12th Man' at the CVM

Celebrating the Day of the 12th Man on 12-12-12 at 12:12 p.m. at the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM), a special group of Aggies spent the morning learning about the mission of the college to "Touch every Texan, every day" through research, teaching, service, outreach, and patient care.

The tour of college facilities, led by Dr. Eleanor M. Green, Carl B. King Dean of Veterinary Medicine; Sam Wigington, Director of Facilities; and Anna Goodroe, a VetMed Ambassador, gave Texas A&M University System Chancellor John Sharp and other distinguished guests the opportunity to meet multiple faculty members from each academic department and hear about thier individual clinical specialties and research initiatives. In addition, participants also had the opportunity to learn about innovative educational and research programs in development at the college.

After the tour, the visitors had lunch with key members of the CVM administration where they "sawed Varsity's horns off" during the Aggie War Hymn.

(l-r) Sam Wigington, Director of Facilities at the CVM; Dr. Jon Mogford, Vice Chancellor for Research for the Texas A&M University System; Dr. Eleanor M. Green, the Carl B. King Dean of Veterinary Medicine at Texas A&M; Texas A&M System Chancellor John Sharp; Dr. Kent Carter, Professor in the Department of Large Animal Clinical Sciences; Dr. Chad Marsh, Clinical Assistant Professor in the Department of Large Animal Clinical Sciences; Dr. Kenita Rogers, Associate Dean for Professional Programs at the CVM; Dr. Charles Graham; and Anna Goodroe, VetMed Ambassador and DVM student.

(l-r) Dr. O.J. "Bubba" Woytek, DVM '65, Assistant Vice President for Development at the CVM; Dr. Charles Graham, DVM '61; Chancellor John Sharp '72; Dr. Eleanor Green; Texas A&M University President Dr. R. Bowen Loftin '71; and Dr. Jon Mogford '90 "saw Varsity's horns off" with the playing of the Aggie War Hymn.

Planning continues for new Veterinary Education Building

To accommodate the dynamic growth in programs at the Texas A&M College of Veterinary Medicine and Biomedical Sciences (CVM), a new Veterinary Educational Complex is nearing the end of the planning stages, with construction to begin in spring 2014. The goal is completion by fall 2016, which will coincide with the college's centennial celebration of its 1916 founding.

"It is a once-in-a-lifetime opportunity to develop a facility that will support modern veterinary medical education well into the future," said Dr. Eleanor M. Green, Carl B. King Dean of Veterinary Medicine. "Even in the early stages of design concepts, the leadership of CVM facilities director, Sam Wigington, and his team, has been notable. Support from Chancellor John Sharp, President R. Bowen Loftin, Texas A&M Facilities Planning and Construction, and all of the others involved in this process has been critical in acquiring funding and enabling the CVM to move forward with the construction planning process. We will prove the investment to be wise. The architects tell us this will be one of the most advanced, sophisticated educational buildings in the United States."

Representatives from the architectural team (SHW Group and Cannon Design) have met with members of the administrative team, faculty, and staff as the process of designing and refining the plans for the new building are developed. Input from all levels within the CVM has been crucial to designing a facility that is innovative, functional, and efficient.

The classrooms will be easily adaptable to different types of teaching styles. Their sizes range from those that accommodate 250 students—more than an entire class of veterinary students—to those for small discussion groups that seat 12. The large classrooms feature accordion style seats, which can be retracted into the wall when not in use.

One of the primary objectives throughout the process is to change the paradigm from teaching to learning through the creation of a collaborative learning environment, one that encourages interactions among students, faculty, and staff. For this reason, the architects continue to engage the CVM family in the planning process to develop a building that will immediately foster new and innovative teaching technologies and will be adaptable to innovations that emerge for the next 100 years.

Sustainability is another value important to an institution that considers health of animals and ecosystems as a primary goal. Therefore, the new building will be designed to a Leadership in Energy and Environmental Design (LEED®) silver rating.

Texas A&M Equine Complex: From Concept to Reality

When construction began on Phase 1 of the new Texas A&M Equine Complex in October 2012, an aggressive schedule was established from the beginning. What began as a concept is now visible as one drives along FM 2818 just northwest of the Texas A&M campus. The goal of moving into the new facility by January 2014 appears to be attainable.

"As construction continues, the vision that was established for the Equine Initiative by the Colleges of Veterinary Medicine & Biomedical Sciences and Agriculture & Life Sciences is tangible," said Dr. Eleanor M. Green, Carl B. King Dean of Veterinary Medicine. "Each day is exciting as new buildings are started."

Planning for the new center began in May 2012 when the Texas A&M Board of Regents approved a major gift that allowed for Phase 1 construction to begin. This cornerstone gift, combined with in-kind and other major gifts, brings support generated for Phase 1 construction to approximately $35 million. Phase 1 will include an education and outreach center, facilities for the Texas A&M Equestrian Team, and a cross country course in collaboration with Texas A&M Athletics for the Texas A&M national championship winning track team.

"As construction of the first phase of the equine complex comes to completion, it's clear to see that this facility is indeed one-of-a-kind," said Dr. Russell Cross, Head of the Department of Animal Science. "The possibilities for collaboration across departments and colleges are endless as well as the hands-on teaching opportunities because of this unique and vast facility."

"It is exciting and motivating to see this phenomenal facility develop before our eyes," said Dr. Allen Roussel, Professor and Head of the Department of Large Animal Clinical Sciences. "But it is even more exciting to realize that the current building project is only the beginning. I can't wait to see what the future brings as the other phases of the project get underway."

Once other phases are completed, the $80 million complex will provide a home for equine science education, research, and outreach at Texas A&M. Both the Department of Animal Science in the College of Agriculture and Life Sciences and the College of Veterinary Medicine & Biomedical Sciences have been instrumental in providing the equine industry with knowledge and care that have advanced not only equine sciences, but also the welfare of the horse.

"One of the most exciting things about working within the land-grant university system is seeing new advancements in research and education reach the people it matters to most," said Dr. Mark Hussey, Vice Chancellor and Dean for Agriculture and Life Sciences. "Texas A&M has always been a leader in equine teaching, research, medicine, and extension, and now the equine science program can strive for even greater levels of excellence and outreach."

The Texas A&M Equine Initiative was created to collaboratively utilize existing expertise within the university to build an equine program that will graduate the industry's future leaders and generate research and veterinary medical care that will serve the industry and improve the care and welfare of the horse. To support its mission, the Equine Initiative has developed four major imperatives: curriculum enhancement, outreach & engagement expansion, facility construction, and partnership development.

"The Thomas G. Hildebrand DVM '56 Equine Complex is a visual representation of the efforts of the Equine Initiative and Texas A&M University over the past three years, as well as a tribute to the support we have received from the equine industry and friends of the program," said Dr. Jim Heird, executive professor and coordinator of the Equine Initiative. "The progress we see each day at the construction site reminds us of our mission of serving the needs of the members of the Texas equine industry, whether it be students, producers or the horses themselves."

Ground broken for new Exotic and Wild Bird Aviary

The Texas A&M University College of Veterinary Medicine & Biomedical Sciences (CVM) officially broke ground July 26, 2013 on a new Exotic & Wild Bird Aviary scheduled for completion in May 2014.

The new building will be approximately 11,000 square feet and will contain a functional hospital, receiving area with quarantine capabilities, two isolation rooms, a Biosafety Level 2 laboratory for infectious disease research, spacious teaching and classroom space, and four offices.

"Based upon their excellence, our avian programs are growing," said Dr. Eleanor M. Green, Carl B. King Dean of Veterinary Medicine. "Our faculty have made substantial contributions to the health and welfare of birds and to the avian industry, in terms of educating future and current veterinarians, providing the highest level of avian patient care, and advancing the knowledge edge. As leaders in avian medicine, we also train the next generation of veterinarians and scientists to continue this important mission. This facility will provide the laboratory, avian housing, and classroom space that will allow this program to continue to thrive."

"This is a beautiful facility that exemplifies the College's commitment to exotic species and to conservation in general," said Dr. Ian Tizard, Richard M. Schubot Professor of Exotic Bird Health and Distinguished Professor of Immunology in the Department of Veterinary Pathobiology at the CVM.

The new, climate-controlled aviary will be able to house a population of 200-250 birds in a comfortable and safe environment, with separate spaces for infected and healthy birds, which will help researchers conduct their studies. For example, one major research program into the prevention and treatment of proventricular dilatation disease involves birds infected with avian bornavirus. In the new facility, these birds can be kept separate from both healthy birds and birds infected with other diseases.

"With a newer, more modern aviary, we will be able to attract more interest in both the university and the college, leading to more collaborative efforts and more student involvement," said Dr. Sharman M. Hoppes, Clinical Associate Professor in the Department of Small Animal Clinical Sciences at the CVM and a specialist in avian medicine.

"We will have much better teaching facilities, not only for undergraduates and DVM professional students but also for continuing education and other courses," Tizard said. The new building, with its dedicated teaching space, will better promote an understanding of avian diseases, husbandry, and conservation among current and future veterinarians. The enlarged and enhanced facilities will also provide space for specialized birds, such as raptors, for which the students can learn appropriate care and treatment.

Representatives from the Texas A&M College of Veterinary Medicine & Biomedical Sciences broke ground for a new state-of-the-art Avian Complex that will support the continued growth of avian medicine and research at the college. (pictured l to r): Dr. Sandee Hartsfield, Head of the Department of Small Animal Clinical Sciences; Dr. Eleanor M. Green, Carl B. King Dean of Veterinary Medicine; Dr. Sharman Hoppes, Clinical Associate Professor, Department of Small Animal Clinical Sciences; Dr. Ian Tizard, Distinguished Professor of Immunology, Director of the Schubot Center for Exotic Bird Health, Department of Veterinary Pathobiology; Stacie Koinis, Second-year Veterinary Student, Avian Chair of Zoo, Exotics, and Wildlife (ZEW) student group; Dr. Linda L. Logan, Head of the Department of Veterinary Pathobiology.

The results of research at the center are already being applied to improving the health of birds kept by zoos, aviculturists, and individual pet owners, as well conserving threatened avian species in the wild.

"Although the Schubot Center is already known internationally in the avian world, many in our own university and community are unaware that we are here and what we have done or are doing in terms of both avian conservation and clinical diagnosis and treatment," Hoppes said.

Laine appointed Texas A&M University Interim Vice President for Research

Dr. Glen Laine

Dr. Glen Laine, Department Head of Veterinary Physiology and Pharmacology, was appointed Interim Vice President for Research for Texas A&M University, effective May 1, 2013.

"We are proud of Dr. Laine for being targeted for this very important position on our campus," said Dr. Eleanor Green, Carl B. King Dean of Veterinary Medicine. "His administrative leadership and commitment to serve make him a natural selection for this opportunity. He is already talking about ways to serve our research faculty well."

Dr. Laine has served as head of the Department of Veterinary Physiology and Pharmacology at the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) for 20 years and director of the Michael E. DeBakey Institute for Cardiovascular Science and Biomedical Devices for 13 of those years.

After bachelor's and master's degrees in microbiology and physics, respectively, from the University of Louisiana, he earned his doctorate in physiology and biophysics with a minor in biomedical engineering from Texas A&M's College of Medicine. Dr. Laine then studied the Biophysics of Transport as a post-doctoral fellow at the Microcirculation Research Institute before becoming Assistant Professor in the Department of Anesthesiology at The University of Texas Medical School in Houston, where he remained for six years before joining the faculty of the CVM in 1999.

Burghardt named acting associate dean for research and graduate studies

Dr. Robert Burghardt, a full professor of Veterinary Integrative Biosciences at the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM), has accepted the role of Acting Associate Dean for Research and Graduate Studies during Dr. Bhanu Chowdhary's one-year absence from the position.

"My role is to work as a member of the administrative team at the CVM to enhance the research mission of the college by promoting extramural and intramural research programs, as well as graduate student training programs," said Burghardt. "This includes efforts to enhance laboratory facilities that support research and graduate education."

Burghardt is starting his 36th year at A&M, and has been at the CVM since 1987 when he came to develop the college's newly formed Image Analysis Laboratory and accepted the appointment as Associate Professor of Veterinary Anatomy. Prior to that, he received a B.S. degree in Zoology from the University of Michigan and his M.S. and Ph.D. in Biology from Wayne State University. Burghardt completed his postdoctoral fellowship in Reproductive Biology from Harvard Medical School.

"My entire academic career at Texas A&M has been focused on graduate instruction, interdisciplinary research, and the development of research resources focused primarily on advanced analytical microscopy technologies that support research and graduate training," Burghardt said.

A distinguished research scientist in cell biology, environmental health, toxicology, and reproductive biology, with an extensive background teaching at the graduate level in areas of cell biology, Burghardt is well-prepared for his duties as Acting Associate Dean for Research and Graduate Studies.

"This one year appointment as acting associate dean for research and graduate education will allow me to better appreciate and contribute to expansion of both the CVM research portfolio and graduate education opportunities as part of a remarkably collegial administrative team," said Burghardt.

Dr. Robert Burghardt

Chaddock joins CVM administration

Dr. Michael Chaddock

Dr. Michael Chaddock arrived at the Texas A&M University College of Veterinary Medicine & Biomedical Sciences in November 2012 as the first ever Assistant Dean of One Health & Strategic Initiatives for the college and university.

"One Health" is the collaborative effort of multiple disciplines working locally, nationally, and globally to attain sustainable optimal health for a biological community of living organisms (humans, animals, plants, and microbes) and their physical environment interacting as a system. One Health is a cultural and behavioral concept driven by agents of change with socioeconomic elements and impacts. Among the many transdisciplinary examples of One Health:

- Climate change
- Global zoonoses (diseases common to both humans and animals)
- Global food and water availability, safety, and security to feed 9.2 billion people by 2050
- Zooeyia (the positive benefits to human health from interacting with animals)

One Health at A&M extends far beyond one or two colleges on campus; each, working collaboratively, has an integral role and responsibility to deliver One Health education, research, and outreach. This is why Texas A&M has identified One Health as one of its prominent grand challenges.

Chaddock, who began his career as a mixed animal practitioner, has worked extensively to support the veterinary profession serving as Director of the Animal Industry Division and State Veterinarian for the Michigan Department of Agriculture for 15 years. After his service with the State of Michigan, Chaddock completed an American Association for the Advancement of Science congressional science and engineering fellows program in Washington, DC and then was the Director of the Governmental Relations Division of the American Veterinary Medical Association. He subsequently contributed to the growth and development of the Association of American Veterinary Medical Colleges where he served as Director of Communications, Associate Executive Director, and most recently as Deputy Executive Director. Chaddock also dedicated his time to serving veterinary medical students in the classroom through collaborations and appointments at Michigan State University's College of Veterinary Medicine and the Michigan State University College of Agriculture and Natural Resources; the University of California-Davis, School of Veterinary Medicine; and the Johns Hopkins University, Bloomberg School of Public Health and Johns Hopkins University School of Medicine, Center for Civilian Biodefense Strategies.

As a part of his new role, Chaddock will not only be facilitating the development of the campus-wide One Health Grand Challenge but also will continue to identify One Health educational opportunities for students across many disciplines at A&M. An undergraduate One Health Learning Community was successfully inaugurated last spring semester and a Certificate in One Health for graduate and professional students will be available in the fall of 2014. One Health at Texas A&M is always looking for ways to establish and enhance collaborations across campus and between Texas A&M and other universities, governmental agencies, and not-for-profit organizations.

One World **One Health**

The One Health Initiative unites human, animal, plant and environmental health.

Miller named director of Texas A&M Institute for Pre-Clinical Studies (TIPS)

Dr. Matt Miller, Professor in the department of Small Animal Clinical Sciences and veterinary cardiologist at Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM), has been appointed Director of the Texas A&M Institute for Pre-Clinical Studies (TIPS) effective May 2, 2013.

Established in 2007 as a vision of Dr. Theresa Fossum, Vice Chancellor for Global & Corporate Partnerships and the Institute's first director, TIPS serves as a state-of-the-art research facility supporting research endeavors that require Good Laboratory Practice (GLP) methods.

"TIPS is a unique resource on this campus," said Miller. "There is most likely not another comparable facility in the world. Our medical imaging capabilities are superior to the imaging available in many human hospitals. The availability of such an assortment of imaging equipment in one facility, as well as access to highly talented individuals trained in optimal use of that equipment, is oftentimes the difference between the success or failure of the potentially life-saving medical technology under investigation."

Miller arrived at the CVM in 1988 after completing a cardiology residency at The Ohio State University. Once at Texas A&M, Miller helped develop the clinical cardiology program that today is considered one of the top programs in the world. While his early research emphasized improving the diagnosis and treatment of acquired and congenital heart disease in companion animals, his research interests now range from developing novel therapies for hemorrhagic shock to the evaluation of biomedical devices that aid in the management of brain aneurysms.

"Dr. Miller's leadership in the college's clinical cardiology program and his experience as a senior research scientist in TIPS made him a natural choice to assume the role of director at TIPS," said Dr. Eleanor Green, Carl B. King Dean of Veterinary Medicine. "Dr. Miller worked side-by-side with Dr. Fossum to bring TIPS from vision to reality. His research expertise in comparative veterinary medicine and biomedical devices will ensure the continued growth of TIPS as a core laboratory supporting researchers from across the Texas A&M System and companies seeking treatments for the nation's important health problems. I am confident he will lead TIPS from a young, promising, innovative facility to enormous success."

As a part of the CVM, the TIPS team specializes in the preclinical phase of research required to gain Food & Drug Administration approval for both drugs and devices. "The team assembled at TIPS has a wealth of expertise in research," said Dr. Bhanu Chowdhary, "including a significant amount of experience in the research protocols necessary to move new drugs and biomedical devices from the laboratory to the next stage of clinical trials. It is exciting to have this level of cutting edge technology and world-class expertise combined in one facility, and to see the growing interest of college, university, System partners and the industry in accessing this resource to enhance research and support discovery that impacts society."

Dr. Matt Miller

In addition to supporting researchers with experienced scientists and the tools necessary to conduct GLP-level studies, working as a part of the CVM gives the TIPS program several advantages over other similar facilities.

"It is an asset to be a part of the CVM," said Miller. "The veterinarians, technicians, and scientists on staff at TIPS and within other departments in the college bring a perspective on comparative anatomy and physiology essential to the success of preclinical research. We have a dynamic team supported by the latest medical imaging technology and are eager to assist other researchers who may benefit by utilizing our facility as a collaborative core laboratory for their endeavors."

The Texas A&M Institute for Preclinical Studies building on the CVM campus.

Avila awarded Phil Gramm Doctoral Fellowship

Felipe Avila, a Ph.D. candidate in the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM), won the prestigious 2013 U.S. Senator Phil Gramm Doctoral Fellowship. This award, which includes a $5000 scholarship, is given to recognize students' exemplary contributions in research, teaching, and mentoring in their doctoral programs.

"Felipe is a tremendous role model for not only our undergraduate students, but also our graduate students. Through his mentorship and teaching, he has touched many lives, and has demonstrated the success that comes with hard work and dedication. We are very proud of Felipe and extend him our sincere congratulations," said Dr. Eleanor Green, the Carl B. King Dean of Veterinary Medicine.

Originally, Avila came to study horses, but when the opportunity arose to focus on alpacas, he took it. Alpacas, a type of camelid originally from South America, are prized in the United States primarily for their fiber. Working in the Laboratory of Animal Molecular Cytogenetics and Genomics, under the supervision of Dr. Terje Raudsepp.

Avila's research focuses on chromosome structure and evolution in camelids, particularly the alpaca, as well as chromosomal abnormalities that affect the health of different camelid species. His Ph.D. research project involves generating a whole genome map for the alpaca. With this study, Avila aims to integrate genome sequence data with physical chromosome information to obtain the location of various genetic markers, such as those for disease resistance, congenital disorders, reproduction, fiber color, and texture. His goal is to lay the foundation for research on genetic contributions to traits of economic and biological importance in different camelid species.

"I couldn't have chosen a better project," Avila said.

He enjoys teaching too. As a teaching assistant for the undergraduate-level Biomedical Genetics course in the Biomedical Sciences (BIMS) program for two years, he worked for three different professors.

Felipe Avila (center) received a 2013 Senator Phil Gramm Doctoral Fellowship from Associate Provost for Graduate Studies Dr. Karen Butler-Purry (left) and Provost Dr. Karan Watson (right).

"I was really disappointed," he said, "when my advisor suggested I stop teaching and focus on my research." Now, he focuses on mentoring the undergraduate students working in Dr. Raudsepp's lab.

"I like to mentor," Avila said. "It's important to pass on our knowledge."

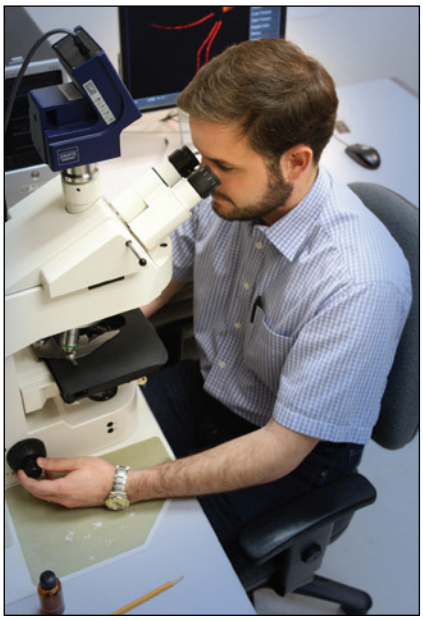
Only ten students throughout the university were awarded the U.S. Senator Phil Gramm Doctoral Fellowship this year. Dr. Bhanu P. Chowdhary, then the Associate Dean for Research & Graduate Studies at the CVM, also sent his congratulations. Chowdhary, who is on Avila's graduate committee, was the one who first encouraged him to apply for the fellowship.

"Felipe has truly distinguished himself in both the classroom and the laboratory," Chowdhary said. "He is deserving of this honor, and we couldn't be prouder that he has been recognized for his efforts."

Avila's advisor, Dr. Raudsepp, nominated him, and the professors for whom he served as a teaching assistant wrote letters of support.

"Felipe is an exceptional graduate student and we are very fortunate to have him," Raudsepp said. "As a scientific advisor, I certainly value his achievements in research, though it is even more important that Felipe is a wonderful person- intelligent, knowledgeable, invariably friendly, patient and helpful, always a gentleman. Our undergraduate students adore him as a mentor and we all love him as a good colleague. I have no doubt that Felipe will become an outstanding researcher, scholar and teacher in his future career."

Avila obtained his Bachelor's degree in Biology from the University of Brasilia (Brazil) in 2005, and joined the Department of Veterinary Integrative Biosciences (VIBS) at the CVM in 2009.



Bovine palpation team wins award

Mallory Cade, Bryan Weaver, Julie Pack, and Lukas Chachere.

The bovine palpation team from the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) placed third at the national Bovine Palpation Competition at Louisiana State University (LSU) on Friday, March 22, 2013. The four students on the team were Julie Pack, Lukas Chachere, Bryan Weaver, and Mallory Cade, and all are members of the student chapter of the American Association of Bovine Practitioners (AABP).

"It would probably be more descriptive to call what we do 'Palpation per rectum for the determination of reproductive status,'" said Pack. "Simply put, we are feeling the cow's reproductive tract to determine if she is pregnant, how far along she is, or if there is anything wrong with the pregnancy or her tract. The most accessible means to feel these structures is by palpating along the rectal wall which lies directly above the reproductive tract. "Palpating for pregnancy is a nearly indispensable part of cattle production," said Pack. "It does not hurt the cow and we get very valuable information that producers can use to make management decisions."

The student chapter of the AABP is part of the national organization, which is made up of veterinarians from all over North America who work on cattle. At the CVM, the AABP student chapter hosts monthly speakers during the school year and organizes hands-on opportunities to learn how to practice veterinary medicine on cattle.

"It is a great way to get more focused experience with cattle veterinary medicine during their formal veterinary training," said Dr. Kevin Washburn, Associate Professor in Large Animal Clinical Sciences and the team's faculty advisor. "It sets them up in the future upon graduation to have a very good skill set and many contacts within the profession to launch their careers."

Each competitor at the national Bovine Palpation Competition individually took a timed written test of 60 multiple choice questions written by the LSU vet school faculty covering all aspects of bovine reproduction. The scores of the four members of the CVM team were high enough to be one of the five teams to qualify for the second round, which tested the students' practical skills and knowledge. Each competitor had three minutes at each of 20 stations where they had to perform tasks such as identification of equipment, palpation of cadaver tracts, and placement of OB chains on a cadaver specimen.

"Everything in the second round, with the exception of the identification of the equipment," Pack said, "was conducted with the specimens covered so that you were effectively identifying everything by feel."

The Texas A&M team was one of the top three teams from the uterine tract test that advanced to the third and final round, which was a live cow palpation at the LSU dairy.

Three of the four team members from each team palpated three cows each, Pack said. Competitors were given three minutes per cow to identify if the cow was pregnant—and, if so, the stage of gestation—as well as any structures on the ovaries.

"This is a very difficult competition and it is very difficult to place as a team, so this is a great accomplishment," said Washburn.

"After the live cow palpation we rushed back to our hotel rooms to clean up for the fantastic Friday evening crawfish boil our Cajun hosts treated us to," Pack said. "It was a great experience."

Lukas Chachere, Julie Pack, Mallory Cade, and Bryan Weaver at the awards ceremony.

Dr. Carolina Nunez wins first Bayer Excellence in Communication Award

Recent DVM graduate Carolina Nunez '13 won the first Bayer Excellence in Communication Award at Texas A&M College of Veterinary Medicine & Biomedical Sciences and with it a $2,500 scholarship from Bayer Animal Health.

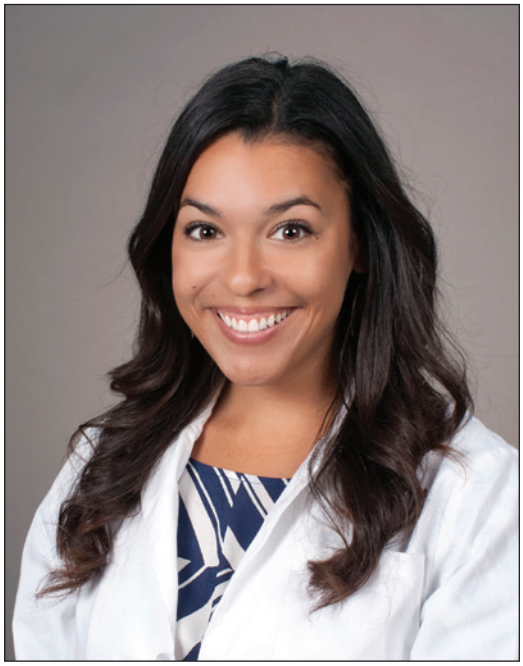
A veterinarian's ability to effectively communicate is one of the keys to establishing excellent animal care and good client relationships. However, the Bayer Veterinary Care Usage Study indicated a communication gap that often led to pet owners not understanding the value of regular veterinary care for their animals.

"The Bayer Excellence in Communication Award was created to focus attention on the importance of good communication between veterinarians and their clients," said Ian Spinks, president and general manager of Bayer HealthCare Animal Health, North America. "We are proud to offer these scholarships to future veterinarians, who, already as students, have committed to making themselves the best veterinarians they can be by being better communicators."

In its inaugural year, seven leading veterinary schools were selected by Bayer HealthCare to pilot the award program, with one winner from each school.

"Thanks to Bayer Animal Health for their educational partnership and offering this opportunity to our 4VM students," said Dr. Dan Posey, Director of Special Programs and Clinical Associate Professor.

The competition included submission of a 20-minute filmed interview in a clinical setting between the veterinary student and a client. Entries at each school were evaluated by a panel of faculty using a scorecard developed by nationally-renowned veterinary faculty who specialize in communication.



Dr. Carolina Nunez

Ricci Karkula, second-year DVM student, named president-elect of national SAVMA

Second-year DVM student Ricci Karkula was chosen by delegates from 33 member veterinary schools as president-elect of the national organization Student American Veterinary Medical Association (SAVMA) at their annual Symposium held this year in Baton Rouge.

This national organization includes approximately 13,000 veterinary medical students representing 29 student chapters. The Student AVMA President and President-Elect serve as members of the AVMA House of Delegates, providing student representation in the national professional organization.

"As president, I plan to voice the opinions of our 13,000 veterinary student members," Karkula said.

"Veterinary students are a group of highly involved, inspirational and dedicated individuals and it is their passion for this wonderful profession that motivated me to run for President-elect. I am both honored and privileged to have the opportunity to represent my fellow colleagues and the future of veterinary medicine."

Ricci Karkula

The concept of a national association of Student Chapters of the AVMA was first proposed to students who attended the 1966 AVMA Convention in Louisville, Kentucky. Its key objectives were patterned after those of the parent AVMA: ". . . to advance the science and art of veterinary medicine, including its relationship to agriculture and public health." In addition to Karkula, third year Aggie veterinary medical student Chase Crawford serves as the Information Technology Officer on the Executive Board of SAVMA.

SCAAEP names new slate of officers

From left to right. Front row: Kari Bevevino, Sydney Lawrence, Frances Hinkle, and Juli Tisdale. Back row: Amanda (Gail) Ramsey, Tyne Hovda, Angela Gaesser, Ricci Karkula, and Kathleen Gerdes.

Texas A&M Student Chapter of the American Association of Equine Practitioners (SCAAEP) is a club of about 150 DVM students interested in pursuing careers in equine veterinary medicine. Recently, this group announced a new slate of officers for the upcoming year.

The SCAAEP officers for the 2013-2014 school year are as follows:

• President Frances Hinkle would like to specialize in Equine Sports Medicine, specifically in polo ponies, after she graduates.

• Vice President Sydney Lawrence, who has served as First Year Representative, also plans to pursue a career in equine sports medicine upon graduation.

• Secretary Angela Gaesser hopes to complete an internship at an equine private practice after graduation.

• Treasurer Tyne Hovda grew up around racehorses and hopes to return to the track someday as a veterinarian.

• Assistant Treasurer Gail Ramsey loves horses but hasn't yet decided between going into mixed practice or solely equine medicine.

• Texas Equine Veterinary Association Student Liaison Kari Bevevino wants to pursue a career as an equine veterinarian.

• 3VM Representative Juli Tisdale is interested in equine surgery.

• 2VM Representative Kathleen Gerdes, who is originally from Fairbanks, Alaska, hopes to work in a mixed or equine practice and then eventually become a lecturer to teach the next generation of veterinary students.

"I wanted to become an officer in SCAAEP because the club provides the best learning atmosphere of the equine world regardless of a student's equine experience and upholds its members to professional level," said newly elected president Frances Hinkle.

The SCAAEP is committed to providing additional learning opportunities for members, including dinner meetings with guest speakers, who are top clinicians in equine medicine. The annual Skills Lab, a project of the group, draws approximately 250 students from 17 universities around the country.

"The annual SCAAEP Skills Lab is a unique opportunity that offers hands-on experience to veterinary students from across the United States," said Ricci Karkula, the EP Skills Lab Coordinator for 2013-2014. "We greatly appreciate the continued support from the many outstanding sponsors, clinicians, and volunteers that enable us to host SCAAEP Skills Lab each year."

The group is advised by Dr. Jeff Watkins, Professor in the Large Animal Clinical Sciences department.

As one of the largest SCAAEP chapters, the Texas A&M chapter at the CVM has earned a strong reputation among veterinary medical students around the country.

"The Texas A&M student chapter of AAEP has proven to be one of the best in the nation," Bevevino said. "I look forward to contributing to the esteemed reputation that our chapter has maintained."

VET in the LSU Fan Zone – October 20, 2012

As part of an outreach effort to educate the public about hurricane season preparedness, members of the Texas A&M Veterinary Emergency Team (VET) set up the mobile examination trailer used on deployments in the Fan Zone outside Kyle Field prior to the Texas A&M-Louisiana State University football game. Aggie fans were able to tour the trailer, visit with members of Texas Task Force One and their search and rescue dogs, and see a demonstration of Second Life simulation technology used as a teaching tool by the VET. Current veterinary students enrolled in the Community Connections rotation in veterinary emergency response served as tour guides, and shared their experience with guests, including Mr. Jim Schwertner and Dr. Richard Box, members of the Texas A&M Board of Regents.

Former Chairman of the Texas A&M University System Board of Regents Richard A. Box talks with members of the VET aboard the mobile examination trailer at the LSU game.

Members of the VET with Regent Jim Schwertner and Dean Eleanor M. Green.

Legends Stallion Auction begins sixth year

Presenters at the Legends Equine Reproduction Short Course participate in a panel discussion.

The Legends Premier Stallion Season Auction is an online auction to which stallion owners donate breedings (also called seasons) to benefit equine reproductive research, education, and clinical missions at Texas A&M University. December 20, 2013 marked the start of the 6th season of the auction, a source of funds that allows our programs to continue growing. Seasons from over 200 stallions from around the world were donated this year. Disciplines included Quarter Horse racing, cutting, barrel racing, reined cow, and show horse.

The auction was originally promoted as "stallions helping stallions" through support of research and clinical efforts exclusively in stallion reproduction. Due to the breadth of the A&M faculty in assisted reproductive technology, and a growing auction donor base that has generated in excess of $1.2 million, the program has expanded to support all aspects of equine reproduction. The auction has grown from a Texas-based event, to a global affair with participants from all over the world. The funds generated help support the scholastic advancement of graduate students and clinical residents, thus helping to ensure future generations will reap the benefits of their participation in a strenuous but rewarding academic program.

"The Legends Premier Stallion Season Auction is an integral part of our research and teaching missions," said Dr. Dickson Varner, Pin Oak Stud Chair of Stallion Reproductive Studies. "While the proceeds are directed exclusively toward the discipline of equine reproduction, the auction-related activities also allow us to reach out and connect with the equine industry in a very meaningful way, to better understand industry needs, and to more clearly structure our efforts to assist the horse-owning public. We are indebted to so many within the horse industry for their generosity and for their guidance as we strive to advance our knowledge of both basic and clinical aspects of equine reproduction."

The internationally recognized equine reproduction team is led by five Board Certified Theriogenolgists: Dr. Dickson Varner, Dr. Katrin Hinrichs, Dr. Terry Blanchard, Dr. Charles Love, and Dr. Steven Brinsko. These professors regularly lecture at scientific symposia worldwide, including those in Australia, Argentina, Austria, Brazil, Ireland, Scotland, and South Africa. Their level of expertise has put them in demand by equine breeders around the world. Texas A&M is generally recognized as the international authority in stallion reproduction, with innovative advancements in areas ranging from semen analysis to fertility assessment, to semen processing and preservation, to insemination strategies that are commonly applied within the horse industry today.

Dr. Katrin Hinrichs, Patsy Link Chair of Mare Reproductive Studies, and her staff at the Equine Embryo Laboratory are world-renowned for their pioneering research and clinical success in the areas of oocyte biology, oocyte transfer, intracytoplasmic sperm injection (ICSI), embryo culture, embryo biopsy for genetic diagnosis, embryo cryopreservation, and cloning. Techniques developed in her laboratory are now being applied commercially for preservation of genetics and for maximizing the fertility of stallions with low semen stores. Her team has greatly benefitted the horse industry through their revolutionary research on equine fertilization and early embryo development.

A short course was held this fall in College Station expressly for Legends Auction donors, buyers, and supporters. In attendance were veterinarians, technicians, stallion and mare owners, and breeders from around the globe.

For more information or to donate to the Equine Reproductive Studies program, please contact:

Warren W. Hohertz '85
Program Coordinator
Tel.: 979-862-2031
Email: legends@cvm.tamu.edu
Web: http://legends.cvm.tamu.edu

Dr. Young Ho Choi and Dr. Katrin Hinrichs lead a wet lab demonstration during the Legends Equine Reproduction Short Course two-day event.

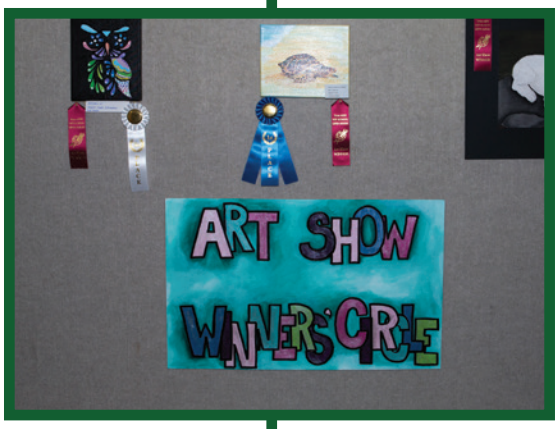
Homecoming & Parent's Weekend – April 5–6, 2013

The CVM welcomed parents and alumni during Homecoming and parents' weekend April 5-6, 2013.

The weekend began with Honors Convocation on Friday afternoon, where both students and faculty were honored for their achievements. This was followed by the White Coat Ceremony, in which second-year veterinary students receive their white lab coats, thus marking the transition from classroom study to clinical work. The white coats are given to every student thanks to Jeanne Fairweather, M.D. Dr. Fairweather left an endowment that supports both the white coats and student scholarships.

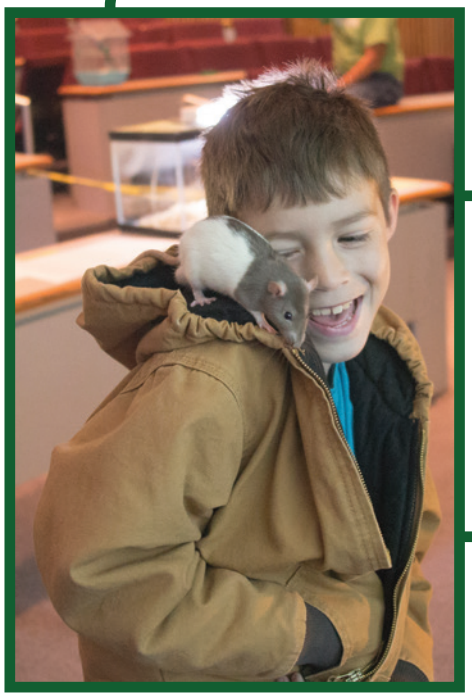
"She was always interested in what the students were doing to make the world a better place for animals," said Dr. O. J. "Bubba" Woytek '64, Assistant Vice President for Development. "And, she left a legacy here at the vet school that fit with her whole life: helping other people. Our veterinary students will benefit from her generosity for many years to come."

Events Saturday included a variety of lectures designed to offer a glimpse into the rigor, complexity, and depth of knowledge students experience and tours of both the Small and Large Animal Hospitals. Lectures included "Emergency Response and Simulation" in which Drs. Deb Zoran and Wes Bissett spoke about the Veterinary Emergency Response rotation, use of simulations, and interactions with the Veterinary Emergency Team, "Cutting Edge Cardiology," in which Dr. Ashley Saunders highlighted advances in veterinary cardiology, and "The Sky's the Limit, a Day in the Life of a Zoo Veterinarian" with Dr. Sharman Hoppes. These activities were followed by a fajita luncheon for parents, students, alumni, and faculty.



CVM Open House

April 20, 2013

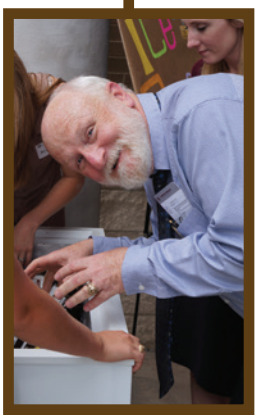


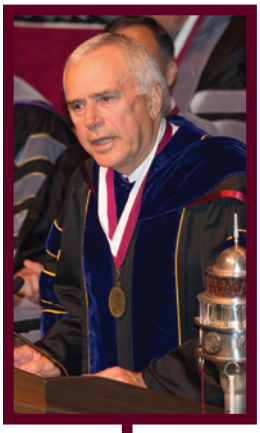
White Coat Ceremony

April 5, 2013

College Picnic

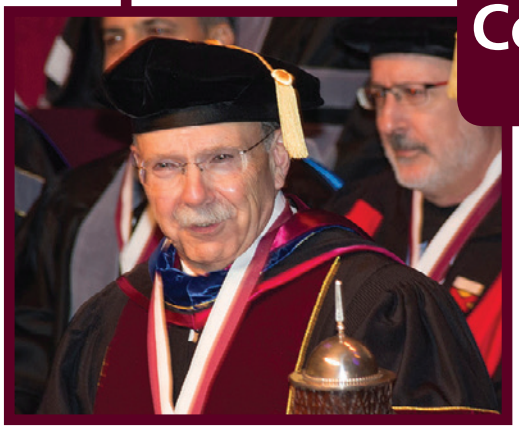
May 25, 2013





Commencement

May 9, 2013



Tizard honored as distinguished professor

The faculty and staff of the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) honored Dr. Ian Tizard, professor in the Department of Veterinary Pathobiology and Director of the Schubot Exotic Bird Health Center, at a reception Tuesday, April 23, 2013.

Tizard was recently named a University Distinguished Professor by a six-person awards committee of previously-named Distinguished Professors. This title is the highest faculty honor bestowed by Texas A&M University and means the professor has made at least one seminal contribution to, is pre-eminent in, and has made a major impact on his discipline.

"Dr. Tizard's contributions to his discipline, to teaching, and to our college are immeasurable," said Dr. Eleanor Green, Carl B. King Dean of Veterinary Medicine. "The impact he continues to make through research and student engagement helps create veterinary leaders that will be well prepared to make a difference wherever they serve."

Tizard's studies on the health and welfare of both wild and captive birds and his books—which have been translated into at least seven languages—and articles on that research clearly qualify him as one of the leaders in the field and well-deserving of the honor, said several speakers at the reception.

"Dr. Tizard's contributions are recognized around the world," said Dr. Linda Logan, department head for Veterinary Pathobiology. Logan noted that Tizard had influenced a number of new faculty members during his career, including serving as one of her first contacts when she arrived at the CVM in 2003.

Tizard acknowledged it took the work of many to get to this point and thanked his colleagues for their support over the years. He also recognized those who took their time to coordinate the nomination process for the award.

Dr. Ian Tizard and Dr. Linda Logan

Only four other professors in the CVM hold this designation: Dr. Tim Phillips, Dr. Fuller Bazer, Dr. Stephen Safe, and Dr. James Womack.

Gerling joins Dean's Office administration

Bringing with her a wealth of experience within the Texas A&M University System, Patricia Gerling joined the administrative team of the Texas A&M College of Veterinary Medicine & Biomedical Sciences in December of 2012.

Gerling has been recognized as an efficient and collaborative leader within Texas A&M University, the Texas A&M University System, and across the State of Texas. As the CVM is experiencing a period of phenomenal growth in programs, Gerling's notable record of strategic positioning in organizational management, communications and visioning will be integral to her role in furthering the college's goals and partnership efforts.

Previously, Gerling has served in numerous roles within the A&M System and Texas A&M including Administrative Assistant to the Chancellor, Staff Associate in the office of the Vice Chancellor for Budgets and Human Resources, Assistant Vice Chancellor for University and System Relations for Texas A&M AgriLife, and more recently Senior Program Manager in the Dean's Office of the College of Agriculture and Life Sciences. She has served leadership roles in several community organizations including the Bryan/College Station Chamber of Commerce, Prenatal Clinic, Arts Council of Brazos Valley, Federation of Texas A&M Mothers' Clubs, Brazos Valley Symphony Society, and the Pink Alliance. Gerling has been recognized by several community organizations for her leadership, including the 2006 Woman of Distinction Award by the Central Texas Girl Scout Council, Volunteer of the Year by the Bryan/College Station Chamber of Commerce, and a 2010 candidate for Top Ten Women of the Year by the Bryan/College Station American Business Women's Association. Patricia is a 1995 graduate of Leadership Texas, a statewide women's leadership program which provides education and development opportunities to Texas women who seek to advance as leaders and expand their knowledge. As a former Regional Alumni Director, Gerling now leads effort in developing the program for incoming classes and recruiting new participants for this influential network of Texas women leaders.

Patricia Gerling

Working closely with the Dean, Gerling oversees college strategic visioning initiatives and operations, partnership relationships, and related efforts to expand and further develop the college¹s outreach through effective communications and marketing in development and constituent relations.

Snowden honored by University of Montevallo

Dr. Karen Snowden receives her Distinguished Alumna plaque at the University of Montevallo.

Dr. Karen Snowden, Professor in the Veterinary Pathobiology Department at the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM), was honored by her undergraduate institution, the University of Montevallo (UM), as its Distinguished Alumna of 2013. Snowden graduated from UM, which is in Montevallo, Alabama, in 1973 with a degree in biology before going on to earn her DVM and then her PhD in Veterinary Medicine at Auburn University and North Carolina State University, respectively.

UM Alumni are chosen for the Distinguished Alumni Award based on outstanding work in their fields and service to their communities. Snowden, who joined the CVM in 1993, is a leader in the field of parasitology, having authored numerous articles in peer reviewed journals, supervised countless students, and given many invited lectures. More recently, she has expanded the CVM's program in shelter medicine, which has entailed many hours of outreach and community service. Thanks to her leadership, senior veterinary students can spend a two-week rotation working at a local animal shelter.

Snowden's college roommate and one of their neighbors worked together on her nomination packet.

"I'm hugely indebted to them," Snowden said. "I was totally surprised that I was selected."

The award, which included a plaque and a chair, was presented during homecoming weekend as part of an elaborate and unique tradition of friendly, intra-university competition—the highlight of which was the alumni banquet at which she received her award.

Snowden is also the recent recipient of the Texas A&M University Association of Former Students Distinguished Achievement Award for Teaching, and she said the two awards coming so close together was a wonderful coincidence.

"I really appreciated the university-level recognition on the heels of the award from my old university," Snowden said.

"For a relatively small school," Snowden said, "the University of Montevallo has many other quite successful alumni."

"I'm so humbly grateful to have been chosen," she said.

Waddell named TVMA Veterinary Technician of the Year

Katy W. Waddell, RVT, VTS, a veterinary technician at the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM), was named the Texas Veterinary Medical Association (TVMA) 2013 Technician of the Year. Waddell specializes in ECC and anesthesia.

Veterinary technicians are nominated for this award by members of the TVMA. Dr. Johnathon "Bert" Dodd, Clinical Professor at the CVM and TVMA member, nominated Waddell and described her as "one of the most proficient techs with whom I have ever worked."

"Her patience with students and her love for teaching is absolutely amazing," Dodd continued.

"Katy is an outstanding member of our hospital staff," said Dr. Eleanor Green, Carl B. King Dean of Veterinary Medicine. "Her excellent clinical skills make her a valuable member of our treatment teams in the Small Animal Hospital, and her ability to share that knowledge with our students and actively engage them in the learning process has made a tremendous impact in the education of future veterinarians."

Waddell has always enjoyed teaching, she said, which is one of the reasons she returned to the CVM in 2002 after 15 years in private practice.

"I just love to see the light bulb go on when students understand something," Waddell said. "It's incredibly rewarding."

In addition to speaking at regional and national meetings, she teaches online courses that draw an international audience. This work helps Waddell enhance her ability to be a patient advocate while simultaneously fostering her profession, she said.

This work very much impressed the TVMA awards committee, said Devorah Jakubowsky, the Associate Director of TVMA. One of the selection criteria used by the committee was leadership in and contributions to advancing the role and value of the veterinary technician.

Katy Waddell

In addition to inspiring her students, Waddell remains committed to challenging herself. She enjoys working at the CVM because she gets to work on a wide variety of cases, she said.

Faculty recognized with tenure and promotion during 2012–2013

Dr. James D. Herman
Veterinary Physiology and Pharmacology
Promotion to Clinical Professor

Dr. Ivan Ivanov
Veterinary Physiology and Pharmacology
Promotion to Clinical Associate Professor

Dr. Jan S. Suchodolski
Veterinary Small Animal Clinical Sciences
Promotion to Clinical Associate Professor

Dr. Glennon B. Mays
Veterinary Large Animal Clinical Sciences
Promotion to Clinical Associate Professor

Dr. William J. Murphy
Veterinary Integrative Biosciences
Promotion to Professor

Dr. Ashley B. Saunders
Veterinary Small Animal Clinical Sciences
Promotion to Associate Professor with Tenure

Dr. Randolph H. Stewart
Veterinary Physiology and Pharmacology
Promotion to Clinical Professor

Dr. Brad R. Weeks
Veterinary Pathobiology
Promotion to Professor

Li wins prestigious junior faculty award

Dr. Qinglei Li

Dr. Qinglei Li, assistant professor in the Department of Veterinary Integrative Biosciences at Texas A&M University College of Veterinary Medicine & Biomedical Sciences, received the prestigious Ralph E. Powe Junior Faculty Enhancement Award from Oak Ridge Associated Universities (ORAU).

The only awardee from Texas A&M University, Li intends to use the award to advance his research program and leverage the findings for obtaining additional extramural funding.

"Dr. Li is an outstanding member of our faculty," said Dr. Eleanor Green, Carl B. King Dean of Veterinary Medicine. "His research program is a significant addition to our key signature program in reproductive biology. We are so proud that his hard work has been recognized with this award, giving him the opportunity to continue his discoveries in this important area of research."

Li, a faculty member at the CVM for the past two years, has developed studies to better understand how a certain protein, called transforming growth factor beta, regulates female reproductive function. Ultimately, he hopes his work will lead to the development of treatments for reproductive disorders in female animals, and, potentially, women as well.

"I am very proud of Dr. Li as one of our newest young faculty members," said Evelyn Tiffany-Castiglioni, Associate Dean for Undergraduate Education, Professor and Head of the Department of Veterinary Integrative Biosciences. "In addition to being an excellent reproductive biologist who has already garnered highly competitive funding and published important research, Dr. Li is also an excellent teacher and invaluable collaborator. The ORAU award is well-deserved recognition of Dr. Li's independent achievements as a young investigator, as well as his promise for future achievements."

The award provides seed money for junior faculty's research projects that will eventually result in new funding opportunities. The money can be used towards summer salary, graduate student salary, travel, equipment, or other assistance relevant to the faculty member's research.

"This national level ORAU award not only recognizes Dr. Li's current research," said Dr. Bhanu Chowdhary, then Associate Dean for Research and Graduate Studies, "it also highlights the potential for his research to earn additional funding in the future, as well as the important implications his discoveries will make to the female reproductive health of humans and animals."

As one of its signature programs, reproductive biology research at the CVM has more than 20 associated faculty members whose work is internationally renowned.

"It is wonderful to work with these outstanding faculty members and students in such a supportive environment," Li said. "I am very pleased that our research is recognized by this competitive award."

As a consortium of major Ph.D.-granting academic institutions, ORAU's mission is to cultivate collaborative partnerships that enhance scientific research and education.

Murphy receives AVMF Winn Research Award

Dr. William Murphy, Associate Professor in the Department of Veterinary Integrative Biosciences (VIBS) at the College of Veterinary Medicine & Biomedical Sciences (CVM), was chosen as the recipient of the 2013 AVMF Winn Excellence in Feline Foundation Research Award.

Established in 2009 by the Winn Feline Foundation and American Veterinary Medical Foundation (AVMF), this award honors contributions to advancing feline health and welfare through research.

"Dr. Murphy's research has contributed significantly to the body of knowledge in feline genomics," said Dr. Eleanor Green, Carl B. King Dean of Veterinary Medicine. "We are proud of his accomplishments and look forward to his continuation of a stellar career here at Texas A&M."

Dr. Murphy's 2001 papers on mammalian evolution, published in Nature and Science, have been cited more than 1365 times, according to the Science Citation Index.

Since then, he has been working on maps of the feline genome to localize the genes for cat coat color and to find the places where mutations cause diseases such as muscular atrophy and infertility. Furthermore, Dr.

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Dr. William Murphy

Stallone appointed acting department head of Veterinary Physiology & Pharmacology

Dr. John N. Stallone

With the recent appointment of Dr. Glen Laine as Interim Vice President for Research, Dr. John N. Stallone accepted the role as Acting Department Head of Veterinary Physiology and Pharmacology (VTPP) in the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM), effective May 1.

Stallone, who earned his Ph.D. in Physiology from the University of Arizona, has been a faculty member at the CVM since 1998. During that time, he has served multiple terms on the Faculty Senate, the Senate Executive Committee, and most recently as Speaker of the Faculty Senate. He has been a member of the Texas A&M Institutional Animal Care and Use Committee since 1999—during most of which time he was vice-chair—and has served as its chair for the past two years. He has also been the vice-chair of the Graduate Instruction Committee at the CVM and served for many years as a Faculty Interviewer on the CVM Admissions Committee.

"As Dr. Laine steps into his new role in support of the university's research enterprise, we are pleased that Dr. Stallone has agreed to assume the department head's role for Veterinary Physiology and Pharmacology," said Dr. Eleanor Green, Carl B. King Dean of Veterinary Medicine. "Dr. Stallone has distinguished himself as a full professor of Veterinary Physiology and Pharmacology and his knowledge of his department, our college and the university, in particular his service on the Faculty Senate, will make him a valuable addition to the administrative team."

Stallone's research focuses on the differences in cardiovascular function between men and women—both in health and in the development of various diseases, including hypertension and coronary artery disease—and how sex hormones play a role in these differences. Specifically, Stallone has looked at the so-called "estrogen paradox": why there is a protective effect of this female sex hormone in younger women (and female animals) but deleterious effects in older females. In more recent studies, Stallone has focused on the interactions between aging and estrogen in cerebral circulation, specifically the development of and recovery from stroke.

In his off time, Stallone is an avid horseman. He and his wife, Janet, are members of the East Texas Mounted Search and Rescue, and they also breed and show miniature Mediterranean donkeys.

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Murphy has led the analysis of feline sex chromosomes and has identified cat-specific genes that regulate male fertility.

Dr. Murphy has also applied genetic tools from the domestic cat to the study of the evolutionary relationships and population genetics of the wild cats, including snow leopards and the other big cats.

Many mapping studies that have led to identification of genes and development of genetic tests have been based on the structure of the feline genome discovered in Murphy's lab.

"Dr. Murphy is an exceptional scientist whose career reflects truly outstanding achievement," said Dr. Evelyn Tiffany-Castiglioni, Associate Dean for Undergraduate Education, Professor and VIBS Department Head, who nominated Dr. Murphy for this award. "He is highly deserving of recognition by the AVMF for his profound contributions feline genetics. He is also a kind and generous colleague and a fine teacher and mentor for students, postdoctoral fellows, and junior faculty members. I am very proud of him and the honor he brings to our college."

"I am honored that the AVMF and Winn Feline Foundation have selected me for this award," said Murphy. "I share credit with my fantastic students and staff who have shared my passion for applying genetic tools to study the interesting biology of cats and their charismatic wild relatives."

> "I am further thankful for the support of my mentors and colleagues, my department and the CVM, and the funding agencies such as Winn that have helped to make my job rewarding."
>
> *~ Dr. William Murphy*

Welcome to all the new faculty who joined us in 2012–2013!

Name	Title	Dept.
Juan C. Robles Emanuelli	Clinical Assistant Professor	VTPP
Lauren Lamb	Clinical Assistant Professor	VLCS
Jules Puschett	Research Professor	VTPB
Megan Sutton	Veterinary Resident Instructor	VSCS
Gabriel Gomez	Lecturer	VTPB
Dharani Ajithdoss	Clinical Assistant Professor	VTPB
Ranjeet Dongaonkar	Clinical Assistant Professor	VTPP
Philippa Sprake	Clinical Assistant Professor	VLCS
Laura Ellsaesser	Veterinary Intern Instructor	VSCS
Maria Jugan	Veterinary Intern Instructor	VSCS
Colleen Neilsen	Veterinary Intern Instructor	VSCS
Claire Legallet	Veterinary Intern Instructor	VSCS
Virginia Poorbaugh	Veterinary Intern Instructor	VSCS
Luis Rivas	Veterinary Intern Instructor	VSCS
Aimee Daniel	Veterinary Intern Instructor	VSCS
Samantha Woods	Veterinary Intern Instructor	VSCS
Braden Boening	Veterinary Intern Instructor	VLCS
Caitlin Burrell	Veterinary Intern Instructor	VSCS
Matthew Coleridge	Veterinary Intern Instructor	VLCS
Maureen O'Brien	Assistant Lecturer	VTPB
Martha Hensel	Assistant Lecturer	VTPB
Holly Minard	Assistant Lecturer	VTPB
Stacie Seelye	Assistant Lecturer	VTPB
Kati Glass	Veterinary Resident Instructor	VLCS
Rylee Hatfield	Veterinary Resident Instructor	VLCS
Sarah Howard	Veterinary Resident instructor	VLCS
Amanda Masciarelli	Veterinary Resident Instructor	VLCS
Jared Voge	Veterinary Resident Instructor	VLCS
David Threadgill	Professor and Director of Whole Systems Genomics Initiative	VTPB
Hsin-Yu (Rita) Ho	Veterinary Intern Instructor	VSCS
Justin Heinz	Veterinary Resident Instructor	VSCS
Jordan Vitt	Veterinary Resident Instructor	VSCS
Adam Breiteneicher	Veterinary Resident Instructor	VSCS
Timothy Bolton	Veterinary Resident Instructor	VSCS
Gregory Kuhlman	Veterinary Resident Instructor	VSCS
Michelle Coleman	Lecturer	VLCS
Debbie Threadgill	Assistant Professor	VTPB
Josue Delgado	Assistant Lecturer	VTPB
Medora Pashmakova	Veterinary Resident Instructor	VSCS
Rosina Krecek	Visiting Professor	VTPB

Dr. Linda Logan with Frances Hicks

John Roths with Dr. Linda Logan

Stevie Bundy

Dr. Nora Matthews

2013 Retirements

Dr. John Bauer

You complete the picture in the CVM Centennial!

TEXAS A&M UNIVERSITY

In 2016, the Texas A&M University College of Veterinary Medicine & Biomedical Sciences will celebrate its 100th anniversary. In honor of this milestone, the Medical Sciences Library has partnered with the CVM Centennial Celebration Committee to produce a commemorative book. We plan for the book to contain mostly photographs and have access to photos in the CVM collection, but we could use additional historic photos or items that could be captured in photograph.

Do you have photographic treasures and memorabilia from your days at Texas A&M hidden away in a box or scrapbook somewhere? This material is exactly what is needed to bring the whole 100 year-story to life! If you or a family member is an alumni or worked in the College of Veterinary Medicine & Biomedical Sciences at Texas A&M University and have any such items that you are willing to donate or loan to us we would be very grateful.

In general, we are looking for:

- photographs of CVM students, faculty, or staff members in the academic or work environment
- photographs of the CVM buildings and facilities, inside or outside
- related paraphernalia such as yearbooks, academic course catalogs, directories, any CVM related publications, or items of historical interest to CVM
- early CVM publications, especially prior to 1980
- documents and papers relating to CVM activities such as meetings, forums and continuing education
- personal stories and memories of one's time spent at CVM.

Please contact the Medical Sciences Library via e-mail at* CVM100@library.tamu.edu *with any questions about donating or temporarily loaning items for the centennial book project.

Mark Francis Fellows

The Mark Francis Fellows recognizes donors who have given $1,000 or more to the College of Veterinary Medicine & Biomedical Sciences. Donors are grouped into two alphabetical lists: New Members and Members Advancing to Higher Levels of Giving. The following donors are honored for their cumulative giving from September 1, 1991 through December 31, 2012.

New Members

Patti Beckham
Ft. Worth, TX

Barbara Bilger
Dallas, TX

Dr. Wesley B. Bonner
Roscoe, TX

Mr. and Mrs. Stanley R. Brown
Fulshear, TX

Dean A. Burkhardt
Houston, TX

Dr. K. Wade Burton
Liberty Hill, TX

Dr. Barbara B. Crews
El Paso, TX

Dr. Ann E. Cudd
Lawrence, KS

Bernice Daniels
Lawrence, KS

Mr. and Mrs. John DiPietro
Oakley, CA

Kirk L. Emiliani
Sugar Land, TX

Mr. and Mrs. Thomas E. Gallagher
Austin, TX

Dr. Linda M. Hankins
Belton, TX

Dr. Joanne Hardy
Caldwell, TX

Brian C. Haws
Austin, TX

Elaine Heaton
Palestine, TX

Ruth Hustace
Portland, TX

Mr. and Mrs. Thomas W. Jackson
Mansfield, TX

Mr. and Mrs. Wesley E. Johnson
Austin, TX

Mr. and Mrs. Robert Kaplan-Stein
Gainesville, FL

Mr. and Mrs. Michael J. Kern
The Woodlands, TX

Mr. and Mrs. Matthew S. Key
Katy, TX

David R. Klein and Marcia Allen
Cardiff by the Sea, CA

Dr. Catherine Lee
Austin, TX

Dr. and Mrs. Dale S. Lonsford
LaPorte, TX

Mr. and Mrs. Ralph N. Marshall
Carthage, TX

Dr. and Mrs. James M. McFarland
Califon, NJ

Mr. and Mrs. Art Nicholas
Douglas, WY

Allen R. Paksima and Barbara R. Barron
Richmond, TX

Carla R. Pope
The Woodlands, TX

Daniel Putterman
San Francisco, CA

Dr. and Mrs. Buena C. Robison
Katy, TX

Brian Saenz
Cypress, TX

Dr. and Mrs. Jeffrey M. Schroeder
Elgin, TX

Montgomery L. Stahlman
Kaufman, TX

Dr. Kirk U. Steinam
Los Angeles, CA

Kim Stevens
Houston, TX

Dr. George G. Stott
Midway, TX

Dr. Brad K. Stroud
Weatherford, TX

Carl W. Stuart
Austin, TX

Dr. and Mrs. Michael Swindle
Mount Pleasant, SC

Dr. Megan R. Uerling
Houston, TX

Stephen K. Whitman
Houston, TX

Members Advancing to a Higher Level of Giving

Drs. David & Karen Stallman Baxter
Dallas, TX

Dr. and Mrs. Gerald R. Bratton
College Station, TX

BG and Mrs. Michael B. Cates
Manhattan, KS

Dr. Troy L. Cobb
Dallas, TX

Mr. and Mrs. Frederick B. Copeland
Richmond, TX

Mr. and Mrs. Benjamin M. Cutler
Paradise Valley, AZ

Tana Daughtrey
Houston, TX

Dr. and Mrs. Kenneth N. Gray
Friendswood, TX

Dr. and Mrs. Duane C. Kraemer
College Station, TX

Donna M. Lee
Spring, TX

Jo Roberts Mann
Amarillo, TX

Irene Purcell
Houston, TX

Dr. Jules B. Puschett
Hoiuston, TX

Dr. and Mrs. Clifford R. Roberts
San Francisco, CA

Mr. and Mrs. George C. Scott
Sherman, TX

Dr. and Mrs. Jerry L. Simmons
El Paso, TX

Heather Hunter Smith
Nashville, TN

Mr. and Mrs. John A. Swanson
The Villages, FL

Linda Thompson
Southlake, TX

Dr. and Mrs. Richard T. Wall
The Woodlands, TX

Construction, centennial make for exciting times

It is an unbelievably exciting time for the College of Veterinary Medicine & Biomedical Sciences (CVM). Phase 1 of the Equine Initiative facilities is drawing near completion with move-in expected at the end of the year. Construction work has begun on the new aviary, expansion of the Stevenson Center has been completed, and architects are completing their work on designing the new Veterinary Education Building and Small Animal Hospital renovation and expansion. With these new buildings comes a number of opportunities to add your name to a piece of our college.

I hope that you have also taken note of the announcement of the creation of the Center for Cell and Organ Biotechnology, a partnership between the CVM, the Texas Heart Institute, and the Texas Emerging Technology Fund. This center is in the process of creating functional organs in a laboratory, increasing the likelihood that replacement organs can be custom-made from the cells of a patient, eliminating the possibility of transplant rejection. It's enough to make one dizzy!

In the midst of all of this activity, we have not lost sight of the fact that we also have the finest faculty, staff, students, donors, and supporters in the country. None of what has been accomplished would be possible without these exceptional people, and we are excited about the possibilities for the future.

If all of this is not enough, our centennial celebration is right around the corner. Membership on the Centennial Committee may be obtained by making a current gift, pledging a gift over time, or even by establishing a planned gift of $25,000 or more. There are many creative ways to make such a gift, and we welcome the opportunity to visit with you about the options. We are grateful for the veterinarians who have already joined this group, and we hope that you will give strong consideration to adding your name to the list.

We have also had the privilege of hosting a number of DVM graduating classes for class reunions this year, and we have enjoyed it tremendously. If your DVM or BIMS class would like to have a reunion in Aggieland we would be happy to assist.

A rendering of the Small Animal Hospital renovation.

A rendering of the Veterinary Education Building Complex.

Finally, I would ask you to please keep an eye out for clients or friends who might have an interest in making an investment in the world-changing work that is ongoing at the College of Veterinary Medicine & Biomedical Sciences. The opportunities for student, faculty, and program support are limitless, and the host of new facilities provides ample naming opportunities. Please let us know if you would like to learn more.

Thanks for your continued support, and Gig'em!

O. J. "Bubba" Woytek, DVM '65
Asst. Vice President for Development

Guy A. Sheppard, DVM '78
Director of Development

Chastity Carrigan
Director of Development

Stevenson Center celebrates 20th anniversary with major expansion

Supporters of the Stevenson Companion Animal Life-Care Center at the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) gathered recently to celebrate the 20th anniversary of this unique facility and to dedicate a newly completed building expansion.

"It is very exciting to celebrate 20 years of caring for companion animals when their owners are no longer able to provide for them," said Dr. Eleanor Green, Carl B. King Dean of Veterinary Medicine. "Today, not only do we reflect on the two decades of compassionate care provided within these walls, we officially open the newly completed expansion to the facility that will enhance the comfort and care provided for residents now and in the future."

The Stevenson Center provides for the physical, emotional, and medical needs of companion animals whose owners cannot do so, either because they are entering a retirement home, being hospitalized for an extended period, or predeceasing a pet.

"People should know we are an option for them, if they don't have anyone to care for their pets," said Ellie Greenbaum, Associate Director of the Center.

Dr. Eleanor M. Green, Carl B. King Dean of Veterinary Medicine, with Happy, a resident of the center, and David Worth, one of the veterinary students living at the center.

The new addition, on which construction began nearly a year ago in July 2012, is 3,300 square feet and includes two rooms each for dogs, cats, and birds. Special features in the aviaries, which are needed for the twelve birds currently enrolled to live at the center someday, include soundproofing panels and solar tubes to allow natural light and to reduce reliance on electricity. Both the cat and bird rooms have enclosed sun porches and the dog rooms have separate fenced-in yards.

Madlin Stevenson's llama, Rusty, still resides at the center. Jeanette and David Hall visited him at the stable behind the center's main building during the expansion opening.

The Center's expansion was made possible by the generosity of 68 donors who made contributions totaling approximately $900,000.

"We are extremely grateful to our many donors and friends that have so generously supported the Stevenson Companion Animal Life-Care Center over the past 20 years," said Henry L. "Sonny" Presnal, DVM, Director of the Stevenson Center. "Through the generosity of many, the Center's facility should be positioned to accommodate the resident pets that will enter the Center in the foreseeable future."

This is the second expansion of the Stevenson Center, which opened in 1993. The total space of the Center, including the new addition, is about 11,000 square feet and will be able to

house about 100 pets. It is completely self-sustaining with donations and income from the endowment.

A stable behind the main building houses the center's resident llama, with space for other large companion animals should the need arise.

Four veterinary students, currently a first-year, two second-year and a third-year-live at the center to provide around-the-clock care to the resident animals. The placement of cameras and video monitors around the center allows the staff to keep a constant watch on their charges. Living day-to-day with the pets, many of whom are older and thus have the health problems of older animals-makes the students very compassionate, Greenbaum said.

"We feel very privileged," Greenbaum said, "that so many owners have entrusted us with the care of their pets."

Enrollees at the center include dogs, cats, birds, horses, and donkeys. To secure a spot for their pet, owners need to establish an endowment, the requirements for which vary depending upon the age of the owner at the time of the enrollment, which can be paid up front or through a bequest or life insurance benefit.

Center staff will pick up enrolled animals anywhere in Texas when necessary. The first stop for the pets-before they even enter the Center-is the CVM Small Animal Hospital, where they are thoroughly examined before joining the other animals. The hospital and its veterinarians also provide care whenever a Center resident is sick or injured, ensuring the animals get the best care available.

The Center is situated on three acres beside the CVM campus. Its name honors the late Madlin Stevenson, a major initial supporter of the project. The building itself is the W.P. Luse Foundation Building, named in honor of the Luse Foundation's support.

"We're excited about this expansion and the added comfort it will bring to our residents," Greenbaum said. "We've been working very hard."

"We have strived to provide a home for pets when their owners can no longer care for them in as near a home-like environment as possible," said Presnal, "and we feel that we have been successful in accomplishing our goal."

(l-r) Dr. O.J. "Bubba" Woytek; Mattie Stevenson, with Trixie; and Kim Muth, with Mackie; lead the way after the ribbon is cut to open the Stevenson building expansion.

Lake Hudson Joyner Family Endowment established

Mary Jane Joyner is truly one of a kind. She grew up learning to take care of herself and not fearing much of anything, including hard work, and along the way, she developed a self-confidence that has served her well. Like her parents before her, she also shares a passion for young people and education.

Animals have also been a large part of Mrs. Joyner's life, and she has a passion for all of God's creatures, with one possible exception. She has very little use for snakes.

Mrs. Joyner's passions for education and animals came together when she created a planned gift from her estate to establish the Lake Hudson Joyner Family Endowment, named for her father, for the benefit of the College of Veterinary Medicine & Biomedical Sciences. The endowment that will be established by this generous gift will be utilized to enhance veterinary specialization through support of internship and residency programs in the Department of Small Animal Clinical Sciences.

Mrs. Joyner was a client of Dr. O.J. "Bubba" Woytek for many years when he practiced veterinary medicine in San Antonio, so when the time came to establish her planned gift, she knew the right person to contact. Together the two of them worked to set up an endowment that will forever produce income to accomplish the purposes that she finds meaningful: developing veterinary specialists.

Mary Jane Joyner is grateful to the College of Veterinary Medicine & Biomedical Sciences for producing veterinarians to provide the outstanding care for our animal friends that she thinks they deserve, and we are also grateful to her for making that possible.

If you, or someone you know, would like to make a similar impact on animals and the training of students who will take care of them, please contact the Office of Development at 979-845-9043.

(l-r) Dr. O.J. "Bubba "Woytek, Mrs. Mary Jane Joyner, and her friend, Mr. A.J. Hausman '70.

Ledford receives inaugural Nichols 'Heart of Service' scholarship

Dean Eleanor Green, Fred Markham, Dr. Travis Nichols '07 and Bruce Nichols present Jeff Ledford (center) with the Patsy Nichols "Heart of Service" Endowed Scholarship.

Jeffrey Ledford, Class of 2016 at the Texas A&M College of Veterinary Medicine & Biomedical Sciences was awarded the inaugural Patsy Nichols "Heart of Service" Endowed Scholarship.

The visionary leadership of Patsy Nichols, who died as a result of a brief illness on October 3, 2012, will continue to impact students at the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) for years to come with the establishment of the scholarship.

This special award, funded by the Texas Pioneer Foundation and through generous donations from friends of Patsy and her husband, Bruce, will be given to veterinary medical students based on financial need and leadership activities. A preference will also be given to those students who have served in the Texas A&M Corps of Cadets, are Eagle Scouts or Girl Scout Gold Award recipients, are a veteran, and/or is married to or a child of a current military service member.

Ledford is an Eagle Scout, completed four years in the Corps, has a 4.0 GPA, and his father is a war veteran still on active duty in the U.S. Air Force. Two of his great-grandfathers served during World War II, and his grandfather was a paratrooper.

"I grew up in a family with a strong military tradition," Ledford said. "Being surrounded by tremendous leaders and American Heroes had such a positive impact on my life. It is very meaningful to be honored for having leadership qualities, because everyone who had a part in raising me were leaders who viewed service to others as a way of life. It is thus a very humbling experience for me to be recognized for my own leadership."

Ledford, who wants to become a large animal practitioner specializing in equine medicine, said the scholarship has already helped him pursue opportunities in the equine industry.

"It has been a humbling experience to receive this scholarship in its founding year," Ledford said. "After the awards ceremony I went to the reception, and I was greeted by many people who had close relationships with Mrs. Nichols. To hear the amazing things that everyone had to say about her and the entire Nichols family was an experience I will never forget, and I am very honored to have received this scholarship."

"Patsy and Bruce are unique and embody the Aggie core values as well as anyone I know," said Dr. Eleanor Green, Carl B. King Dean of Veterinary Medicine. "We are humbled for them to have been so involved with and supportive of our college. They exuded such warmth and sincerity, that they naturally engaged and embraced everyone, gathering friends by the armful. By sharing their passion for our programs and our people, they helped our college forge new relationships and made our college stronger. These talents made them superb members of the CVM Development Council."

"I was overwhelmed when I heard about this special tribute to Patsy," Green said, "who touched so many lives with her perpetual Aggie spirit. It is fitting that outstanding veterinary students with the soul of service will represent Patsy in perpetuity and will get to know her in a meaningful way. I envision the students selected to have many of the same qualities as Travis Nichols '07, Patsy and Bruce's son and one of our remarkable graduates. While we will always miss Patsy, we know the seeds she planted through her many contributions to our university will continue to grow and have a significant impact on generations of students to come."

Patsy and Bruce were first introduced to the Aggie family through their son, Travis, who came to Aggieland with his heart set on becoming a veterinarian. During his undergraduate years, Travis demonstrated great leadership qualities serving as Deputy Corps Commander for the Corps of Cadets. As a family, the Nichols developed the annual Nichols Rising Leaders Conference for the Corps of Cadets that is now in its 10th year.

"Leadership is part of the education that Texas A&M provides," said Bruce Nichols. "We came up with this idea of how to support that endeavor through the establishment of the Nichols Rising Leaders Conference which helps sophomores in the Corps develop the leadership skills they need to not only take on important roles in the Corps,

but also in the real world outside of college. Patsy was a very smart and strategic thinker with great vision, and she saw the impact that Texas A&M made on Travis, and wanted to make sure that other students had the opportunity to learn and grow as well."

After his undergraduate degree was completed, Travis was admitted to the Texas A&M College of Veterinary Medicine & Biomedical Sciences professional program to pursue his life-long goal of becoming a veterinarian. During his time there, Travis and his wife, Katy, nominated Bruce and Patsy for Parents of the Year, which they won in 2006-07 school year. When they were honored with this prestigious award, they were the first parents to be nominated by a graduate or professional student to win this recognition.

Patsy's contributions to Texas A&M did not end with the Nichols Rising Leaders Conference or the Parents of the Year award. She developed a deep love of Texas A&M University across the board, and was involved in supporting the Corps of Cadets, the University Libraries, the Bush School, the Federation of Aggie Moms, the Singing Cadets, and International Programs through the Office of the Provost.

"Patsy was simply an amazing person," said Bruce. "She cared about people, yet remained a humble, regular person in spite of her accomplishments. She put her family first, including her Aggie family."

The devotion Patsy felt for Texas A&M is something she felt important to share with others. Her 36-year career as an attorney with Fulbright & Jaworski led her to work with many non-profit organizations such as the Central Texas Higher Education Authority, a non-profit student loan organization, where Patsy met Fred Markham and began a life-long friendship. With Patsy's help, Fred started the Texas Pioneer Foundation, a non-profit organization that provides financial support to educational programs.

"It is overwhelming to me, all the things Patsy has done," recalled Markham. "Patsy had a profound effect on the Texas Pioneer Foundation and on me. I learned so much from her about connecting with people and connecting people together."

Those that know Patsy the best will agree that one of her greatest gifts was connecting people with projects that they can be passionate about. She possessed a unique ability to recognize people who might have a common interest in things and bring them together.

"I am not a former student, and didn't really know much about Texas A&M until Patsy introduced me to the heart of the university," said Markham. "Through her, I came to admire and respect the university, and I have developed relationships and friendships within the university that have changed my life. That's what Patsy was so amazing at doing…bringing the right people together to do impactful things."

In true Aggie spirit, Patsy was laid to rest in the cemetery in Aggieland with Ross Volunteer honor guards and a contingent of the Singing Cadets singing at her graveside service. Together, Bruce, Travis, Katy, and Fred wanted to make sure that the spirit of Patsy, that commitment to leadership and service that she exemplified would live on.

Through the generosity of the Texas Pioneer Foundation, and donations from family and friends, the Patsy Nichols "Heart of Service" Endowed Scholarship was created, and established within the CVM in recognition of Travis' veterinary medical education.

"The Texas Pioneer Foundation is thrilled to be able to support and create this endowment," said Markham. "It is out of our love and respect for her, and the love and respect for Texas A&M she shared with everyone that makes this such a fitting way to help her memory live on and to positively impact the education and leadership development of students for years to come."

"I am very grateful to the Nichols family," Ledford said, "and I look forward to a growing relationship with them."

For more information on the Patsy Nichols "Heart of Service" Endowed Scholarship, or to make a contribution, contact the Texas A&M College of Veterinary Medicine & Biomedical Sciences Development Office at (979) 845-9043 or by email at nvance@cvm.tamu.edu.

About Patsy Nichols

Patsy Waller Nichols was born January 31, 1949 in Luling, Texas and grew up in San Antonio. She met Bruce, her husband of 43 years, while in college at Tulane University, where she was a member of Pi Beta Phi and Secretary of the Newcomb student body. After they married, Patsy completed her degree at Texas Tech University before accompanying Bruce to his U.S. Navy station in Bermuda.

In 1973 they moved to Houston where Patsy attended the University of Houston Law School. She joined the law firm of Fulbright & Jaworski in 1976. After the birth of their son, Travis, Patsy and Bruce moved to Austin where she continued her practice at Fulbright. In 1984 she became one of the first female partners at Fulbright in Austin and remained with the firm for her entire legal career, spanning over 36 years.

When Travis attended Texas A&M University, Patsy became an avid and loyal Aggie mom. She was involved in many A&M organizations, including Aggie Moms, the University Libraries, the Corp of Cadets, and the Bush School and in 2009 was appointed to the A&M University International Advisory Board. In addition to these roles, she also served as chairperson of the College of Veterinary Medicine & Biomedical Sciences Development Council.

Patsy died on Wednesday, October 3, 2012 in Austin after a brief illness.

Bruce and Patsy Nichols

Major contributors join the Burnett Foundation in funding for the Glenn Blodgett Equine Chair

The College of Veterinary Medicine & Biomedical Sciences (CVM) at Texas A&M University is pleased to announce that the Glenn Blodgett Equine Chair has been fully funded. In April of 2011 the Burnett Foundation of Fort Worth awarded a $2.5 million challenge grant to the CVM to establish an endowed chair in honor of Dr. Glenn Blodgett '74, a leader in equine veterinary medicine and a 2011 CVM Distinguished Alumnus. Gifts from Wagonhound Land and Livestock, the McDaniel Charitable Foundation, Heritage Place, along with Perry Johns of J&M Steel Company completed the challenge grant, bringing the endowment total to more than $5 million.

"Wagonhound Land and Livestock is honored to support the Burnett Foundation's lead in establishing the Glenn Blodgett Equine Chair at Texas A&M University," said Art Nicholas, owner of Wagonhound Land and Livestock. "Glenn has been a special friend to Wagonhound and horse enthusiasts in general, and it's wonderful to have him recognized in such an important way—one that will forever contribute to the betterment of the equine industry." Wagonhound Land and Livestock is a cattle and horse operation based in Douglas, WY. Nicholas and his wife, Catherine, have been supporters of equine academic programs for many years.

"I'm invested in the success of Texas A&M University and its equine programs," said Missy Lyons of the McDaniel Charitable Foundation, located in Galveston. "Helping to complete the Glenn Blodgett Equine Chair gives me the assurance that strong leadership will continue to be in place as the Equine Initiative moves into the future."

"As a member of the Equine Initiative Development Committee, Dr. Charlie Graham '61 has kept Heritage Place abreast of the successes of this unique program. Texas A&M is at the forefront of the equine industry in terms of education and research, and we wanted to do our part to make sure that the Equine Initiative is successful into the future," said Jeff Tebow of Heritage Place, located in Oklahoma City, OK.

The Glenn Blodgett Equine Chair will help support the Equine Initiative, a collaboration between the CVM and the College of Agriculture and Life Sciences at Texas A&M University. The Equine Initiative, led by Dr. Jim Heird, utilizes the expertise available at Texas A&M to build an equine program that will graduate industry leaders and generate research and veterinary medical care that will improve the equine industry and welfare of the horse. The Equine Initiative is built on four major imperatives including; curriculum enhancement, outreach and engagement expansion, facility construction, and partnership development.

"Both Dr. Glenn Blodgett and the Burnetts are icons in Texas, the ranching industry and the horse industry in general," said Dr. Eleanor M. Green, Carl B. King Dean of Veterinary Medicine. "It is special for the Burnett Foundation to honor Dr. Blodgett in this meaningful way, and we are so appreciative of those donors who helped us to meet the challenge the Burnett Foundation laid out for us. The Glenn Blodgett Equine Chair will contribute significantly to lasting excellence of the Equine Initiative at Texas A&M in the number one equine state in the nation."

Dr. Glenn Blodgett

Dr. Jim Heird, Executive Professor and Coordinator of the Equine Initiative, said, "The Glenn Blodgett Equine Chair is a tremendous honor and recognition of a fabulous horseman and Aggie. Glenn is a leader, a friend of Texas A&M, and an internationally known breeder of great horses. This endowed chair ensures that the Equine Initiative will have nationally recognized leadership into the future. The support of the Burnett Foundation, Wagonhound Land & Livestock, Heritage Place and the McDaniel Charitable Foundation is a humbling statement of the importance of what we are accomplishing at Texas A&M. There is no way to truly say thank you to these outstanding leaders of our industry."

If you would like to learn more about the Glenn Blodgett Equine Chair or the Equine Initiative, please contact the Equine Initiative office at 979-845-6098.

Endowed Class Scholarships

Class of '41	Class of '70
Class of '43	Class of '71 (2)
Class of '51	Class of '75
Class of '55	Class of '76
Class of '56	Class of '78
Class of '57	Class of '79
Class of '58	Class of '80
Class of '62	Class of '83
Class of '64	Class of '84
Class of '65	Class of '87
Class of '66	Class of '93
Class of '67	Class of '02
Class of '68	Class of '07
Class of '69	Class of '09

CVM Outstanding alumni honored

Dr. Eleanor M.Green & Dr. Lelve G. Gayle '64

The Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) honored five of its alumni for their contributions to the veterinary medical profession at a dinner held on April 5th as part of Homecoming activities at the CVM. The Outstanding Alumni were nominated by fellow alumni in recognition of their leadership and service.

"We are fortunate to be able to recognize the significant contributions our former students have made to our profession," said Dr. Eleanor Green, Carl B. King Dean of Veterinary Medicine at the CVM. "These outstanding veterinarians, through their commitment to service, leadership, and lifelong learning, have made an impact on our college, our state, and our nation. We congratulate each of them as outstanding ambassadors for our profession and our college."

Dr. Lelve G. Gayle '64 of College Station, Texas completed a military obligation in the U.S. Air Force after graduation, followed by a period of 10 years in private veterinary practice. In 1976, Dr. Gayle joined the Texas Veterinary Medical Diagnostic Laboratory (TVMDL). He served as Case Supervisor, as Head of Diagnostic Services, and as Executive Director. Dr. Gayle served as president of the Texas Academy of Veterinary Practice in 1985, after which he went on to hold every executive leadership position in the Texas Veterinary Medical Association (TVMA), including his service as TVMA President in 1996. He has received numerous recognitions including the Distinguished Achievement Award from the Texas Veterinary Medical Association, the Vice Chancellor's Award in Excellence, the Regents Fellow Service Award, and the Texas Poultry Federation Distinguished Service Award. Dr. Gayle was also named as a Distinguished Member of the Texas Veterinary Medical Association and as Associate Vice Chancellor and Executive Director Emeritus at Texas A&M University in 2007.

Dr. J. Wayne Kyle '56 of Carthage, Texas returned to his hometown of Carthage after graduation and opened his own mixed animal practice. Dr. Kyle served as the secretary of the East Texas Veterinary Medical Association in 1959 and as president of that organization in 1960. Dr. Kyle also served as president of the Panola County Cattleman's Association and as chairman of the Cattleman's Association Rodeo Committee, overseeing improvements to the rodeo facilities and performances. Dr. Kyle has served on

Dr. Eleanor M. Green & Dr. J. Wayne Kyle '56

the Carthage ISD Board of Trustees for 36 years and helped found the Carthage ISD Education Foundation. Numerous students from Carthage High School have been mentored and assisted by Dr. Kyle, and he is especially proud of six of these students who went on to become

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CVM Outstanding Alumni present at the ceremony.

Dr. Eleanor M. Green & Dr. D. Bruce Lawhorn '72

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practicing veterinarians. He also founded the local Humane Society.

Dr. D. Bruce Lawhorn '72 of College Station, Texas entered the U.S. Army Veterinary Corps upon his graduation. After his tour of active duty was completed, Dr. Lawhorn entered private practice and established the Lawhorn Veterinary Clinic in Temple, Texas, where he practiced from 1975 until 1979. In 1979, Dr. Lawhorn became a Staff Veterinarian for Dekalb Swine Breeders in Dekalb, Illinois, before moving back to Texas in 1982 when he accepted the position of Extension Swine Veterinarian with the Texas Agricultural Extension Service at Texas A&M. He then added the title of Assistant Professor in the Department of Large Animal Medicine and Surgery at the CVM as he accepted concurrent positions in service to the swine industry and veterinary practitioners in the state. Dr. Lawhorn received a Master's of Science degree in Veterinary Microbiology from Texas A&M in 1989, and was promoted to Associate Professor in 1993 and full Professor in 2001. From 2002 until 2003, Dr. Lawhorn also served as the Chief of the Food Animal Section in the Department of Large Animal Medicine and Surgery at the CVM. Dr. Lawhorn retired from the State Swine Extension Veterinary position in 2003, but retained his teaching appointment in the Department of Large Animal Clinical Sciences until 2010.

Dr. Eleanor M. Green & Dr. Billy D. Martindale '68

Dr. Billy D. Martindale '68 of Denison, Texas began his practice career in Denison immediately after graduation. He constructed a new building to house the Animal Hospital of Denison in 1980 and in 2008, he joined other local veterinarians in forming the Grayson County Animal Emergency Clinic, which serves Grayson and adjoining counties with small animal emergency care. Dr. Martindale is also very proud to be a Lifetime Member of the Texas Veterinary Medical Association (TVMA) and has held every executive office in its leadership, highlighted by a year as TVMA President in 2004. Furthermore, Dr. Martindale served as the alternate delegate from Texas to the American Veterinary Medical Association (AVMA) from 2006-2009 and as delegate to the AVMA from Texas from 2009-2012. Dr. Martindale was elected in 2012 to serve on the AVMA Council on Education, which is the accrediting body for veterinary colleges in the United States and around the world, where he continues to serve today.

Dr. James H. Wright '68 of Tyler, Texas served in the US Air Force for 22 years in settings all over the world. In addition to inspecting food and food handling facilities, he was involved in preventing zoonotic diseases, investigating foodborne illness outbreaks, managing occupational health programs, and teaching public health to veterinarians and airmen. During this time of service to our country, Dr. Wright earned a Master's Degree in Preventive Veterinary Medicine from the University of California at Davis and obtained Diplomate status in the American College of Veterinary Preventive Medicine, Epidemiology Specialty. After retiring from the armed services, Dr. Wright joined the Texas Department of Health, where he has worked in the Meat Safety Assurance Program and the Zoonosis Control Program.

Dr. Eleanor M. Green & Dr. James H. Wright '68

The College of Veterinary Medicine & Biomedical Sciences annually recognizes graduates from the DVM professional program who have made significant contributions to society through veterinary medicine and who have not only brought honor and recognition to themselves, but also to the college.

Graduates of the CVM may be nominated for this honor. A resume, or curriculum vitae, that summarizes major career accomplishments and two letters of support are required to nominate an alumnus or alumna. Additional information or letters that may be helpful to the selection committee.

Nomination packets may be found online at http://vetmed.tamu.edu/ or by contacting Noell Vance, Development and Alumni Relations Coordinator, at 979-845-9043 or nvance@cvm.tamu.edu.

Members of the CVM Family

Dr. Gerald N. Woode died Apr. 12, 2013 at the age of 78. A graduate of the Royal Veterinary College in London, his work as a veterinary research virologist contributed to the discovery of Rotovirus. He retired as professor emeritus from the Department of Veterinary Pathobiology in 1997.

Dr. Raymond W. Loan died July 1, 2013. Dr. Loan received his DVM from Washington State University in 1958 and his PhD in animal pathology from Purdue University in 1961. After serving on faculty at both the University of Missouri and Purdue University, Dr. Loan joined the CVM in 1978 as Professor and Associate Dean for Research and Graduate Studies where he guided the development of the CVM's research infrastructure and led the construction efforts for several new animal facilities. He rejoined the Department of Veterinary Microbiology and Parasitology in 1989, and retired from the Department of Veterinary Pathobiology in 2004.

CVM Alumni

Class of 1944

Charles M Barnes, 90, of Georgetown, TX, died Oct. 4, 2012

Stanley Vezey, 89, of Athens, GA, died Jun. 4, 2013

Class of 1945

Eugene Douglas Dillon, 89, of Horseshoe Bay, TX, died Mar. 4, 2013

Raymond Alfred "Doc" Ivie, 90, of Follett, TX, died Sep. 15, 2012

Jack Monroe Sanders Sr., 90, of Marshall, TX, died Jan. 24, January 2013

Leonard Delton Smith, 87, of Hendrix, OK, died Dec. 26, 2008

Class of 1946

Bud E. Alldredge, Sr., 92, of Sweetwater, TX, died Mar. 25, 2013

Class of 1947

Hannis Ledbetter Stoddard, Jr., 88, of Cross City, FL, died Feb. 10, 2012

Class of 1945

O.C. "Bob" Granzin, 87, of Baton Rouge, LA, died Jan. 17, 2012

Class of 1946

David Gage Smokler, 85, of Dallas, TX, died Apr. 6, 2012

Charles Theron Caraway of Covington, LA, died Dec. 6, 2011

Class of 1949

Monte Powell Moncrief, 87, of Corpus Christi, TX, died Dec. 11, 2011

Class of 1948

Willie Lee Trahan, 93, of Baton Rouge, LA, died Feb. 09, 2012

Howard Lee Underwood, 89, of Huntsville, TX, died Mar. 09, 2012

Class of 1950

Frederick Bryan Clooney, 87, of Houston, TX, died Oct. 3, 2011

Herbert Joshua King, 91, of San Antonio, TX, died Aug. 27, 2011

Lester Johnson, 93, of Stillwater, OK, died Sep. 4, 2011

Class of 1951

Charles E. Deyhle, 87, of Clarendon, TX, died Dec. 29, 2011

Class of 1952

Arnold G. Pessin, 83, of Lexington, KY, died Jan. 20 2012

Class of 1954

Jack S. Stanton, 80, of Ozona, TX, died Mar. 13, 2012

Class of 1955

Spencer Clay Spruill, 81, of Comanche, TX, died Nov. 30, 2011

Class of 1956

Thomas G. Hildebrand, 81, of New Braunfels, TX, died Mar. 29, 2012

Class of 1961

O.L. Oliver, Jr., 80, of Eddy, TX, died Oct. 5, 2011

Class of 1963

Larry Michael Dubuisson, 71, of Hunt, TX, died Nov. 6, 2011

Class of 1964

Dennis Wayne Jansen, 70, of Houston, TX, died Jun. 29, 2012

Karon Gale McCreary, 72, of Greenville, TX, died Jun. 26, 2012

Joe T. McKnight, 70, of Longview, TX, died Sep. 17, 2011

Harold Joseph Whitehead, 78, of Houston, TX, died Mar. 24, 2012

Albert Clarence Wurster, 76, of Jonesville, LA, died Oct. 23, 2011

Class of 1966

Dennis "Doc" Cannon, 79, of Dripping Springs, TX, died Dec. 27, 2011

Class of 1970

J. Michael "Mike" Godin, 66, of Richmond, TX, died Dec. 22, 2011

Class of 1971

William "Rob" Dominy, 64, of Abilene, TX, died Jun. 24, 2012

Dennis M. "Doc" Reed, 64, of Mount Vernon, TX, died Sep. 12, 2011

Class of 1973

G. David McCarroll, 62, of Bridge Creek, OK, died May 25, 2012

Class of 1977

Richard "Rick" Singleton, 56, of Bedford, TX, died Sep. 9, 2011

Class of 1979

Terry Wayne Hicks, 62, of Cleveland, TX, died Mar. 9, 2012

Janice (Glass) Mouser, 56, of Madisonville, TX, died Feb. 20, 2012

Class of 1980

Douglass Kirk Macintire, 60, of Orange, NJ, died Dec. 27, 2011

Class of 1984

Rob Frederick, 53, of Teaneck, NJ died Apr. 28, 2012

Class of 1988

Jeffrey David Rose, 49, of San Antonio, TX, died Jan. 1, 2012

Class of 1994

Karen Hamilton Gunn, 44, of The Woodlands, TX, died May 28, 2012

Class of 1990

Junior H. Radney, 51, of Amarillo, TX, died Dec. 3, 2011

Class of 2001

John Patrick "Pat" Baugh, 41, of Plano, TX, died Apr. 13, 2012

VETERINARY MEDICINE
& BIOMEDICAL SCIENCES
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CVM Today
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Parting Shot

by Larry Wadsworth

Dr. Eleanor M. Green, Carl B. King Dean of Veterinary Medicne, and an avian friend celebrate the groundbreaking for the Exotic & Wild Bird Aviary.