

VETERINARY MEDICINE & BIOMEDICAL SCIENCES TEXAS A&M UNIVERSITY

Discovering the Soul of Service

Dean's Message

The winds of change continue to blow at the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM). Since our last issue of *CVM Today*, we have received \$120 million in funding from the state's Permanent University Fund (PUF) to build a new, high-tech education building that will bring the college into the 21st century. In addition, a portion of those funds will be designated for the expansion of the Small Animal Hospital. The new building will house classroom and teaching laboratory space featuring educational technology designed to enhance the learning environment for all students. Combined with the expansion of the Small Animal Hospital, the new facilities will provide opportunities for innovations in teaching and will nurture collaboration and creativity.

In true Aggie fashion, our faculty remain even more committed today to advancing the future of the CVM. Members of the faculty, staff, and student body have participated in the

early stages of the planning process for the new building. Faculty and staff also contributed time and valuable input in a five-day strategic planning retreat that will result in a new strategic vision for the college. I cannot thank the CVM family enough for their service and dedication to making this CVM the best there is.

> Outside these walls, the CVM faculty, staff, and students continue that commitment to serving the greater good. This is particularly evident in times of disaster. Thus, it is timely that our main feature for this issue tells the story of the CVM's own Veterinary Emergency Team (VET) response to one of our state's biggest wild-

fires last fall, and how our CVM clinicians work to ensure that animals with distinguished careers can continue serving. It is dedication to Aggie core values, such as selfless service, that has become a hallmark of our college as we serve the citizens of Texas and beyond.

At the same time, this college would not be in the position to explore new ways to make a healthier world or to educate the veterinary leaders of tomorrow if it weren't for the support we receive from our alumni and friends of the college. With their continued guidance and support, we will be able to be even more responsive to the demands and expectations of the veterinary industry, as well as play a stronger role in the 'One Health' initiative. Thank you from all of us at the CVM!

I am still excited each and every day about the promise that this college holds as it is reflected in the people here the faculty, staff, and students. If you find yourself in Aggieland for a football weekend this fall, please stop by for a quick "Howdy!" We'd love to hear from you!

than mar

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











The Four C's

6 Caring

'One Health' Training Prepares Army CAMS to Treat All Species

8 Curing

Injured Longhorn Finds a Second Chance in Aggieland Warrior Status Goes to the Dog—Vonn, the Warrior

12 Creating

A Cause Worth Fighting For: Racing to Save Lives Texas A&M CVM Expands to Meet Future Needs in Veterinary Medicine

16 Communicating

Traditional and Social Media in the Veterinary Medical Profession



18 Research Spotlight

Milking Benefits Texas A&M Research Unlocks Mystery of Salmonella Infection

20 Biomedical Sciences Spotlight

A Busy Year for BIMS: New Location, Program Accreditation A Reason to Celebrate: Record Number of 4.0 GPA Graduates

22 Leadership Lab

The Veterinary Leadership Experience Effect

24 Main Feature

Discovering the Soul of Service









Departments

- 2 Dean's Message
- 4 College Information
- 5 Continuing Education Calendar
- 30 A Message From TVMA
- 31 College News
- 42 Faculty/Staff Focus
- 62 Development Message & News
- 65 Mark Francis Fellows
- 66 Alumni News
- 70 In Memoriam
- 72 Parting Shot

College Information



*CVM Toda*y Staff Editor: Angela Clendenin, '91

Contributing Editor: Dr. Barbara Gastel

Communications Specialist: Amanda Earp

Writers:

Parvathy Hariharan Becky Mahon, '12 Elizabeth Prichard-Jones Katherine Teel

Contributing Writers: Dr. Dan Posey, '82 Dr. Guy Sheppard, '78

Art Directors: VeLisa Ward Bayer Jennie L. Lamb

Graphic Designers: Cameron Coker, '12 Victoria Dominguez, '13

Photographer: Larry Wadsworth Correspondence Address: Editor, *CVM Today* Veterinary Medicine & Biomedical Sciences Texas A&M University 4461 TAMU College Station, TX 77843-4461 979.862.2675 *cvmtoday@cvm.tamu.edu*

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

Permission is granted to use all or part of any article published in this magazine, provided no endorsement of a commercial product is stated or implied. Appropriate credit and a tear sheet are requested.

Executive Committee

The Carl B. King Dean of Veterinary Medicine Dr. Eleanor M. Green Associate Dean, Professional Programs

Dr. Kenita S. Rogers

Associate Dean, Research & Graduate Studies Dr. Bhanu P. Chowdhary

Associate Dean, Undergraduate Studies & Dept. Head, Veterinary Integrative Biosciences Dr. Evelyn Tiffany-Castiglioni

Assistant Dean, Biomedical Sciences Dr. F. H. "Skip" Landis

Assistant Dean, One Health & Strategic Initiatives Dr. Michael Chaddock

Assistant Dean, Finance Ms. Belinda Hale

Dept. Head, Veterinary Pathobiology Dr. Linda Logan

Dept. Head, Veterinary Physiology & Pharmacology Dr. Glen Laine

Dept. Head, Large Animal Clinical Sciences Dr. Allen Roussel

Dept. Head, Small Animal Clinical Sciences Dr. Sandee Hartsfield

Assistant Vice President of Development & Alumni Relations (Texas A&M Foundation) Dr. O. J. "Bubba" Woytek

> **Chief of Staff** Ms. Patricia W. Gerling

Director, Texas Institute for Preclinical Studies Dr. Terry Fossum

Director, Veterinary Medical Teaching Hospital Mr. W. Terry Stiles

Director, Communications & Public Relations Ms. Angela Clendenin

Veterinary Medicine & Biomedical Sciences Texas A&M University 4461 TAMU College Station, TX 77843-4461 vetmed.tamu.edu

Dean's Office/Administration 979.845.5051

> Admissions Office 979.845.5051

Development and Alumni Relations Office 979.845.9043

Continuing Education Office 979.845.9102

> Public Relations Office 979.862.2675

4 • CVM Today • Winter 2012

Biomedical Sciences Undergraduate Advising Office 979.845.4941

> Department of Veterinary Integrative Biociences 979.845.2828

> Department of Veterinary Pathobiology 979.845.5941

Department of Veterinary Physiology & Pharmacology 979.845.7261 Department of Small Animal Clinical Sciences 979.845.9053

Department of Large Animal Clinical Sciences 979.845.9127

Veterinary Medical Teaching Hospital Administration 979.845.9026

> Small Animal Hospital 979.845.2351

> Large Animal Hospital 979.845.3541



CONTINUING

EDUCATION

SCHEDULE



VETERINARY MEDICINE & BIOMEDICAL SCIENCES TEXAS A&M UNIVERSITY

All dates subject to change.



April 26–28, 2013 Annual Feline Symposium Chair: Dr. John August

May 5–6, 2013 3rd Annual Laparoscopy Wet Lab Chair: Dr. Mike Willard



May 18–19, 2013 19th Annual Veterinary Technician Conference Chairs: Katrina LaCaze & Katy Waddell

June 15–16, 2013 22nd Annual Food Animal Conference Chair: TBA





July 13–14, 2013 5th Annual Dentistry for the Small Animal Practitioner Conference Chair: Dr. Bert Dodd

August 23–25, 2013 5th Annual Canine Conference Chair: Dr. Audrey Cook



4470 TAMU Texas A&M University

COLLEGE STATION, TX 77843-4470

Tel. 979.845.9102 Fax 979.862.2832

vetmed.tamu.edu/ce



October 11–13, 2013 15th Annual Emergency Medicine & Critical Care Conference Chair: Dr. James Barr





OFFICE OF Continuing Education

Caring

'ONE HEALTH' TRAINING PREPARES ARMY CAMS TO TREAT ALL SPECIES

by Katherine Teel

The early morning sun breaks through the flaps in the medical tent. It's only 0630, but United States Army Sergeant Ramirez has already been up for an hour preparing for today's clinics in this high mountain village deep in the jungle of this developing country. In the morning, the slate is full examining people with various ailments, vaccinating children for diseases no longer seen in the United States, and providing prenatal consultation to a group of young women. In the afternoon, Ramirez will attend clinics of another kind. She will be vaccinating and deworming cattle, goats, and pigs that belong to the families of this village. In addition, she will examine some animals that are experiencing ulcers on their feet and in their mouths. She may need to notify the Army veterinarian on this one. It's going to be a full day.

Although Ramirez is fictional, the work being described is not. Ramirez represents a class of sergeants in the U.S. Army called Civil Affairs Medical Sergeants (CAMS). CAMS receive hands-on food animal training at the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM).

Texas A&M University was established as a military school and has a rich history with the U.S. military. Therefore, it is fitting that the CVM is providing veterinary education to members of the U.S. Army.

Dr. Clay Ashley, director of the Veterinary Medical Park at the CVM, organizes and teaches classes to educate members of the Army about veterinary medical treatments. Originally, the program trained enlisted Army veterinary technicians in collaboration with Fort Sam Houston in San Antonio. While most of the classroom training took place at Fort Sam Houston, the CVM provided the practical training expertise for cattle, small ruminants, poultry, and swine education.



Dr. Dominguez showed Army tech students how to restrain a chicken.



A civilian Army tech oversaw an Army tech student drawing blood from a cow.

Lieutenant Colonel Cheryl Sofaly, DVM, chief of the Animal Health Branch of the Army Medical Department Center and School, continues to lead the program at Fort Sam Houston and works with Ashley to develop the training at the CVM.

Now, the Army Class Medical Specialist program has been tailored to educate CAMS. CAMS are trained as "one health" medical technicians capable of treating both humans and animals. The sergeants chosen for the CAMS program enter the program as trained human emergency medical technicians (EMTs). Most were not raised on farms and never thought they would be treating any species other than humans. The CAMS program, however, trains them to perform as "all species EMTs" for the Army. By using their medical skills across a variety of species, they not only provide needed medical care to an area, but also help establish positive relationships with populations in war-torn areas across the world.

"They serve the local population medically, but also there is an invaluable human element present, showing that the military is not there just to occupy or attack, but to help and heal these populations," Ashley said. "In a remote village, a goat or cow can provide the livelihood for a family, so CAMS can be amazingly important. We want to help the Army by training CAMS so they can improve relationships in these areas."

The CVM gives four courses throughout the year, with about 15 students per class. Ashley is well suited to lead the class. He served as a veterinarian with the U.S. Air Force for three and a half years and then, spent an additional eight



Dr. Ashley observed two Army tech students working with a cow.

years in Asia working in international development, instructing local populations in animal husbandry methods.

"Teaching these classes is a lot of fun," Ashley said. "The attendees are so engaged in the classes, and we have a great audience of senior enlisted men and women who have been chosen specifically for this task."

Ashley teaches the cattle and small ruminant sections and Dr. Brandon Dominguez, clinical assistant professor at the CVM and Texas Department of Criminal Justice clinician, leads the poultry and swine sections. Because most CAMS work in the field, the lessons are tailored to working in developing countires. Physical exams, blood sample collection, injections, and manual restraint are all instrument-based aspects of the education the attendees receive.

"Working with cattle anywhere can be a dangerous task, but even more so in developing countries where modern and safe restraint equipment is not available," Ashley said. "Therefore, in this class, I teach them useful skills like safe methods of restraint using just a rope and a halter to safely lay the animal down so it can be treated. In addition, I teach them how to do a complete exam and how to take blood and urine samples in the field. Working in the areas where these CAMS will be deployed can be very challenging. We want them to leave here with not only a skill set, but with confidence in working with animals."

Sofaly is pleased with the program. "It's worked out really well for us," she said. "We give them a bit of classroom knowledge, so when they get to the veterinary school they are able to gain the hands-on experience with the animals, and that's something we can't teach in the classroom. It adds a huge amount to their training." Dominguez has led the swine and poultry sections of the course for the past year. He explained that because the CAMS will be expected to address both human and animal health needs, he can tailor his teaching to build on their experiences in human medicine.

"We are really just bridging the gap between veterinary and human medicine with this course," Dominguez said. "We want them to clearly recognize bacterial, viral, and parasitic disease problems in addition to field treatment."

Although the CAMS are not veterinarians, they perform examinations and are crucial in recognizing problems that need the intervention of an Army veterinarian.

"We try to give the CAMS extra knowledge so they recognize where there's a veterinary medical problem in areas where a veterinarian wouldn't normally be called in," Dominguez said. "CAMS have the potential to really

benefit these populations; it's great to be a part of this."

Sofaly said CAMS are critical in the field.

"When we're deployed, there are veterinarians and veterinary technicians in the field, but we can't be everywhere. CAMS are our eyes and ears for medical development, an extension for us for preventive and treatment medicine. They go more places than the veterinarians because vets are associated with a certain stationary area where animals are brought to us, while CAMS go to a lot more rural and remote places. They can really intervene and save lives."



An Army tech learned how to take a blood sample from a pig.

Curing

Injured Longhorn Finds a Second Chance in Aggieland

Stars Sweet Intention received treatment at the Texas A&M College of Veterinary Medicine & Biomedical Sciences' Large Animal Hospital for an open compound fracture of her hind limb while she was a month pregnant. Both Star and her calf are living a healthy life at the Bull Creek Ranch in Fayetteville, Texas. (Photo courtesy of Suzanna Torkildsen.)

by Amanda Earp

A female longhorn named Stars Sweet Intentions (Star) arrived at the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) Large Animal Hospital for treatment of an open compound fracture, which means the bone was penetrating the skin, of her hind limb. The longhorn fractured her leg in a steel hay ring in February 2011, said Suzanne Torkildsen, one of Star's owners.

Star faced a difficult six-month healing process because of the extensive damage to her blood supply and because she was a month pregnant when she had her accident. The veterinarians proceeded with the needed reparative surgery on Star with caution because she was pregnant; however, because most of the weight gain from her pregnancy would come in her third trimester, there would be enough time to heal before her due date.

"[The recovery] was slow. It just took a long time. She was one month pregnant and kept the calf, which was unbelievable. The calf was just beautiful," Torkildsen said.

The longhorn's treatment was a team effort at the Large Animal Hospital, and dozens of veterinarians were involved with the case, along with two veterinary student classes. Dr. Kara Schulz, lecturer at the CVM, was the senior veterinarian on the case. Other veterinarians at the

"[Star] is out with the regular herd of cows, and I didn't know she could ever do that. She has access to 30 acres, she trots and runs. ...If you were to watch her across the pasture, nobody would ever know she had surgery for a broken leg," Torkildsen said.

CVM included Dr. Jeffrey Watkins, professor and orthopedic surgeon at and Dr. Ricardo Loinaz, surgery resident.

Suzanne and husband William Torkildsen were dedicated to Star's recovery, along with the many veterinarians and students involved in her case. The Torkildsen family still owns both Star and her calf and say that they are leading happy, healthy lives at their ranch in Fayetteville, Texas.

"[Star] is out with the regular herd of cows, and I didn't know she could ever do that. She has access to 30 acres, she trots and runs.

...If you were to watch her across the pasture, nobody would ever know she had surgery for a broken leg," Torkildsen said.

Torkildsen said she was "blown away" by the Large Animal Hospital and would recommend it to anyone.

"I've never been so impressed in my life. When we drove up, there were like three DVMs and 10 helpers. I just want to cry thinking about it; they were just awesome," she said about the veterinarians and staff at the Large Animal Hospital. "[They were] very honest and upfront but, yet, very caring, loving, and sensitive."



Vonn spent three weeks in the ICU at the VMTH at the CVM after receiving treatment for burns over most of his body. He was then adopted by a member of the CVM family.

wherestatus</tr

TEXAS AAM

TEXAS A & M

12

by Elizabeth Prichard-Jones

Thousands of patients walk through the Veterinary Medical Teaching Hospital (VMTH) doors at the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) each year, each patient with a unique story to be told. Covered in bandages from head to paw, Vonn had a heavy story to tell. Fortunately, the VMTH specialists, the CVM, the community, and his The CVM's own Chastity Rodgers adopted Vonn. Here he into one with a happy ending.



own strong spirit helped turn his story settles in at home with her and her Great Dane, Keightly.

The story started August 17, 2011, when two pit bulls, Esperanza and her puppy Vonn, were brought to Aggieland Animal Health Center by a concerned citizen, Christi Wuthrich, who found the dogs near her home with injuries indicative of severe abuse.

Esperanza's ailments were evident as her whiskers were singed off, she had sustained a fractured pelvis, and she had extensive bite marks across her body. Dr. Barbara Hannes, veterinarian with the Aggieland Animal Health Center, and her team felt confident that they could treat Esperanza in house. Vonn, Esperanza's then six-month-old puppy, however, had sustained very severe burns all over his body, possibly exposing him to deadly infections. To give him the best chance at survival, Hannes enlisted the help of Dr. James Barr, clinical assistant professor of emergency and critical care at the CVM, to treat Vonn. Soon afterward, Terry Stiles, director of the VMTH, approved treatment for Vonn. Around 10 p.m., Barr and his critical care team of residents and technicians transferred Vonn to the VMTH and began treatment.

"With any burn victim, the major wildcard was possible infection," Barr said. "Our foremost concern was taking care of Vonn and his needs. We would like to give credit to Dr. Hannes and thank her for stabilizing Vonn and Esperanza."

Barr explained that Dr. Brooke Smith, veterinary resident instructor in critical care at the CVM, was the quarterback for Vonn's case, and Dr. Katy Fryer, veterinary resident instructor in surgery at the CVM, was in charge of Vonn's care during surgery.

A week after Vonn's admission, Smith reported, "Vonn is swiftly becoming the mascot of the Small Animal Hospital. He knows his daily routine perfectly and leads us to the treatment room every morning for his daily wound care. We found out that his new favorite food is scrambled eggs. We think that is why he continues to be optimistic about his anesthesia, because he knows he will get a home-cooked breakfast after he wakes up."

Smith provided daily updates via the college's website and Facebook page to keep concerned community members informed.

As a good Samaritan patient, Vonn did not have an owner to pay for his treatment. His treatment was paid for by concerned citizens through the Capper & Chris Save the Animals Fund. The fund, created by Capper Thompson, was established as a memorial to Texas A&M student Chris Stehouwer. Thompson envisioned the fund as the perfect way to both help sick animals in need and, at the same time, provide valuable training for veterinary students.

After nearly three weeks in the Intensive Care Unit (ICU), Vonn was adopted by a member of the CVM family. Chastity Rodgers, director of development and alumni relations, showed exceptional support for Vonn during his treatment at the VMTH, and Vonn's team at the VMTH felt confident that he would become a special member of her family.

Rodgers has a soft place in her heart for pit bulls, and as soon as she became aware of Vonn's story, she knew she had to do something. She visited him every day to check on his progress. She also helped to raise awareness of Vonn's unfortunate situation to the public and, with her help, the community showed amaz-

ing emotional and financial support for him.

"Vonn is a community dog," Rodgers said. "His strength to live along with the fantastic team at the VMTH, Aggieland Animal Health Center, Christi Wuthrich, and the community of support that flooded our emails and phone lines proved that his success was a community effort."

"I am extremely happy to have a new member in my family to join my Great Dane, Keightly," Rodgers added. "As soon as they met, Keightly and Vonn became best friends. I am forever grateful to all of the supporters and to the miraculous team at the VMTH for saving his life. I promise that he will be a frequent visitor."

Barr said Vonn is healed of his burns, and he has asked Rodgers to bring Vonn in for regular check-ups.

Dr. Bonnie Beaver, professor in behavior medicine at the VMTH, performed a temperament test on Vonn before his departure, and he passed with flying colors.

Uncertain of the conditions Vonn was exposed to before treatment, Rodgers will continue to be cautious with Vonn to ensure that his health and happiness are the number one priorities in his continued healing process.

Although Smith was thrilled with Rodger's decision to adopt Vonn, she missed his lively spirit at the ICU.

"All I can say is that this place definitely felt the void when Vonn was adopted. He was the face that everyone looked forward to seeing when they walked into the hospital," Smith said. "He stopped the crowds with his playful puppy personality. He is absolutely a precious gem."

Dr. Eleanor Green, Carl B. King Dean of Veterinary Medicine at the CVM, was also excited about Vonn's success story.

"This was a sad story, but we are grateful that we have the greatest team of specialists and state -of-the-art tools that gave Vonn the best chance at survival," Green said. "It is clear that both Esperanza's and Vonn's paths changed dramatically when Christi Wuthrich, Dr. Hannes and the CVM, intervened in their lives. My heartfelt thanks go out to them, the veterinary teams who provided the best of care for both dogs, and to members of the community whose generosity has supported their care. These personal donations have been essential. Animal abuse of any kind is troubling, but the compassion of all involved in Vonn's case is inspirational."

Barr echoed the same thankfulness. "We, at the VMTH, would like to thank everyone who supported Vonn through this tough, yet very successful journey," he said.

"We are truly amazed at the progress that Vonn has made, and we think that his recovery is nothing short of a miracle. We are very confident that Rodgers makes the perfect owner for Vonn, because she knows his true heart and that he was born to shine and be an inspiration to all," he added.



A CAUSE WORTH FIGHTING FOR:

RAGING TO SAVE LIVES

by Elizabeth Prichard-Jones

After two successful years, the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) agreed to make "Paws to the Pavement, Beat the Hell Outta Cancer" benefit walk/run an annual event each fall to help support the Diagnostic Imaging and Cancer Treatment Center. The 3k/5k pet walk/run allows patients, pet owners, clinicians, staff, and university officials to come together to support the new Diagnostic Imaging and Cancer Treatment Center in hopes that new cancer research will lead to breakthroughs from within the very thick walls of the newest building at the CVM.

Dr. R. Bowen Loftin, president of Texas A&M University, said the center proves that the CVM is a top veterinary school.

"The CVM has an established track record of educating the brightest scholars in the various fields of medicine. The CVM also serves the state of Texas by providing unrivaled service to patients and their owners. We, at Texas A&M, are proud of what the CVM has accomplished and will accomplish. This center demonstrates another reason why it is a great day to be an Aggie!"

Dr. Eleanor Green, Carl B. King Dean of Veterinary Medicine, emphasized the importance of the center as she addressed the crowd at the inaugural event held on Sept. 17, 2011. The second annual fun run/walk was held on Nov. 10, 2012.

"This is a magnificent facility that was a dream not very long ago, and now it is a reality," Green said. "It offers, arguably, the most extensive and the most technologicallyadvanced equipment under one roof."





The center is equipped with an advanced Tomotherapy unit, a 3 Tesla MRI Unit, and a 40-slice CT scanner. The Tomotherapy unit allows CVM specialists to treat tumors that previously were untreatable because of their size or location. Both the MRI and the CT scanner are similar in diagnostic capability to equipment found in human hospitals.

They deliver specialized images, allowing for better diagnosis and faster, more successful treatments.

By combining the most technologically advanced equipment with the skilled clinicians and technicians at the Veterinary Medical Teaching Hospital, the CVM provides enhanced care to patients of many species and administers better service for referring veterinarians.

"On behalf of the college, I would like to thank everyone who supported the new center and helped it become a reality," Green said. "We are very proud of what the CVM has to offer in teaching, research, service, and outreach. The center will help to strengthen these platforms upon which we stand as a college. The new center will also help to support current collaborations and initiate future collaborations through the One Health Plus initiative, which benefits animal, human, and environmental health."

Please visit vetmed.tamu.edu for more information on the race and other events at the CVM.



Treating



Texas A&M CVM expands to meet future needs in veterinary medicine

by Elizabeth Prichard-Jones

To keep up with the need to produce the best and brightest scholars in the veterinary field, the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) will soon undergo the largest expansion of its history with the new CVM education building and Small Animal Hospital expansion.

On Feb. 9, 2012, the Texas A&M University System Board of Regents approved the addition of a \$120 million classroom building and Small Animal Hospital expansion project. The new 200,000 square foot education facility will allow the CVM to better meet the needs of the students well into the future.

The new building will house high-tech classroom and teaching-laboratory space that will enhance the learning environment for students today and for the next 50 years. The new facility will also be built for flexibility, allowing for growth and change with emerging technologies. The plans also include a teaching conference center that will accommodate about 1,000 people. The conference center will be able to hold all four veterinary classes and will be used for continuing education events, college functions, and meetings.

Combined with the expansion of the Small Animal Hospital, the new facilities will provide opportunities for innovations in teaching and research and will nurture collaboration and creativity. In addition, the expansion is expected to help in recruiting the best faculty, staff, and students.

Dr. Eleanor Green, Carl B. King Dean of Veterinary Medicine, was thrilled at the approval of the new building and has high expectations for what it will provide the CVM and Texas A&M University, and the State of Texas.

"The new facility represents a tremendous opportunity to bring the latest in teaching technology and methodology to the CVM and to Texas A&M University," Green said. "We are grateful that the Board of Regents, Chancellor John Sharp, President R. Bowen Loftin, and his administrative team are investing in the future of our college, our faculty, and our



students. The impact of having state-of-the-art teaching and clinical facilities will be felt not only by those who receive their education here in the future, but also by those we serve."

The \$120 million needed to complete both facilities will come solely from the Permanent University Fund (PUF). The PUF was established in the Texas Constitution of 1876 as a public endowment contributing to the support of the Texas A&M and University of Texas systems.

Now that the new facilities have been added to the capital plan, a team headed by Sam Wigington, director of facilities at the CVM, has begun the planning and design process with guidance from the Texas A&M College of Architecture. The architectural firm, SHW Group/Cannon Design, has been selected to design a building of eminence.

"In 2016, we will be celebrating our 100th anniversary," Green said. "It would be outstanding if we were able to step into our new facilities as we step into a new century."

In the meantime, Wigington and his team are asking for suggestions from students, staff, clinicians, faculty, and constituents to determine what is necessary for the new building.

"This building and expansion are very important within the college, and we want to ensure that we are doing all that we can so that everyone's voices are heard during this process," Wigington said.

In addition to receiving ideas from individuals within the CVM, Wigington and his team have visited veterinary and

medical schools elsewhere in North America to gain new perspectives and concepts.

"We don't need to re-invent the wheel," Wigington said. "If something works well somewhere else, we want to find out why it works well and modify the idea so that it works best for us. This project is all about bringing ideas together to create the best learning environment possible."

The CVM education building will be located west of the Large Animal Hospital (LAH). The road currently going to the LAH will become a boulevard, creating an impressive entrance to the veterinary campus.

Texas A&M University President Dr. R. Bowen Loftin expressed his hope for the new facility and expansion.

"Our goal is to build a premier teaching and research facility that complements our world-class faculty in the College of Veterinary Medicine & Biomedical Sciences and the far-ranging impact they have on both animal and human health," Loftin said. "At this point, the building will be one of the largest construction projects in the history of the university, which speaks volumes about the importance veterinary medicine plays in our state's economy, as well as in our daily lives."

Green added, "This building will be a lasting tribute to Texas A&M, the veterinary profession, and veterinary education. Many naming opportunities will be provided for those wanting to be an enduring part of this grand building."

Tommunicatin

TRADITIONAL & SOCIAL MEDIA

in the veterinary medical profession

by Amanda Earp

Just like a stethoscope, a microscope, or a computer, effective communication is a key tool for the veterinary medical profession. It's essential that veterinarians know how to communicate clearly with their clients and the media. It is also important for those in the veterinary field to learn to use both traditional and social media to their advantage.

Communicating Clearly

Veterinarians must communicate clearly and effectively when speaking to staff, clients, and media because statements can easily be taken out of context and misunderstood by the audience.

Dr. Guy Sheppard, Director of Development and Alumni Relations at the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM), said communicating clearly is crucial.

"I was in veterinary practice for 28 years, and communication is crucial to relationships with clients, staff, and family. It doesn't matter who—communication is vital," Sheppard said.

Sheppard recalled that many times his statements were misinterpreted when he thought he was clear.

"I spent a lot of my time through the years thinking about how something I wanted to say could be misconstrued and trying to avoid that and still finding out how difficult it was to communicate precisely," he said.

Sheppard stressed that it was important to communicate clearly to his practice's staff members because they take the information, interpret it, and then relay it to the client.

"You have to be clear to your staff because...in veterinary hospitals, they are asked more questions than you are. And, then, you have to continuously monitor that because it is just human nature to shorten stories or change them or to think on their

Dr. Guy Sheppard, Director of Development and Alumni Relations at the Texas A&M College of Veterinary Medicine & Biomedical Sciences



own if it requires a little adjustment to the answer for certain situations," he said.

Sheppard suggested staff meetings and role playing to help ensure that the correct information was being conveyed.

Traditional Media

The main traditional media are newspapers, magazines, radio, and television. These media are often used to educate the public, market veterinary practices, and explain research and issues in the field.

Dr. Jim Humphries, CVM graduate and media and communications consultant for the veterinary profession, said traditional media is the most powerful.

"When a hot topic or crisis issue hits veterinary medicine, it will be a TV camera that you see first, whether it's in a parking lot on the way out to your car or...at Capitol Hill in Austin," Humphries said.

Sheppard agreed that traditional media are the more important outlet. Throughout his practice career, he wrote many articles and columns. He also sent press releases to local newspapers informing them of upcoming issues such as a livestock disease or weather conditions that could be bad for animals.

Sheppard also wrote a quarterly newsletter about mixed animal practice for his clients. His clients often forwarded the newsletter to their friends, and its popularity grew.

Sheppard said that for traditional media, there is generally no time to prepare or research answers to a reporter's questions, but with social media the veterinary professional is in control.

"Usually, you didn't get to prepare for [questions]. Occasionally, you would have to do some research, but, usually, you have to be able to put together a pretty good answer on short notice and communicate that verbally," Sheppard said.

Humphries agreed with Sheppard.

Dr. Jim Humphries, CVM graduate and media and communications consultant for the veterinary profession



by A

"Now you're dealing with traditional media and staring down the lens of a camera. You need to know what to say and what not to say," Humphries said. "This relates back to communicating messages clearly so that you are not misunderstood."

The CVM tries to reach the public and portray the passion and importance of the veterinary profession through the airing of a segment on the local CBS TV affiliate, KBTX, twice a month. This three- to five-minute segment features veterinary clinicians from the CVM speaking on a wide variety of animal health topics.

Social Media

Social media includes internet forums such as Facebook and Twitter, where members of the public can actively participate in discussions with other individuals and organizations. Humphries said veterinary professionals should use social media together with traditional media to reach broader audiences. He also suggested that current veterinary students learn the basics of social media while in school.

"The key with students is that they learn the power of social media tools along with their veterinary medical education because it is an essential part of communicating in today's world," he said.

Humphries explained that knowledge of social media looks great on a new graduate's resume and in job interviews because many practice owners look to the new veterinarians to bring the skill to their practices.

"When it comes time for new graduates to interview for the first position, the owner of the hospital wants not only a medically competent veterinarian, but one that knows how to use these social media communication tools. Also, new graduates who are comfortable with all types of public communication skills will get involved with their state veterinary medical association sooner and help make a real difference statewide," he said.

To Humphries, websites are the most important tool of social media. Other outlets, such as Facebook, Twitter, and blogs, should drive viewers back to the website.

"All social media tools should do one main thing...drive the user to your website. This allows them to 'see' your practice (virtually) and get comfortable with you before they even call the office. Some experts say 80 percent of new clients will visit your website first, before they even consider using your hospital," Humphries said.

Synergizing Media

Because the website is the most important social tool, Humphries said it needs to be "professional, functional, beautiful, and interconnected with the other social networking sites."

"So from Facebook your users know how to get to your website and from your website your visitors know how to get to your Facebook page," he said. "That interconnectivity is important."

But there is an even more important part of making sure media is "synergized." Humphries suggested using print, radio, television, and social media together as doing so multiplies the power of all these tools.

"Dovetailed and synergized, it is the only way to do media in today's world," Humphries said.



SPOTLIGHT SPOTLIGHT Milking Benefits Research by Dr. Mark Westhusin



Think of a biotech company. The image that might come to mind is a sophisticated facility with huge bioreactors and complex technologies bottling rare biopharmaceuticals into tiny vials that are then packaged and shipped off to pharmacies, health centers, and hospitals. Not always. In the future, the "factory" may be a lush pasture where farm animals happily jump and skip around, while producing vaccines, drugs, and other pharmaceutical products in their milk.

The above scene may soon come alive on the Texas A&M campus, thanks to the efforts of Drs. Mark Westhusin and Charles Long in the Department of Veterinary Physiology & Pharmacology at the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM).

Using transgenic technologies, Westhusin and Long, in collaboration with Genzyme Biotherapeutics in Framingham, Mass., are working on a research project to produce malaria vaccines in the milk of goats.

"Getting protein products from the milk of animals is known as biopharming," Westhusin said. "Historically, there has been a big effort to more effectively and efficiently produce millions of dollars' worth of products very cheaply just by producing the protein in the milk."

The latest project has been under incubation for a while. About 15 years ago, Genzyme Biotherapeutics started a project in which malaria antigens that could potentially act as vaccines were produced in the milk of mice. "[Genzyme Biotherapeutics] had all the particulars from the molecular biology standpoint worked out," Westhusin said.

The next step was to increase the milk production, and goats were ideal candidate animals. However, after transgenic goats producing these potential vaccines were made, and just before proceeding with non-human primate trials, the project ran out of funding and was shelved for more than a decade.

Enter Westhusin and Long, experts in animal biotechnology. They are renowned for producing, with Dr. Duane Kraemer, the world's first cloned cat named "Carbon Copy" and a whitetailed deer named "Dewey." "Both of these were fun projects," Westhusin reminisces.

In recent years, Westhusin's lab has focused on producing transgenic or genetically modified (GM) animals. So when William Gavin, a colleague at Genzyme Biotherapeutics, was thinking about reviving the project, Westhusin and Long were keen to join.

To restart the project, Genzyme Biotherapeutics used semen from previously produced transgenic goats to derive embryos in their Massachusetts facility and then shipped them to Texas A&M. Westhusin and Long then transferred the embryos to surrogate mothers, and three offspring (two males and one female) all carrying the gene for the potential malaria

vaccine—were born.

The female, Goat 21, was subsequently bred to one of the males, and this past spring she gave birth to two female kids. The female was given hormones to induce lactation, and her milk was analyzed to demonstrate that the potential vaccine was indeed being produced. Since then, her milk has again been collected and shown to contain the protein for producing the potential malaria vaccine.

"This was a project we really liked. We thought that we should get this going again, as the potential benefit was simply mind-boggling given the need for effective vaccines to combat malaria, which has been estimated to cause over a million deaths per year worldwide," Westhusin said.

"We will continue collecting milk from her and then start looking at purifying and testing the protein for the vaccine to test its efficacy," Westhusin said.

The expectations are high because the previous experiments showed that when the vaccine was produced in the milk of mice, it worked in nonhuman primates. The amount of milk obtainable from mice is extremely limited, so the next step was to produce goats that produced the same vaccine in their milk. "Our short-term goal is to produce more goats by breeding, collect the milk, purify the protein, produce the vaccine, and test its efficacy," Westhusin said. Another goal, he said, is to start clinical trials with nonhuman primates before potentially proceeding with human trials.

There are, of course, many challenges in accomplishing the project. There are several serotypes or strains of malaria and each protein needs to be tested to determine which is the most effective.

Along the way, researchers need to find the most effective and efficient technologies to produce GM animals. Options include inserting a transgene into a one-cell embryo by micromanipulation versus using nuclear transfer technologies. Perhaps the biggest challenge is to raise the funds to take the project further, as all the research to date has been funded by pooled resources, and no designated source of funding has been available for the project.

"We could really use some 'angel funding' for this project," Westhusin said.

Westhusin and Long both say that there is great potential for this research, as biopharmaceuticals produced by GM animals comprise an up-and-coming industry.

"Products from GM animals, such as cows, goats, and pigs, whether it is a drug, protein, or a pharmaceutical product, are going to become commonplace just like how GM crops are now," Westhusin said. "Potentially, producing a million doses of vaccine in one goat can avoid the need for having more common facilities that can cost hundreds of millions of dollars," he said. "Our long-term goal is to deliver products like vaccines or nutraceuticals orally in the milk of goats, a kind of fortified milk that children in developing countries can drink to receive vaccines and other medicines. We could have a living bioreactor on the farm delivering beneficial proteins, nutraceuticals, and medicines very cheaply."

In efforts to reach this goal, Westhusin and Long are especially grateful for the support from their research team. "We love our team. They are like a family," Westhusin said. He credited Long, who has worked with him for over two decades; Dr. Mike Golding, an assistant professor at the CVM; and his mentor, Kraemer.

"It's very rewarding to work with a dedicated group of people who share a similar vision of long-term goals that could potentially change the world and have a major impact on human health and welfare," Westhusin said.

Dr. Glen Laine, professor and head of the department of Veterinary Physiology and Pharmacology praised this research.

"This is another example of the One Health Initiative. Drs. Westhusin's and Long's discoveries are having a profound impact in the way in which people are vaccinated and protected against deadly, infectious diseases. Their malaria work at the CVM will prevent the suffering of countless children around the world," he said.

Texas A&M Research Unlocks Mystery of Salmonella Infection

Salmonella infection, or salmonellosis, is a major public health problem that carries a substantial price tag. Recent news stories about outbreaks of salmonellosis have harmed industries. Historically, pigs and the consumption of salmonella-contaminated pork have been a major source for the transmission of this disease to humans. To better control human exposure to and infection by this pathogen, it is important to better understand the swine host-pathogen relationship by developing better detection measures.

Scientists at Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM), in collaboration with researchers at the Swedish National Veterinary Institute and the Swedish University of Agricultural Sciences, have examined the intermittent pattern in which pigs shed salmonella bacteria in their feces. They discovered that salmonella may lay dormant in the host at an undetectable level as a survival strategy that prolongs the host's infection. Furthermore, different salmonella serotypes are shed and go dormant at different frequencies, making detection especially difficult. The results of this research were recently published in the journal *PLoS ONE*.

This "off and on" pattern of pathogen excretion can lead to a host being misdiagnosed as clear of bacteria when in fact it is still infected. In either case, pigs typically do not show physical signs of being infected. In the "on stage," the host sheds the bacteria in fecal material, whereas in the "off stage," the pathogen is still present in the host, but is not shed. Therefore, the leading method of detecting infection—fecal shedding—becomes difficult.

"Because of the important role that pigs have played in salmonellosis outbreaks in other pigs and humans, reliable detection measures and models are critical in developing efficient salmonella control efforts," said Dr. Renata Ivanek-Miojevic, assistant professor of epidemiology in the Department of Veterinary Integrative Biosciences. Although this early study has documented the ability of salmonella to lay dormant, thereby extending its presence in the infected host, future research will investigate whether the same association between the cyclic behavior and the length of infection holds true in other host-pathogen models.

"With this study, we were able to observe the relationship between shedding pattern and length of infection in several serotypes of salmonella in the



Dr. Renata Ivanek-Miojevic

swine host," Ivanek said. "From here, we will need to use what we learned and the models that we were able to develop to see if the same behavior is observed in other host-pathogen systems. If so, the relationship may be useful not only in improving detection methods but also in understanding evolutionary ecology of this and similar infectious diseases with an 'off and on' pattern of pathogen excretion and consequently adopting better control measures."

This study, funded by the National Science Foundation, will become a model for future studies aimed at furthering the detection capabilities and effective control for salmonella and similar infectious agents in their animal and human host populations.

Dr. Evelyn Tiffany-Castiglioni, professor and head of the department of Veterinary Integrative Biosciences said, "Dr. Ivanek is among an elite group of veterinarians who are creating new mathematical models to understand how infectious organisms evolve in their hosts and in the environment to survive and spread. Her research is exceptionally creative in bringing together different disciplines of science, statistics, and mathematics to help predict outbreaks of Salmonella infections. It reflects a very clear appreciation of the concept that human health, animal health, and ecosystem health are inextricably linked."

SPOTLIGHT

<u>A Busy Year FOR BIMS:</u> New Location, Program Accreditation

The Biomedical Sciences (BIMS) program within the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) is an interdepartmental undergraduate degree program in applied biology. The rigorous curriculum is designed to challenge students and prepare them for professional school, such as medical, veterinary, dental, pharmacy, nursing, etc. In one of the few colleges of veterinary medicine to house an undergraduate program, students enrolled in BIMS benefit from instruction by professors who teach in the undergraduate, the graduate, and the professional programs.

A distinctive feature of BIMS is the 2+2 articulation program. Through this initiative, qualified students at participating community colleges can apply to transfer into the BIMS program. These relationships with community colleges have enabled many students who are the first in their families to attend college to complete four-year degrees after starting closer to home.

To accommodate the growing number of students, the BIMS staff recently relocated to the Reynolds Medical Building across from the CVM campus. The move increased the area available for students meeting with advisors and added classroom space while still maintaining convenient proximity to the CVM and accessibility through the tunnel connecting the two buildings beneath Raymond Stotzer Parkway. During the 2011–2012 school year, the BIMS program underwent external accreditation. The review for the accreditation was part of a periodic examination of all Texas A&M University academic programs. It offered an opportunity to assess the standards of the program and to learn from review team members' experiences with similar programs. The team started by reading a study describing the curriculum and staffing in the program. The team then met with faculty members, staff, students, and administrators.

The review committee consisted of Dr. Charles W. Miller, from the Department of Biomedical Sciences at Colorado State University; Dr. James Wagner, from The University of Texas Southwestern Medical School; and Ms. Lori Martensen, from the School of Biomedical Science at The Ohio State University. The review process examined the following areas: operations, administration, budget, vision and goals, recruitment, admissions and enrollment, financial assistance, curriculum, advising, enrichment activities, assessment and plans for improvement, student profile, graduation rates, honors and recognitions, acceptances to professional schools, faculty profile, faculty honors and recognitions, reinvestment, facilities and resources, and strategic planning. The accreditation team gave the undergraduate program a positive review when they presented their findings in an open session and final written report. 🔅



BIMS staff relocated to the Reynolds Medical Building allowing more space for students meeting with advisors and additional classrooms.

<u>A REASON TO CELEBRATE:</u> Record Number of 4.0 GPA Graduates

The Biomedical Sciences (BIMS) program Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) is proud to announce an unusually high number of 4.0 graduates for the 2011–2012 academic year. Out of 71 students graduating with degrees in BIMS, six BIMS students graduated with 4.0 grade point averages (GPAs) in December 2011. In May 2012, five of the 160 students graduated with a 4.0 GPA. In such a strenuous program, this many 4.0 graduates is rare and seems to indicate the dedication of the students in the program.

Dr. Eleanor M. Green, Carl B. King Dean of Veterinary Medicine is proud of this achievement.

"I look forward every year to Dr. Skip Landis, assistant dean of biomedical sciences, coming to tinform me of how many watches I have to buy. The CVM buys a watch for every 4.0 student. This is money well-spent—an investment, not a cost," she said.

One Fall 2011 graduate, Hayden Lowe Joseph, said he hopes to enter an orthopedic surgery residency program. When asked

about his 4.0, Joseph said he just took one semester at a time. "I would work as hard as I could to do well early in the semesters so when finals rolled around and I was getting a little worn down, I would have the comfort of a little gap to work with," he said.

Alejandra Perez graduated with her 4.0 in May of 2012



Brady Dennis advises a BIMS undergraduate student.

studies has allowed me to more deeply delve into the world I want to be working in for the rest of my life. I plan on going to medical school and becoming a doctor, and my experiences with BIMS have definitely helped me on my way to achieving that goal."

These students shared the ability not only to set high goals for themselves but to achieve them.

"I would work as hard as I could to do well early in the semesters so that when finals rolled around and I was getting a little worn down, I would have the comfort of a little gap to work with," Hayden Lowe Joseph said.

and plans to attend medical school. Perez said the experience was difficult but worth the effort.

"I have numerous stories of long hours studying. I tried to know everything I possibly could about the subjects I was learning," Perez said. "But, in hindsight, I did enjoy learning everything I did."

In addition to than achieving a goal, Perez gained confidence. "I feel now that putting that much work into my "During my first semester after I adjusted to the course work, I set the goal to graduate with a 4.0," Joseph said. "Honestly, I thought I would have to miss out on some of the typical college stuff to accomplish this goal, but, in reality, I feel that I was still able to enjoy every part of college I wanted to, and accomplishing this goal only made it that much sweeter."

by Dr. Dan Posey, '82



The American Veterinary Medical Association (AVMA) Veterinary Leadership Experience (VLE) had a profound effect on me in the summer of 2007. I really didn't know what to expect and thought that it would just be another kumbaya event. I know that you have been involved in those events: lots of extroverted people, like me, high-fiving, networking, and lots of one-upmanship, my kind of crowd. I have to say how wrong I was about this one event and how it would shape the way I think.

The AVMA VLE is an experiential program developed in 2004 for veterinary students and faculty. The original template for this leadership experience came from Washington State University's Cougar Leadership Program. The first VLE class in 2004 had 80 participants. The number of participants grew to 110 in 2005, and then in 2006, there were 145 individuals from the United States, the Caribbean, Canada, the United Kingdom, and Australia. The focus of this program is the development of the non-technical skills in veterinary students and faculty, which have a direct impact on our profession. A 1999 KPMG study recognized leadership as a vital component of the skills, knowledge, and abilities of our profession, and this precept was embraced by

What you learn at the Aggie Veterinary Leadership Event*

- When venturing out your comfort zone remember: "No one is going to die and no one is going to cry"
- 2) Don't be surprised by your own capabilities
- 3) Creativity is a group activity, two brains are better than one
- 4) You never know until you try
- 5) Adults learn best by doing things, not passively listening
- 6) It's a safe learning environment, it's okay to make a mistake
- 7) It is better to serve than be served
- 8) Most problems occur because of a breakdown in communication
- 9) The biggest growth is what happens on the inside
- 10) If you want to build leaders show them your passion

*Now known as the Texas A&M Aggie Leadership Event or TAMALE (Coined by Dr. James Marshall) the National Commission on Veterinary Economics Issues.

The VLE was designed to increase participants' awareness of their inventory of non-technical skills to help balance their veterinary technical skills. Whereas the faculty

at the colleges of veterinary medicine are working hard on teachingthe technical skills of our profession, the VLE helps to address the development of the rest of the doctor. The basis of the VLE is the emphasis on the principle of knowing oneself. One cannot expect to be an exceptional leader until one learns to lead oneself through selfawareness and selfmanagement. Once one can lead oneself, one can lead others and manifest true



Team building experiences are now a part of the CVM's New Student Orientation.

leadership-caliber values—principles, integrity, compassion, and emotional intelligence. The central leadership philosophy of the VLE is servant or relational leadership.

My entire experience at the VLE was enlightening. First, we weren't meeting in classrooms on a college campus but in the mountains of Idaho next to the Spokane River. This heightened my energy; who can argue with early June in Idaho? What amazed me is what I learned through this experiential program. The VLE was developed and continues to evolve through an interactive curriculum that encourages positive transformation by alternating between small group and individual challenges. The small-group activity can be as easy as allowing someone to fall backward off a table and the group catching them and as complicated as trying to figure out how we are going to fit 12 people on a 4-by-4 piece of tarp; it has been done before. In both of these exercises, the skills that are reinforced are trust, helping to break down our interactive space, communicating in a collaborative environment, and demanding that you become aware

of your own skills. The self-reflective sessions included activities like spending a portion of every day alone and reflecting on the events of the day. These individual activities could be used not only as quiet time but also to challenge your fears through rock-wall climbing and ropes courses. This combi-

nation of collaborative activities and selfreflection helped us to explore self-awareness, self-leadership, social awareness, and social skills. All of these attributes are crucial elements of leadership.

During this five-day experience, servant leadership evolves through subtle events. Every meal is served in a large dining hall. One requirement was at least once daily to eat with different people—complete strangers. This helped break down barriers between groups and increased networking opportunities. The culture of the VLE is helping your fellow man, who happens to be a perfect stranger. It is not unusual to see people waiting on each other, helping prepare and clear tables, and much more. These small acts of kindness are powerful in relational leadership.

Much has been written about the servant leadership style. The basic premise is that servant leaders put the needs of the followers ahead of their own needs. The servant leader does this by making it the highest priority to encourage, support, and enable followers to realize their full potential and abilities. I believe it is the foundation of our profession; putting others' needs (those of our patients, clients, employees, families, and so forth) before our own, regardless of where we serve in private or public practice. It was exciting to see this concept being put into action every day. I was amazed at what I learned in this program that included opportunities for reflection and introspection, as well as personal growth, networking, and new friendships.

As you can tell, the VLE had a positive impact on me and the two students who participated in the 2007 VLE. When we left Idaho, we wanted to bring some of our experiences back with us so that we could affect more students and faculty at the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM). It was difficult to characterize this event to others, and so the transformation of others was slow or nonexistent.

So we changed our tactics, and little pieces of the VLE have been implemented in our professional program over the last five years. The biggest transformation was in the first-year orientation. Orientation was changed dramatically from a two-day passive information session to a three-day

event with the first day being completely interactive. The first day of orientation is a full day of experiential team building and communication training. We also have implemented some of

the techniques in clubs like the Veterinary Business Management Association (VBMA), but we were still affecting only a few students. The conclusion from those who went to the VLE from 2007 to 2011 was that we needed to bring the VLE to Texas A&M.

Through generous funding from the Texas Pioneer Foundation, an opportunity became available for the CVM to offer

an Aggie Veterinary Leadership Event (AVLE) in Fall 2011. We had a very successful inaugural event on Nov. 4-6, 2011. This event was offered to all four classes in the veterinary professional program. The event was attended by 75 people: 60 veterinary students, eight faculty and staff, three industry partners, and four Texas Veterinary Medical Association (TVMA) executive officers. The event was based on the learning principles of the AVMA VLE. Through the AVLE, we brought the foundational leadership principles of servant-leadership and taught through the VLE experiential model. The event was facilitated by two instructional leaders that I met at the AVMA VLE: Drs. Rick Debowes and Betsy Charles. These two dynamic individuals led us on a vibrant leadership development journey.

The impact of the AVLE on the CVM educational program has been phenomenal. This event energized numerous individuals into knowing that they have the ability to pursue leadership positions in their student organizations. The best quote from a second-year veterinary student was "I was fortunate to attend the AVMA VLE this year and expected that the AVLE would be a letdown. Just the opposite occurred, I found that the AVLE was not only more exciting and fun, but I learned so much more." Our professional students and faculty learned to break down barriers between colleagues, collaborate actively, enhance our networking community, instill trust in each other, and increase all forms of communication. I believe that most of us came without any expectations of learning and were thinking only about teaching. The experiential learning model that was used caught most of us by surprise. Nothing makes you feel as good as seeing the blindfolded president of the TVMA being led around by a second-year veterinary student in a trustin-communication exercise. We all learned so very much together.

We are very grateful and fortunate that The Texas Pioneer Foundation committed to fund the AVLE for two years. This has empowered us to establish this premiere leadership event that is based on innovation, learning, individual empowerment, professional leadership development, and skill building. The second AVLE was held

in early Fall 2012. We are in the process of planning the 2013 event and hope to increase the impact of this leadership experience on our students and faculty, educational partners, and private practitioners.



Student Orientation have their roots in the VLE.

Discovering the Soul of Service



A baby squirrel receives medical treatment after being rescuedby a search and rescue team member in the near by wooded area burned during the Bastrop Complex Wildfire.

Texas A&M University has long been known for building leaders of character who stand ready to provide aid to those in need. Indeed, selfless service is a core value that is foundational to being an Aggie. That spirit and tradition of helping others who cannot help themselves is thriving within the College of Veterinary Medicine & Biomedical Sciences (CVM). Whether it's saving a beloved pet or ensuring that a distinguished Army horse can to continue serving soldiers by carrying them to their final resting place, Aggie veterinarians have exemplified the soul of service to the citizens of Texas and beyond, and we are immersing students in this culture of selfless service. What follows are two stories of how the soul of service is alive at the CVM.

YAYYYY Passionate... about Service 1.1.1.1.

Summer of 2011 will long be remembered as one of the hottest and driest on record in Texas. Wildfires were popping up around the state as dried grass and leaves provided a ready supply of fuel. The Labor Day weekend arrived with unusually strong winds. On Sept. 4, three separate fires, thought to have ignited from power lines that blew down, began to burn near Bastrop State Park. These three fires merged into one large inferno that came to be known as the Bastrop Complex Fire. As the work week began, many residents in the area were away from home when the fires began to encroach on their neighborhoods. While they worked, their possessions and their pets were in peril. Recognizing the danger that these fires presented to companion animals, livestock, and wildlife, the Texas A&M Veterinary Emergency Team (VET) deployed to Bastrop County.

Work for the VET members began with supporting the members of the Urban Search & Rescue unit of Texas Task Force 1, as they searched for people in harm's way using canine search teams to aid in their efforts.

"Texas Task Force 1 members will tell you that out of all the equipment they have, their Search and Rescue (SAR) dogs are their most valuable asset," said Dr. Deb Zoran, medical operations director of the VET. "By providing physical exams each day, hydration therapy, and basic veterinary care in the field, we were able to extend the amount of time these special dogs were able to stay in the field and stay deployed. That equals more lives saved."

Members of the VET examine a canine member of Texas Task Force 1 during a disaster training exercise.

> crisis, and this commitment to serving others is what being an Aggie is all about. It's about doing the right thing for people. When our team was able to save an animal, we recognized that it was perhaps the only thing its owner had left of their life. Their houses had burned, their possessions gone or barely salvageable. This animal was a person's connection to their past and perhaps the one thing that could give them hope for rebuilding their future.

"This was an awesome and

humbling experience," Bissett

said. "Texas Aggies have always

been ready to help in times of

As responders from multiple agencies—including members of the Bastrop County Sheriff's Department, animal control officers from Bastrop and Travis Counties the Texas Animal Health Commission, the Texas Forest Service, and the Texas Division of Emergency Management—worked to contain and extinguish the growing fire, the VET established a field veterinary hospital, complete with a mobile surgical unit.

"In the past, responders were put in a position of having to leave animals in harm's way, because there was no place to take them outside of the disaster zone," said Dr. Wesley Bissett, director of the VET. "It was very difficult to have to walk away from those animals. In Bastrop, these rescue workers now had a place to bring these animals. They brought us dogs and cats, deer, a pot-bellied pig, geese, and the list goes on. Overall, we were able to triage and treat more than 150 animals. Working with the shelters that were established, more than 250 animals found a safe haven."

Responding to a disaster the magnitude of the Bastrop Complex Fire takes a substantial amount of expertise and manpower. The Bastrop deployment lasted two weeks, and the VET members—veterinarians, veterinary technicians, veterinary medical students, and administrative staff—rotated in and out of the base of operations to provide rest for those serving long, stressful days.



First responders rescued a pot-bellied pig from the burn zone and brought it to the VET mobile hospital for treatment.

we care about animals and want to do our part in minimizing their suffering during times of disaster. We deployed because it's the right thing to do. We're Aggies, and it's in our blood."

We deployed because

Dr. Eleanor Green, Carl B. King Dean of Veterinary Medicine at the CVM, kept up with the progress that the VET made each day.

"I am immensely proud of our VET," Green said. "Dr. Wesley Bissett sent emails almost daily from Bastrop, and every single one would both bring tears to our eyes and instill mounting pride. He commented on the Texas A&M effort being a bright spot in a terrible situation. He always thanked the team 'on the front line' and those at home assuming double duty in their

A goose is brought in from the burn zone for treatment.

absence. He described the destruction and the unimaginable scenario in which people went to work leaving all they owned, not

being allowed to return home, and learning they had lost everything, except their lives," she said.

"He described waking up to this scene of destruction every day and the Texas A&M trucks and trailers joining the convoy of those deployed to help. He relayed the combination of profound sadness from so much animal pain, injury, and loss of life and the hope from saving a life or reuniting an animal with its owner. He described the dinners at end of each day with 40 to 50 soot-covered responders, some too tired to take care of themselves. The welcome they received when they



returned to A&M was touching. We all recognized what they had done, the toll it had taken, and the lasting memories associated with doing something of value, which they had done," Green said.

Since the Bastrop Complex Fire, the members of the VET continue to train, prepare, and educate others about the importance of emergency preparedness and response. In May 2012, the leadership team of the VET began the first required



Flash, a basset hound found and treated during the disaster, was left homeless and alone. He was adopted as an unofficial mascot of Texas Task Force 1. rotation in veterinary emergency response for fourth-year veterinary students.

"As a college of veterinary medicine, we have the responsibility to educate our students in such a way that they are prepared to meet the challenges they will face when they enter the profession after graduation," said Dr. William Moyer, safety officer for the VET and professor in the department of Veterinary Large Animal **Clinical Sciences.**

"This rotation is, we think, the first of its kind in the world that immerses students into a disaster scenario and lets them apply their decision-making skills in a fast-paced crisis situation. Being involved in the creation and instruction of this course has been a rewarding and fulfilling experience for the entire teaching team," he said.

The two-week learning experience teaches students about using critical thinking skills when preparing for a disaster, deploying to the disaster scene, and caring for animals in a field hospital or field assessment setting. In addition, students receive approximately eight hours of risk/crisis communication training that focuses on working with media. Online Second Life technology is also a part of the rotation, allowing students, as avatars, to visit a virtual disaster zone with simulated injured animals that must be assessed and treated.

"Each year, we will have exposed more than 125 A&M veterinary students to the concepts of emergency response, emergency preparedness, and animal issues in disaster," said Dr. Norberto Espitia, operations director for the VET and clinic supervisor for the Small Animal Hospital. "These students will then graduate and take that knowledge with them wherever their careers take them. By growing the number of veterinarians who are able to tackle animal issues in disaster situations, we have helped to make overall emergency response stronger in the state of Texas and beyond. It is our hope that by continuing to serve our citizens through service, research, and teaching, Texas A&M will become a model for how to better care for those animals caught in harm's way."

The rotation received high praise from Dr. Kenita Rogers, associate dean of Professional Programs. "The faculty leaders of this new and truly innovative clinical rotation are impressive," she said. "They are providing an intense learning environment and allowing students to develop valuable skills that will help them throughout their practice lifetimes. They are developing the ability to work effectively in the midst of chaos, manage a team, triage patient care, and communicate with the media, public, and other health care professionals. Perhaps most importantly, they are seeing yet another way that veterinarians are vital to the well-being of the community."



A rescuer brings in a dog found in the woods near a burned home in Bastrop. A burned car located near the VET's base of operations shows the intensity of the heat from the wildfires.

In addition to pets, rescuers also found wildlife that had been affected by the fires, and brought them to the VET for treatment.

Veterinary Emergency 🕽 Team

The Texas A&M Veterinary Emergency Team (VET) participated in a state-wide training exercise at Camp Swift in Bastrop, Texas, July 10–11, 2012. As a part of this training, seven veterinary medical students enrolled in the Community Connections fouth-year rotation traveled with the team. During lunch on the first day, members of the VET leadership team and the students had the opportunity to visit with two Bastrop veterinarians, Drs. Jeff Schroeder and Greg Maynard, who found themselves in the middle of the response effort during the 2011 Bastrop Complex Wildfire. Enough cannot be said about the dedication of the local veterinarians to serving the citizens of Bastrop and their animals. Faced with overwhelming circumstances, these veterinarians exemplified the soul of service, going to great lengths to care for injured animals and provide them with a safe haven until they could be returned to their owners. It was a great learning opportunity for the students as they were able to question the veterinarians about the impact the disaster had on their private practices, the animal owners in the area, and also what things worked or didn't work as part of the response effort. Below are a couple of comments from the veterinarians who met with the students.

"We had animals everywhere. We were having to find crates and places to put them. Our clinic represented a safe haven for animals in the beginning, so people turned to us to provide that shelter. It was overwhelming at times, but we had a great team in place. They worked a lot of hours to care for the animals as well as our clinic. Soon after, the wildfires began to approach our clinic, and we had to begin thinking about how we would evacuate all the animals in our care. We were fortunate that we did not have to evacuate or try to find shelter for the growing numbers of animals arriving at our clinic. This experience has demonstrated the urgent need to plan for animal issues during a disaster. We are fortunate to have been able to work together as the veterinary community in Bastrop County to care for those animals we could." ~ Jeff Schroeder, DVM, Bastrop Veterinary Hospital

"One of the things that I remember the most was the outpouring of support from outside the area. Trucks loaded down with feed and supplies came in from as far away as Katy because people saw what was happening and wanted to help. It restores your faith in your fellow man to see that. Like the other veterinary clinics, we were overwhelmed with animals being brought to our clinic. Located next to the highway, we were very visible. We had lots of people showing up to volunteer, and so we had to develop a plan to ensure the safety of our clinic, our employees, the animals, and the volunteers. It was a daunting task. The need for a centralized number for people to call so that they would know where to take animals, where they could go for information or for shelter, was evident and one of the lessons I think we all learned from this event." ~ Greg Maynard, DVM, Crossroads Animal Hospital

Wooldridge, a Percheron that serves as part of the Fort Sam Houston Caisson Section, has shown continued recovery and has re-joined the team that serves to honor some of America's fallen heroes.



Serving with Honor and Dignity トノノノ

The men and women who serve in America's armed forces put their lives on the line so that those in the civilian world can enjoy the freedoms that are often taken for granted. For members of the armed forces who die either in the line of duty or after a long career of service, a burial in one of the national cemeteries is the final recognition of their commitment to serving and defending the nation. Only two of these cemeteries have Caisson Sections that serve them. The best-known of these final resting places is Arlington National Cemetery in Arlington, Va. The other is located in San Antonio, Texas, at Fort Sam Houston. These military Caisson Sections are teams of soldiers and horses that work together to carry soldiers to their graves with honor.

The Caisson Section at Fort Sam Houston was founded in 2002 as the second active Caisson Section in the United States Army. The team consists of soldiers and horses that actively participate in funeral services for soldiers. In addition to caring for the horses, the soldiers care for the tack, the equipment, and the special wagon, called a Caisson, that carries the casket draped in the American flag through the cemetery to the gravesite.

"Every year, we have new people come in," said Jonathan Deeley, manager of the Caisson Section. "Most of the soldiers come in with no horse experience, but they learn. They realize the importance of what they do in this section. It is the last real honor that fallen soldiers have. It's a tradition." As important as the soldiers are to the team, the Caisson Section's most valuable players are the horses that serve the fallen by pulling the Caisson during the ceremony. Consisting of four large, dark draft horses—Percherons—the wagon team, often followed by an additional draft horse at the rear and led by a guide horse in front, serve as a symbol of strength and dignity to the service. To continue in this service, these horses are well cared for and must be in good health. Their veterinary care is overseen by the Army Veterinary Corps stationed at Fort Sam Houston.

It's because of the care provided by the veterinarians and veterinary technicians that one special member of the Caisson wagon team is still serving today. Wooldridge, or "Wooly," as the soldiers call him, is one of the largest horses assigned to the Fort Sam Houston Caisson Section. In 2007, civilian veterinarians found that he had navicular disease, an inflammation of a bone in a horse's lower leg. This condition can lead to significant lameness, and, in Wooldridge's case, retirement from service.

Wooldridge was treated for his problem, but, in 2009, he began showing signs of thrombocytopenia, a shortage of platelets in his blood, which could indicate more severe problems. Army veterinarian, Cpt. Sarah Luciano, who graduated from the CVM in 2010, arrived at Fort Sam Houston in 2011. Upon reviewing the veterinary records for the Caisson horses, she learned about Wooldridge's ongoing problem and removed Wooly from service in September 2011.

"I felt we needed to follow up on the platelet problem," Luciano said. "We needed to figure out what was causing it because it could be symptomatic of something much worse. After running initial diagnostics here, we made the decision to refer him to the Large Animal Hospital at Texas A&M."

Dr. Keith Chaffin, professor and equine internal medicine specialist at the CVM, was assigned to Wooldridge's case.

"Wooldridge is a magnificent animal," Chaffin said. "In all my years as an equine veterinarian, I have never seen such an incredible horse. It was a very special moment in my career to work with this horse and help him return to his honorable occupation."

Chaffin and his team of veterinary technicians and veterinary students confirmed that Wooldridge's platelet count was indeed below normal. After consulting with Dr. Mark Johnson, a board-certified clinical pathologist at the CVM, a count of the platelets was performed by another method. It too confirmed the low platelet concentration in Wooldridge's blood.

Then, Chaffin decided to consult with Dr. Mary Boudreaux, a platelet specialist at Auburn University. At Boudreaux's advice, Chaffin drew blood using a novel method that prevented the platelets from clumping and provided a more accurate platelet count. When the new sample was tested, Wooldridge's platelet count was indeed normal.

"It was necessary for us to draw the blood through a large bore needle directly into anticoagulant solution contained in the syringe," Chaffin

said. "This reduced the opportunity for platelet activation, and we were able to see normal platelet concentration levels. It was a huge relief for our team, as the low platelet count could be indicative of other more severe health problems such as cancer or immune-mediated thrombocytopenia that could have ended Wooldridge's career."

With the platelet problem solved, Chaffin consulted Dr. Robin Dabareiner of the equine lameness service within the Large Animal Hospital. Dabareiner helped devise a treatment plan for Wooldridge's navicular disease. Wooldridge returned to Fort Sam Houston. Since being cleared for duty in May 2012, Wooly has returned to his spot on the Caisson team. With three or four Caisson requests each week, the Caisson Section was excited to have one of its shining stars back in the line-up.

"Working with horses like Wooly has its challenges," said Spc. Christopher Szewc, Army veterinary technician. "They are large and they have their own personalities. I love them all, and we treat them with as much or more care than anything. Their mission is so important. There is no other animal that can do their job."

The Army veterinarians and their team of technicians are responsible for the health and well-being not only of these horses but other animals that serve on post. At Fort Sam Houston, there is a regular small-animal clinic that sees about 450 to 600 clients each month that are pets belonging to both active duty and retired military. The team is also responsible for inspections anywhere there are animals including classrooms at the educational facilities on post. There is also a riding stable with 20 governmentowned horses available for trail rides, riding lessons, and equine therapy for wounded warriors. The veterinary team at Fort Sam Houston also travels to Cassion Section member, Staff Sgt. Glen Childers (left), Dr. Keith Chaffin (center), and Dr. Sarah Luciano, U.S. Army veterinarian (right) stand with Wooldridge prior to preparing for a Caisson Service.

Randolph and Laughlin Air Force bases to provide care for military working dogs and United States customs dogs.

Without the diligent care and attention provided by the Army veterinary team, horses like Wooldridge and all the other animals who serve our nation would not be able to do their jobs.

A Special Bond

Animals like Wooldridge and the ones rescued from the wildfires of Bastrop County not only symbolize dignity, honor, and hope, they exemplify the importance of the human-animal bond and the special role that animals play in the everyday lives of humans. In times of need, these animals are often left unable to help themselves or to continue important jobs. At the CVM, however, a cadre of Aggie veterinarians, veterinary technicians, veterinary medical students, and staff stand ready to step in and lend a helping hand. There, the Aggie spirit, the soul of selfless service, is alive and well, giving hope and improving health for animals in the state of Texas and beyond.



The VET returns to the CVM after the Bastrop deployment.



TVMA members for life!

by Chris Copeland, TVMA Executive Director & Devorah Jakubowsky, TVMA Associate Director

Did you know that as a veterinary student at Texas A&M's College of Veterinary Medicine & Biomedical Sciences (TAMU CVM) you're automatically a member of TVMA? Well, you might have known considering the free Texas Veterinarian magazines that arrive at the College for each of you every other month, but did you know that we also give first-year graduates of veterinary school complimentary TVMA membership and second-year graduates membership for half-off? We do this not only because we know starting a career is both emotionally and financially taxing, but because we hope that you'll extend your membership beyond graduation. Why? We need every veterinarian in Texas to be a member of TVMA so that together we can represent and protect the profession as a whole.



Chris Copeland, TVMA Executive Director

But first, what does TVMA do for you? Well, aside from the free magazines (in which a student from the CVM is routinely given the opportunity to contribute a Student Scoop column about attending veterinary school), you also receive emailed updates about important happenings in the veterinary profession and drastically reduced (and sometimes free) registration to the TVMA Annual Conference, the next one taking place March 1–3 in College Station, Texas.

But that's just the tip of the iceberg. You also get benefits during different class-years in veterinary school, too. For instance, during your first-year orientation ceremony, you receive a "welcome" gift. In the past, the Texas Veterinary Medical Foundation (TVMF), the charitable arm of TVMA, provided first-years with Dorland's Illustrated Medical Dictionary, but for the class of 2015 they donated Littman Classic II SE stethoscopes instead. The stethoscopes were so well received they will be given again this year. During the Veterinary Ethics Program, TVMA

also sponsors a dinner for firstyear students and presenters.

Second-year veterinary students receive both a copy of Plumb's Veterinary Drug Handbook and scrubs from TVMA, third-year students get a sponsored dinner for various practice management seminars and TVMA also sponsors a breakfast for CVM graduates and other participants in the graduation program.

There are also two students who receive sponsorship from TVMF for a research project each summer, as well as the Johnson and Waddell Scholarship awards provided by TVMF. Upon request, TVMA routinely provides financial support for an AVMA government affairs intern as well as tables and booths at TAMU's annual Gentle Doctor Luncheon and Open House.

TVMA even provides many networking opportunities to veterinary students. Every year, TVMA organizes both a tailgate party, where students and recent graduates can connect before an A&M football game, and a veterinary student-practitioner social at the TVMA Annual Conference, where students can pursue career opportunities. Additionally, TVMA supports student job fairs, college-to-work transition meetings, and hosts an extensive externship section on tvma.org, where students can search for career-building experience.

Through TVMA, students have the chance to make their voices heard and influence the profession by serving on committees. One student representative even has a voting seat on the TVMA Board of Directors.

But, the most important benefit TVMA provides veterinary students and the profession comes from our successful government relations program. Though, it may be difficult to put much thought into concerns related to laws and regulations that impact the practice of veterinary medicine while focusing on schoolwork, there are those who are attempting to do the veterinary profession irreparable harm.

TVMA has fought numerous battles on behalf of veterinarians for more than a century and continues to fight today. The veterinary profession is truly one of the "underdog" professional occupations. When compared to most professions, we simply do not have the numbers we need. There are almost 6,000 veterinarians currently practicing in Texas and yet only about 3,500 are members of TVMA. With a profession this small, we cannot afford to have so many veterinarians choosing not to be a part of the organization that represents them all. Therefore, we need every veterinarian in the state to be a member of TVMA.

So we hope that you, the students of TAMU CVM, will remain members of TVMA after you graduate and beyond. Currently, TVMA has 549 student members, 144 first-year graduate members and 98 second-year graduate members. We'd like to increase that and we need your help. If there's something TVMA isn't providing that you need for your education and future profession, please let us know at *info@tvma.org*. We always appreciate feedback.

College News

Veterinary Enrichment Camp: Coming full circle for prospective and current veterinary students

The Veterinary Enrichment Camp at the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) continues to have a profound impact on former and current attendees by offering a three-and-ahalf-day program where participants interested in veterinary medicine can learn about life as a veterinary student at the CVM.

The Veterinary Enrichment Camp has been an annual event for over 20 years. It is open to students interested in veterinary medicine who have completed their sophomore or junior year in high school. The participants experience real-life student situations, such as partaking in a rigorous admissions process, living on campus in a dorm, and learning hands-on techniques in the Veterinary Medical Teaching Hospital.

The camp this year, held the weeks of July 16 and 23, was Brady Dennis', assistant director of external relations in the Texas A&M division of Marketing & Communications, last camp to oversee. Brady Dennis, former BIMS senior academic advisor and director of the camp from 2008-2012, said his favorite part of the camp was observing the mentorship and interaction between the counselors, faculty, staff, and campers.

"I have never seen a faculty more willing to offer their time and expertise to help guide these young minds to reach their ultimate goal of practicing veterinary medicine," Dennis said. "The faculty and staff of the College of Veterinary Medicine & Biomedical Sciences, as well as the great counselors, are what make this a great experience."

At last year's camp, held the week of July 25, 2011, Erin Braley, third year veterinary student at the CVM, and Adam Ridenour, second year veterinary student at the CVM, worked as counselors because their attendance almost a decade ago proved to be the solidifying factor in pursuing a veterinary medicine career. They said they wanted to provide the same positive experience they had in camp to prospective veterinary students.



Texas A&M University Veterinary Enrichment Camp July 24-27, 2012

"Prior to attending camp, I was terrified, because I was not exposed to much in the veterinary field," said Braley, who attended camp before her junior year in high school in 2004. "I knew I wanted to be a veterinarian, and camp taught me a lot because we got a taste for what the veterinary field had to offer. Therefore, the camp helped me gain confidence in my decision to pursue this career."

"The counselors really impacted my experience at A&M and the CVM. This experience also prompted me to seek out mentorship opportunities because of the positive influence my Veterinary Enrichment Camp counselors had on me," Braley said.

Ridenour also attended Veterinary Enrichment Camp the summer before his junior year in high school, in 2002.

"The pinnacle of my experience at camp was when we got the chance to see behind the scenes of the Small Animal Hospital," Ridenour said . "This opportunity exposed me to the CVM and the veterinary profession, as well as Texas A&M."

"I love working as a counselor because it is so refreshing to see myself through the attendees' eyes as I was in their shoes a couple of years ago," Ridenour said. "Now, I reflect on how I have changed, and that I made my dream come true to pursue a career as a small animal veterinarian." Dustin Black, a first-time attendee of the Veterinary Enrichment Camp, will be a senior at B.F. Terry High School in Richmond, Texas. His enthusiasm for veterinary medicine was sparked in kindergarten, and since then he has volunteered for veterinarians. He worked for a year to pay his way to Veterinary Enrichment Camp because he was so determined to participate.

"This experience is amazing," Black said. "I know many students will never get this opportunity, and so I am taking full advantage of what I am learning this week. I am learning and working with doctors and veterinary students and doing things I never expected."

Black said he hopes to pursue a career as a rural veterinarian in Texas. The Veterinary Enrichment Camp confirmed both his desire to become a veterinarian and attend Texas A&M as a biomedical sciences undergraduate in the college.

The journey came full circle for Braley and Ridenour, and it is just the beginning for Black. The Veterinary Enrichment Camp fosters enthusiasm and love for the veterinary profession. It is a collaborative effort among the biomedical sciences program at the CVM, Texas A&M advisors, and CVM veterinary students. The efforts of this partnership go far beyond the week for the students, and as in Braley and Ridenour's cases, it can last a lifetime.

College News

Animal advocate and author gives to the CVM

Natalie C. Markey, freelance writer and animal enthusiast, recently wrote a book offering practical advice and hope to owners raising dogs with special disabilities, titled *Caring for Your Special Needs Dog.* She hopes to give back to the veterinary field by donating five percent of all of her book profits to the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) Neurology Service.

Markey's experience with a special needs pet started about two years ago when her adopted German Shepherd/



Ridgeback dog, Oscar, experienced his first seizure at one year old. She immediately contacted her veterinarians, Dr. Alison Ivins and Dr. Carole Price of Bear Creek Animal Clinic in Houston. Alumni of the CVM, Ivins and Price helped diagnose Oscar with

Rhodesian

epilepsy and educated Markey and her husband on how to best care for with a special needs dog.

"I'm fortunate that I have a skill set where I can work from home," Markey said. "Since I'm with Oscar all the time, I began to find triggers for seizure episodes and began to find a way to prevent them. I also figured out simple, around-the-house things that anyone can do to improve their dog's quality of life. I didn't want the book to be about Oscar, but he is its inspiration. I wanted to make a difference, and I wanted this book to give any dog owner whose dog is diagnosed with a special needs condition hope."

Ivins said Markey is a conscientious owner who is aware of the timing of her dog's seizures.

"I feel this book will be a helpful resource for owners dealing with special needs pets as well as being an applicable tool for pet owners of all kinds who deal with various pet personalities," Markey said.

Markey said she knew before she began writing the book that she would give a percentage of the profit to a charity.

"I respect the reputation of the CVM, and I knew that my donation would be put to good use. It is my plan, as more money comes in, to start a special foundation called The Oscar Endowment for Neurological Research," she said.

"I'm grateful for the support of the CVM," Markey said. "I do not want owners to give up on their dogs, because I can't imagine my life without my dog, Oscar. My heart and cause will always be with dogs, and I look forward to having a long relationship with the CVM."

The book was released on May 18, 2011, and is available as an e-book on Amazon and Barnes and Noble.

Markey received a bachelor of arts in journalism/public relations and speech communications with minors in business development and event management from Baylor University. After working for several years in the PR and communications industries, Markey became a freelance writer full-time. She has published more than 500 articles in both local and national publications including her column, The Special Needs Dog Care Examiner, for Examiner.com. She also writes young adult and middle grade fiction. She lives in Arkansas with her husband, her daughter, and Oscar. 🛊

CVM PEER Program continues outreach efforts

The Partnership for Environmental Education and Rural Health program (PEER program), housed in the department of Veterinary Integrative Biosciences at the Texas A&M College of Veterinary Medicine & Biomedi-



A veterinary student shows bone cross-sections to middle school students during a PEER program visit.

cal Sciences (CVM), provides several approaches to science and veterinary medical education outreach. These include state-wide teacher training (365 teachers during summer 2011), middle and high school curricula, and presentations to kindergarten through 12th grade students to stimulate interest in science and technology.

High-quality curriculum materials that the program has developed enable students to see connections between what they learn in school and what is being done in the "real world," including research being done at Texas A&M.

PEER's newest program involves the development of curricular materials for high school veterinary assistant certification programs. Many other materials are also available through the PEER Program: online video presentations by scientists, veterinarians, veterinary students, and graduate students. PEER recently increased its reach via iTunes, Facebook, and statewide videoconferencing. Also, recent programs by veterinary technicians involving animal rescue during the Bastrop Complex Wildfire have been transmitted to 1,500 students in 47 schools.

Through the PEER program, CVM scientists also have visited more than 37,000 Texas students, and at least 1,750 Texas teachers have incorporated PEER materials into their classrooms. Last year, the PEER website (peer.tamu. edu) tracked 9,540 downloads from 884 teachers in 48 states. With these multi-faceted approaches and both National Institutes of Health (NIH) and National Science Foundation (NSF) funding, the CVM PEER program continues to enrich and enhance education through memorable experiences for educators and students and to help the CVM "give back to Texas" as stated in the university's strategic plan. 🗼

32 • CVM Today • Winter 2012

College News

CVM outreach efforts increase at dog and cat shows

The Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) participates in many outreach programs that educate the public about veterinary medicine, what it takes to become a veterinarian, and what the CVM is doing daily to serve Texans. Members of the CVM had booths at two major shows: the Reliant Park World Series of Dog Shows and the Houston Cat Club's Annual Charity Cat Show in both 2011 and 2012.

Dana Heath, assistant hospital administrator of the Small Animal Hospital at the CVM; David Sessum, veterinary technician III at the CVM; and other veterinary technicians from the CVM manned a booth at the Reliant Park World Series of Dog Shows. This series of dog shows lasts five days, attracting more than 40,000 spectators and participants and 14,000 entries.

"This was a wonderful outlet to speak with pet owners about the importance of veterinary medicine," Sessum said. "We answered questions about veterinary school and the different specialties within the Veterinary Medical Teaching Hospital at the CVM. Dana and I were able to build some great relationships with some great people."

Heath and Sessum plan to attend and expand the booth next year because this year was such a success.

"We want to continue the education outside of the classroom and hospital walls and bring it to concerned pet owners," Sessum said. "Next year, we want to tell pet owners what clinical trials the veterinary school is working on to help pets like their own and explain how the veterinary school can help them."

Members of the Texas A&M University Student Chapter of the American Association of Feline Practitioners (SCAAFP) at the CVM, along with their advisor, Dr. John August, professor in feline internal medicine at the CVM, participate in the Houston Cat Club's Annual Charity Cat Show, held at the George R. Brown Convention Center in Houston.

Throughout the show, the Texas A&M veterinary students staffed a booth where they answered questions about the college's programs in feline medicine and discussed careers in veterinary medicine with aspiring veterinarians and their parents. In addition, the department of Veterinary Small Animal Clinical Sciences and the Development Office at the CVM co-sponsored a show ring.

Lauren Castilla, fourth year veterinary student and president of SCAAFP, led the efforts at the cat show. "Our main

purpose at the Houston Cat Show was to show support for the local

community of cat owners, breeders, and shelters, as well as to promote the College of Veterinary Medicine's dedication and commitment to feline health," Castilla said. "We let the public know about our feline internal medicine residency, the Aggie Feral Cat Alliance of Texas (AFCAT), and the Stevenson Companion Animal Life-Care Center. Members of our organization were there to answer questions about our hospital services, veterinary program, and current research endeavors."

Castilla said she learned a lot from participating in the cat show. Taking on this leadership role, she was able to talk with cat owners and to learn more about her field of interest.

"It was exciting to talk with breeders and expand my knowledge about the unique breeds that were present," Castilla said. "I enjoyed having owners share their cat experiences with us, and every person had a wonderful story to tell."

The cat show not only educates the public on the current efforts of the feline industry. It initiates conversations among feline enthusiasts about the possible future of the industry.



Veterinary students Will Floyd, Lauren Castilla, Tamie Hunt, and Erin Braley represented the CVM at the Houston Cat Show.

"I am so excited for what the future holds for feline medicine," Castilla said. "It is so great to see the field growing with more ABVP [American Board of Veterinary Practitioners] diplomat and the increasing popularity of feline specialty clinics. The CVM is giving us a great foundation in feline medicine, and it just opens us up to so many more opportunities after graduation."

August said the students did a great job representing the college at the show. "By having a presence and being available to concerned cat owners, we are able to visibly demonstrate the CVM's commitment to feline health and education," he said.

SCAAFP is one of 16 Texas A&M SCAVMA (Student Chapters of the AVMA) sponsored organizations at the CVM. SCAAFP's involvement represents the type of active roles veterinary students take in organizations at the CVM.

Outreach participation is important because it leads to better learning experiences inside and outside the classroom, creating better prepared professionals, and a public better informed about veterinary medicine.

College News

Biodefense Seminars expose CVM to important research

"Can we meet at the Dinner-and-Disease session?"

'Of course! I'd love to!" Don't be shocked. This is just a casual conversation at the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM). The aforementioned session was a popular part of the Biodefense Seminar Series organized by Dr. Jeffrey Musser, clinical associate professor in the Department of Veterinary Pathobiology, where speakers knowledgeable in various disciplines of biodefense research presented at the CVM. They later joined students and faculty for a fun, friendly meal. No need to worry; the only contagious thing about the dinner was the intellectually stimulating conversation.

The Biodefense Seminar Series sought to expose researchers, students, and teachers to the wide breadth of biodefense research. The series was funded by the Western Regional Center of Excellence for Biodefense and **Emerging Infectious Diseases Research** (WRCE), supported by the National Institute of Allergy and Infectious Diseases (NIAID). The invited speakers gave a technical presentation at the CVM and a general talk at Texas A&M University. Students and faculty interested in meeting the speakers emailed Musser beforehand to register for the dinner, an informal, intimate gathering where the students had the opportunity to learn more about the speakers.

Started in Fall 2010, this seminar series included more than 16 seminars



Dr. Jeffrey Musser

and 18 Dinner-and-Disease sessions attended by 1,184 people.

So why was Musser inspired by the topic?

"When we think about biodefense research, we usually think of only one part, usually vaccines. There are several aspects to it—law, policy, even marketing strategies—and both universities and private industries are involved," Musser said. "The seminar series explains the nuts and bolts of the science behind biodefense to increase awareness among researchers, graduate students, and the general population of the university."

The invited speakers have come from a range of backgrounds. Some speakers have been from Texas A&M-the CVM and the Texas A&M Health Science Center-and some have been from other universities (both within the United States and from other countries), private industries, the Centers for Disease Control (CDC), and even one from Plum Island. The professions of the speakers have been varied, too, including the vice-chancellor for strategic initiatives at Texas A&M, an independent journalist and author, and the executive director of a bio-informatics company.

Given the interdisciplinary nature of biodefense research, how does Musser choose speakers? Musser invites people whose work he has known directly or read. In his effort to bring in a broad range of speakers, he also asks colleagues for suggestions.

"There is a wonderful network at the vet school," he said. But do the speakers readily agree to come? "Most of us in research and academia are always excited to talk about our work. That's what gets them."

The enthusiasm to meet the speakers is not just professional. "It also gives me the opportunity to meet someone I have previously only read and heard about. Now, I can meet them right outside the hotel," Musser said with a smile.

He said he hopes to broaden the awareness of students about not just the science but also the range of career paths in the interdisciplinary field of biodefense.

"It is this personal contact that students get when they meet the speakers," he said. This is also why there are two seminars, one at the CVM and one for the general audience at Texas A&M University. It helps the speaker tailor the speech to the audience, Musser said.

Occasionally there are challenges in handling these seminars. "I wanted to make a live video feed of the seminar, but the technology was not easily adaptable to all seminar rooms," Musser said. Because so much goes on at the CVM, it also has been difficult to schedule time and rooms. "We need to have a good room at a good time to get students to attend regularly."

Good timing is especially important considering the latest aspect of the Biodefense Seminar Series—a one credit seminar course for Honors students which started in Spring 2012 where the speakers meet the students of the course for an hour a week. At the end of the semester, each student writes a paper on any area of biodefense. "It's a rigorous and stressful course. The logistics of this program—the booking of the flights and the hotels—makes sure that the days of the course cannot change," Musser said.

The program has been going well and the reports sent by Musser to the WRCE evaluation committee were impressive enough that the seminar series was funded for the second consecutive year. "If the course goes well, we can find funding for next year," Musser said with optimism. He aims for the program to not merely educate the students but also motivate them to learn more about biodefense. "Hopefully, it will inspire the students to learn more about policies and economics behind the science. The end users are the American people!"

Musser thanks his colleague Dr. Susan Payne, associate professor in the Department of Veterinary Pathobiology at the CVM, for working with him on the program. He is also thankful to the CVM for its cooperation. "We have a wide variety of students here at the vet school — majors in biomedical sciences, veterinarians, medical school students, and science journalism students. This heterogeneity gives different angles and a much better discussion for a diverse program. That's what biodefense is, not just bench science."

College News

Trace Elements Research Lab studies 'EPA Priority Pollutants'

The Trace Elements Research Laboratory (TERL) at the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) researches and collaborates with others on investigating anything that involves trace metals. Over the years, researchers at the TERL have worked on projects involving many of the elements in the periodic table and a range of topics such as toxicology, pollution, and nutrition. Much of the TERL's work, however, involves the trace elements that are considered priority pollutants



Dr. Robert Taylor

by the United States Environmental Protection Agency (EPA).

Dr. Robert Taylor, associate research scientist at the CVM, said that over the past 30 years, TERL has built a national reputation as one of the premier inorganic environmental chemistry laboratories in the country. For more than 20 years, the TERL has collaborated with the U.S. Fish and Wildlife Services' (FWS) Environmental Contaminants program, which protects the federal government's trust resources such as wildlife refuges and endangered and migratory species. The lab works with the FWS on a contract basis. That contract comes up for bid every five years and the TERL must compete against other labs to receive the contract. A new contract term began on Jan. 1, 2012.

"We assist them mainly by analyzing samples, that might be biota or water, for a variety of contaminants," Taylor said.

The projects vary as well as the samples. Currently, TERL is working on 10 to 15 projects for the FWS' contaminants program. In some cases, the TERL helps the FWS evaluate land the government wishes to acquire or wildlife refuge property the government already owns. In addition, TERL has helped the FWS examine tribal state resources and territories.

"Many of the current projects involve examining mercury levels," Taylor said. "They've been developing more and more interest in mercury over the years, so we assist them in looking at it and some of its more toxic organic species."

Analyzing and researching mercury has been Taylor's favorite project. Taylor said mercury poses the greatest environmental risk, because it bioaccumulates and is a potent neurotoxin.

"If one looks at the lowest level of the food chain, which would be plants or plankton, and measures mercury in that compartment, one would see a relatively low concentration. And, then, at the next level up and the next level up and the next level up, one would see that, for the most part, the top dog in that food chain, the apex predator, which would be you or me, if we eat meat or fish, would have the highest level of mercury," Taylor said. He added that the older an organism is, the higher mercury concentrations are likely to be.

Mercury harms the nervous system. Taylor cited a well-known case of mercury poisoning in Minimata Bay, Japan. In that case, a chemical plant released organic forms of mercury into the bay killing and crippling people in the 1950s and 1960s.

"So we've had a number of projects that look at mercury in one [way] or another, exploring how it behaves in the environment and measuring concentrations of mercury in various



Deborah Perry and Dr. Robert Taylor in the TERL.

organisms, from animals at different levels of the food chain. So, to me, the [mercury] work is one of TERL's longrunning areas of interest," Taylor said.

Taylor used the expression "canary in a coal mine" to describe looking at mercury in wildlife. "You look at what these contaminants are doing to the wildlife and it gives you an idea of what your own exposure might be," he said.

Generally, four people work full-time in the lab and various veterinary graduate and undergraduate students work there part-time. Currently, the lab has only three full-time workers: Taylor; Dr. Gerald Bratton, senior professor; and Deborah Perry, research associate.

Taylor said he likes working on TERL projects because they are meaningful and interesting. "We like doing work that we consider to be meaningful and certainly protecting health, either human or environmental. It is an important priority today," he said.

"I don't know about retirement. I like what I do. I have two sons in the Marine Corps and one of them will retire before I do. ...I'll ask him how retirement is. I like what I do and I don't anticipate that is going to change," Taylor said.

College News

Texas A&M, Iowa State veterinary medicine have no 'beef' with taking the pigskin from the gridiron to the grill



Dr. Lisa Nolan, the Dr. Stephen G. Juelsgaard Dean of Veterinary Medicine at the Iowa State University, and Dr. Eleanor Green, the Carl B. King Dean of Veterinary Medicine at Texas A&M, exchanged meat gift baskets before the football game between the two rival schools.

In recognition of the final time that the Texas A&M Aggies and the Iowa State Cyclones met on the football field as conference rivals, Dean Eleanor Green, the Carl B. King Dean of Veterinary Medicine at the Texas A&M University College of Veterinary Medicine & Biomedical Sciences (CVM), and Dr. Lisa Nolan, the Dr. Stephen G. Juelsgaard Dean of Veterinary Medicine at the Iowa State University College of Veterinary Medicine, decided to take the rivalry from the gridiron to the grill with an exchange of specially packaged meats from their respective states.

"Not only is this an opportunity to highlight the final match-up in conference play between our two schools," Green said, "it's also a fun way to acknowledge each state's unique flavors and underscores the role that veterinary medicine plays in our nation's food supply. Iowa is as well known for its place in the pork industry as Texas is for beef production. These industries are important factors in each state's economy, and veterinarians trained at our institutions play a key role in ensuring the safety of pork and beef production."

As Texas A&M enters the SEC, Green will likely look for other opportunities to showcase the rivalry between SEC schools with colleges of veterinary medicine. There are eight from which to choose.



SAM HOUSTON STATE UNIVERSITY PRE-VET SOCIETY

Vet Med Ambassadors, Katrina Lindsay and Emily Ward, hosted members of the Sam Houston Pre-Vet Society, (from left) Emily Adams, Theresa Pitts, Jessica Daniel, Sarah Owen, Chantell Grimes, Stephanie White, Chanell Harvey, Ashley Spurlin, Daniel Smith, Melissa Lawson, Shaylai Turner, Ashley Weise, Sofia Caylor, and Kathryn Head.



UNIVERSITY OF HOUSTON PRE-VET SOCIETY

Alexandra Pruett, Vet Med Ambasador, hosted members of the University of Houston Pre-Vet Society (from left) Duc Nguyen, Mitchell Etzkin, Laura Potter, Alexandra Pruett, Lauren Orda, Jaclynn Jacquier, Susan Zamora, and Josephine Tang, on a tour of the VMTH.
College News

SCAVMA observes World Rabies Day



Dr. Cynthia Hoobler and 2010 alumna, Dr. Christina Guillory, supervised the 35 veterinary students as they performed physical exams and inoculated the animals against rabies.



"Aggie vet students enjoyed practicing their physical examination and history taking skills while interacting with pets and their owners from the community. SCAVMA is especially proud of performing an important public health service to our community by vaccinating over 100 dogs and cats for rabies," Kenneth Sieranski said.



Kenneth Sieranski, fourth year veterinary student and organizer for SCAVMA World Rabies Day, said more than 100 dogs and cats were vaccinated at the fifth annual SCAVMA Vaccination Clinic on Oct. 1, 2011.



The SCAVMA Vaccination Clinic also featured an outdoor art area where veterinary students helped children make crafts.

VET attends Emergency Preparedness Exercise

Members of the Veterinary Emergency Team (VET) participated in the 2012 Emergency Preparedness Exercise and Expo hosted by the Texas Division of Emergency Management. The event served as a kick-off to hurricane season in an effort to increase awareness of emergency preparedness. Members of the Texas Legislature, the Governor's Office, and the media attended to witness the tremendous resources Texas has pulled together to help those affected by a disaster. In addition, student members of the VET demonstrated the use of Second Life technology as part of the newly created required fourth-year rotation, Community Connections, which includes veterinary emergency response. Governor Rick Perry (center) visited the VET set-up to greet fellow Aggies and to thank them for their service and commitment to Texas. Pictured with Governor Perry (left to right) are members of the VET: Dr. Leslie Easterwood, Matthew Behrens, Angela Clendenin, Dr. William Moyer, Justin Robinson, Chad Pruess, Kim Campbell, Dr. Brandon Dominguez, Andy Woller, Rylee Wiseniski, C. J. Mabry, Daniel Hinojosa, Casey Cole, Michelle LaRue, Shawn Gilmore, and Dr. Wesley Bissett.



College News





























College News





Gentle Doctor Scholarship Luncheon March 24, 2012



















College News



CVM *Today* • Winter 2012 • **41**



CVM recognizes staff at 2012 awards ceremony

In August 2012, the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) honored 11 employees at its annual staff awards ceremony for their continued excellence and commitment to the college.

Dr. Jeffrey Musser from the Department of Veterinary Pathobiology welcomed attendees in his debut as emcee of the annual event.

The 2012 Pearl Enfield Staff Leadership Award, was presented to Terry Stiles, Administrative Director of the Veterinary Medical Teaching Hospital (VMTH). The 2012 CVM staff awards were presented to ten employees based on nominations by their colleagues and faculty. Recipients included VeLisa Bayer, graphic designer in Creative Technologies; Wade Friedeck, veterinary radiological technologist in the Diagnostic Imaging and Cancer Treatment Center; Jay Jaxtheimer, veterinary technician I in the Large Animal Hospital; Thomas Koenig, veterinary technician II in the Small Animal Hospital; Chaitali Mukherjee, research associate in Veterinary Integrative Biosciences; Amy Rapczyk, senior medical transcriptionist in the Veterinary Medical Teaching Hospital; Sarah Read, diagnostic lab supervisor in the Small Animal Hospital; Rachel

Sears, office associate in Large Animal Clinical Sciences; Destiny Taylor, veterinary technician III in the Veterinary Medical Park; and Cynthia Voelker, business coordinator III in Veterinary Pathobiology.

Dr. Eleanor M. Green, Carl B. King Dean of Veterinary Medicine, congratulated the recipients at the staff awards as well as giving her thanks to all staff members at the CVM. "Congratulations to all who earned awards this year," Green said. "People make programs, and the success that we all enjoy is due in large part to the contributions by our excellent staff," Green said. "Thanks to each and every one of you who makes us better every day and who contributes to an important CVM culture."

Each recipient received a plaque along with a monetary award.



Pictured left to right: Amy Rapczyk, Cynthia Voelker, Wade Friedeck, Chaitali Mukherjee, Sarah Read, Thomas Koenig, Jay Jaxtheimer, Destiny Taylor, VeLisa Bayer, Terry Stiles, and Rachel Sears

Communicators shine at Brazos Bravo Awards

Three employees of the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) were honored at the 26th annual Brazos Bravo Awards on April 25. The Brazos Bravo Awards are held annually by the Brazos Valley Chapter of the International



Victoria Dominguez, VeLisa Bayer, Jennie Lamb, Angela Clendenin, and Elizabeth Prichard-Jones coordinated the 2012 Brazos Bravo Awards competition and event. (Photo by Matt Zeringue)

Association of Business Communicators (IABC/Brazos Valley). Judges from other chapters score entries against communication standards, rather than against each other.

Angela Clendenin, director of communications and public relations at

the CVM, won an Award of Excellence in the Media Relations category for her work on the CVM's Veterinary Emergency Team response to the Bastrop Wildfires. VeLisa Ward Bayer, graphic designer at the CVM, won an Award of Merit in the Other Graphic Design category for her logo for the CVM's Paws to the Pavement Fun Run. Bayer and Jennie L. Lamb, graphic designer at the CVM, won an Award of

Excellence in the Publication Design category for their work on the Permanent University Fund (PUF) proposal for the CVM's new administration and classroom building.

Both the Bastrop Wildfire and PUF Proposal entries were entered into the next level of competition—the IABC Southern Region's Silver Quill Awards—and the proposal entry won an Award of Merit. Lamb won an Award of Merit in the 2011 Silver Quill Awards competition in the Interactive Media Design category for the "Heart Sounds" cardiology teaching module.

This year, communicators from the CVM took the lead role in planning and executing the Brazos Bravo Awards competition and event, as members of IABC/Brazos Valley. Lamb will continue for two more years as awards chair and member of the board of directors of the local chapter.

Faculty/Staff Focus

CVM College Hour honors 45 faculty members

The seats at the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) College Hour were full of faculty, students, and staff, as the Association of Former Students (AFS) and the CVM honored colleagues. Two professors received the annual AFS College-Level Teaching Awards on Oct. 7, 2011, because of their influence in the lives of their students both in and out of the classroom. The CVM College Hour also acknowledged 43 individuals who had made a large impact at the CVM.

The 2011 AFS College-Level Teaching Award recipients were Dr. Wesley Bissett, assistant professor in the Department of Veterinary Large Animal Clinical Sciences, and Dr. Timothy Cudd, professor in the Department of Veterinary Physiology & Pharmacology. The award recipients are chosen by a combination of faculty members and students. Each honoree receives a plaque and a stipend.

Bissett received his DVM in 1997 from the CVM, and in 2007 he completed a Ph.D. in veterinary microbiology from the CVM. His clinical focus is food animals, and he plays an important role in environmental health, epidemiology, and public health. He started and directs the Veterinary Emergency Team (VET). In this capacity, Bissett has created a veterinary emergency response team that deploys with the Texas Animal Health Commission to care for Texas Task Force 1's rescue dogs, to provide medical support to injured animals, and to help affected areas in times of crisis. He hopes to establish a national center for emergency response training for veterinarians, and there is the possibility of collaboration with the U.S. Department of Homeland Security in the future.

"Teaching has been the biggest learning experience for me," Bissett said. "My students give me the motivation to continue to create experiences that will help them become better veterinarians. I am very honored to have received this award, and I can thank my students for that."

Cudd, who passed away on Aug. 26, 2012, was with the CVM since 1994. He held a joint professional appointment with the Texas A&M University System Health Science Center in the Department of Medical Anatomy and Neurobiology. This appointment allowed him to expand his research on Fetal Alcohol Spectrum Disorders, which affect about one percent of children born in the United States. In 2004, Cudd was a CVM nominee



Kathryn Greenwade, vice president of The Association of Former Students, Dr. Timothy Cudd, Dr. Wesley Bissett, and Dr. Eleanor M. Green at College Hour.

for the TAMU Presidential Professor for Teaching Excellence Award.

"My teaching is influenced by my practice experience, where I learned how important it is to correctly understand how animals function to make diagnoses and to correctly institute and monitor therapy," Cudd said. "This experience created in me very high expectations for my students. Our college is very fortunate because of the tremendous ability and motivation of our students. Seeing these students develop into confident and capable veterinarians is very motivating."

Cudd added, "This is the first teaching award I have received where student input was a significant factor, which makes the award very gratifying."

Kathryn Greenwade, vice president for AFS, gave the first two awards of the ceremony. Dr. Eleanor M. Green, Carl B. King Dean of Veterinary Medicine, then noted the following recognitions:

Keynote Speaker for Freshman Convocation: Dr. Ian Tizard

Honorary Doctor of Science Degree, University of Guelph: Dr. Ian Tizard

University Level AFS Award for Graduate Mentoring: John Edwards

Kansas State University AAEP Alumnus of the Year: Dr. Terry Blanchard

AAVP-Merial Distinguished Pathologist: Dr. Tom Craig

2011-2012 Montague–Center for Teaching Excellence Scholars Program Award: Dr. Mike Criscitiello

Wilford S. Bailey Distinguished Alumnus of Auburn's College of Veterinary Medicine: Dr. William Klemm and Dr. Eleanor M. Green Professor for Teaching Excellence: Dr. Anton Hoffman Equine Practitioner of the Year: Dr. Peter Rakestraw Texas Veterinary Medical Association's 2011 Distinguished Career Achievement Award: Dr. Leon Russell John H. Milliff Faculty Award: Dr. Claudia Barton L.P. Jones Pathology Resident Memorial Award: Dr. Sharla Birch Veterinary Medical Teaching Hospital Clinical Service Award: Dr. Keith Chaffin Student Chapter of the American Association of Equine Practitioners Award: Dr. Michelle Coleman Texas Veterinary Medical Foundation Earl Waddell Memorial Award: Dr. Michelle Coleman Bridges Teaching and Service Award: Dr. Timothy Cudd Richard H. Davis Teaching Award: Dr. Tamy Frank-Cannon Pfizer Carl J. Norden Distinguished Teacher Award: Dr. Anton Hoffman Texas Agirlife Diversity Team Award for his project "Bridges to the Doctorate in Reproductive Leadership": Dr. Greg Johnson Sigma Xi Distinguished Lecturer: Dr. William Klemm TVMA Auxiliary Clinical Resident Award: Jonathon Lidbury Associate Dean of Faculties and AD-VANCE Administrative Fellow: Dr. Blanca

continued on page 45

Lupiani



Adams receives Lifetime of Excellence in Research Award from the AVMA

Dr. Garry Adams, professor in the Department of Veterinary Pathobiology at the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM), received the American Veterinary Medical Association Lifetime of Excellence in Research Award. The award is based on the lifetime achievements of Adams in research and the impact of his career on the veterinary and biomedical professions.

"This award is certainly a humbling honor," Adams said. "For me, this profession has offered unlimited opportunity to really invest and discover all new approaches to old problems. It is really the profession that I am indebted to for my career."

Adams' career began 44 years ago when he became an assistant professor in the Department of Veterinary Pathobiology at the CVM. Upon completion of his residency and Ph.D. in veterinary pathology, Adams led the Rockefeller Foundation and USAID sponsored research team in Colombia, South America. The team worked on developing diagnostic assays and vaccines for bovine anaplasmosis, babesiosis, and trypanosomiasis.

Adams returned to Texas A&M to teach pathology and continue his infectious disease research as a professor. He also served as associate dean for research at the CVM. "My role as an administrator was really to encourage both new and mature scientists to rekindle their passion to conduct research," Adams said. "I wanted to create an environment of discovery and creativity that would be contagious for students."

For more than 30 years, the research findings of Adams' team have helped improve the scientific basis of two of the largest animal health regulatory programs in



Dr. Garry Adams

"I love to

focus on complex scientific questions," Adams said.

As a leader in the profession, he provided expert testimony to the United States House Committee for Homeland Defense while serving on the National Institutes of Health Biodefense & Emerging Diseases Blue Ribbon Committee for Category B and C Pathogens, and the National Academy of Sciences Standing Committee for the Department of Defense Transformational Medical Technologies.

Adams currently leads the development and implementation of biodefense and emerging disease research initiatives. He has also served as the Scientific Leader for Biological Systems division of the Department of Homeland Security, sponsored by the National Center for Foreign Animal Disease and Zoonotic Disease Defense, as member of the American Veterinary Medical Association (AVMA) Council on Research from 2004-2010, as Commissioner for the Texas Forensic Science Commission from 2006-2012, and, currently, on the AVMA Council on Education.

In addition to his research and more than 235 original scientific publications in refereed journals, his passion is the education of students in the profession. He has chaired or co-chaired 54 Ph.D. graduate student advisory committees and served on 78 other M.S. and Ph.D. graduate student advisory committees. "The most important accomplishment for my career is the legacy that I will leave behind through my students. They will go on to solve problems of the future and take up scientific issues important to both animal and human health. The undergraduates, graduates, veterinary students, residents, and postdoctoral fellows reflect the work of all who have conducted research with me."

Adams' ongoing research is on salmonellosis, brucellosis, Johne's Disease, Rift Valley Fever, and African Swine Fever. "In my students I see the future of the profession and those who will replace the current faculty, so I'm passionate about preserving the future of the profession based on these research findings," he said. 🛊



Davidson named diplomate of the ACVSMR

Dr. Jackie Davidson, clinical professor in the Department of Veterinary Small Animal Clinical Sciences at Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM), recently became one of the first diplomates of the American College of Veterinary Sports Medicine and Rehabilitation (ACVSMR) through successful completion of a subject matter examination.

The ACVSMR is the newest veterinary specialty college approved by the American Veterinary Medical Association (AVMA), having been recognized by the AVMA two years ago. According to the ACVSMR website, the mission of the college is to advance the art and science of veterinary medicine "by promoting expertise in the structural, physiological, medical, and surgical needs of athletic animals and the restoration of normal form and function after injury or illness." Diplomates can become specialists in either canine or equine sports medicine or rehabilitation. Davidson received her certification in canine.

For candidates to become diplomates of the ACVSMR, they must complete a three-year residency, be published in the field, submit five case reports, and pass a two-day examination. Since the specialty is only two years old, there are only a few veterinarians in residencies now. Davidson, however, was one of the few individuals who qualified to take the exam without doing a residency. To be exempt from the residency portion of the process, applicants were required to submit their credentials for approval. Criteria that the board considered included having at least 10 years of work experience, having publications in the field, and being a faculty member actively involved in clinical and research aspects of veterinary sports medicine and rehabilitation. Once the credentials were approved, the selected applicants were allowed to go straight to the exam portion of the process. This residency exemption option will be available for only the next two years. This was the first year the certifying exam was offered.

Davidson said the exam was one of the hardest she has ever taken.

"I'm board-certified by the American College of Veterinary Surgeons and the difficulty level was comparable to that. You leave the exam and think, 'There is no way I passed that.' But I did pass," Davidson said.

Davidson prepared for the exam by reading and taking continuing education courses in the field. While reading a book or article related to the topic, Davidson would take notes which she later used to study for the exam.

"Then, the last six weeks before the exam, I had time off clinicals and all I did was sit and study for 12 hours a day," she added.

Davidson said she took the exams because she felt prepared by her experiences from working in postoperative rehabilitation for 10 years and her dedication to continuing education.

"I was working in this area, so I wanted to have the certification that

Speaker-Elect Faculty Senate: Dr. John Stallone Pfizer Animal Health Award for Research

Excellence: Dr. Jörg Steiner

Texas Veterinary Medical Association Research Award: Dr. Dickson Varner

Women's Faculty Network (WFN) Outstanding Mentoring Award: Dr. Jane Welsh

Second author on paper in Genome Research: Dr. James Cai

Visiting Professor Scholarship from the German Cancer Center Institute (DKFZ): Dr. Gloria Conover

Charter Diplomate, American College of Veterinary Microbiologists: Dr. Tom Craig



Dr. Jackie Davidson and Amadeus

represented this other special skill set and knowledge area that sets me apart," she said.

Davidson explained that her dream is to have a residency program at the CVM where residents of the program can receive training and become specialists in the field.

Davidson is currently a surgeon for the Small Animal Hospital, but also oversees the physical rehabilitation service.

"My job here is primarily as a surgeon, but I would like to build up the rehab portion of [the hospital]. That's kind of what I do now. Most of my time is spent actually in the surgery service, but I help oversee the rehab service at the same time," she said.

Davidson is the second member of the CVM family to become a diplomate. Dr. William Moyer, professor and special assistant to the dean, is a founding diplomate of the college.

TAMU Environmental Health & Safety's Safe Laboratory: Dr. Maris Esteve-Gassent

Upcoming Paper in Science: Drs. Bill Murphy, Jan Janecka, and Emma Teeling

Paper selected for the cover of the April 2011 issue of Molecular Endocrinology: Dr. Weston Porter

Newly Elected Chair, Institutional Animal Care Use Committee: Dr. John Stallone

Newly Elected Chair, Committee on Academic Freedom, Responsibility, and Tenure: Dr. Mark Westhusin

Contributed to the "Teaching for Tomorrow" series showcasing award-winning Texas A&M faculty members: Dr. Deb Zoran

continued from page 43

Texas Veterinary Medical Association Teaching Award: Dr. Glennon Mays

Texas Veterinary Medical Foundation Earl Waddell Memorial Award: Dr. Medora Pashmakova

VMTH Clinical Service Award: Dr. Adam Patterson

Bridges Teaching and Service Award: Dr. Lynn Ruoff

Bridges Teaching Award: Dr. Ashley Saunders

Richard H. Davis Teaching Award: Dr. Kathy Scott

Texas Veterinary Medical Association Teaching Award: Dr. Phillipa Sprake



Tizard presents 2011 Freshman Convocation keynote speech

Dr. Ian Tizard, Richard M. Schubot Professor of Exotic Bird Health in the Department of Veterinary Pathobiology at the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM), was the keynote speaker for the 2011 Freshman Convocation on August 28, 2011.

In the spirit of convocation, which was to motivate incoming freshmen to aspire to greatness inside and outside the classroom, Tizard emphasized that a university like Texas A&M is not an extension of high school, but rather a generator of new knowledge and discoveries. Tizard referred to his own research experience at Texas A&M University studying exotic bird diseases in the United States and the Amazon to help demonstrate the possibilities available to students. Ultimately, he said he hoped to instill a desire in each incoming freshman to use the tools and knowledge available at Texas A&M University to grow professionally and personally and to create a better future for all.

Tizard joined the Aggie family in 1982, as department head and professor in the Department of Veterinary Microbiology and Parasitiology at the CVM. In 1990, he moved to the Department of Veterinary Pathobiology as a professor of immunology. Then, in 1999, he took his current position as the Richard M. Schubot Professor of Exotic Bird Health.

A native of Northern Ireland, Tizard received his veterinary medicine degree from the University of Edinburgh diplomate in the American College of Veterinary Microbiologists.

Tizard has received many awards, including university-level teaching awards, and in 2006, he was the first recipient of the Outstanding Veterinary Microbiologist Award from

"His impressive record as a scholar, as well as his respected service as teacher and mentor to undergraduates, made him an ideal faculty keynote speaker to welcome the incoming freshman class to our community of learners and scholars."

~ Dr. Pamela Matthews

in 1965 and then received his Ph.D. from the University of Cambridge in 1969. After graduation, he pursued a fellowship at the University of Guelph in Ontario, Canada, where he then served as a professor until he moved to Texas. In 1996, he became an honorary



Dr. Eleanor M. Green, Dr. Ian Tizard, and Dr. Lesia Crumpton-Young, former associate provost for Undergraduate Studies, celebrate Dr. Tizard's Convocation keynote speech.

the American College of Veterinary Microbiologists.

In Tizard's nomination letter, Dr. Eleanor M. Green, Carl B. King Dean of Veterinary Medicine, noted "his ability to engage and inspire undergraduate students to achieve excellence, both within the classroom and beyond."

"The College of Veterinary Medicine & Biomedical Sciences is fortunate to be able to benefit richly from Dr. Tizard's remarkable skills as a teacher, as a mentor to undergraduate students, and also as a researcher," Green added.

After returning from Tizard's convocations speech, Green said, "Tizard was wonderful and...nailed the important point of the mutual enrichment of teaching and research at Texas A&M."

Dr. Pamela Matthews, vice provost for Academic Affairs and former associate provost for Undergraduate Studies, said she was delighted Tizard agreed to serve as the speaker.

"His impressive record as a scholar, as well as his respected service as teacher and mentor to undergraduates, made him an ideal faculty keynote speaker to welcome the incoming freshman class to our community of learners and scholars," Matthews said.

Faculty/Itaff Focus

Old deer, new tricks: Seabury applies sequencing to the white-tailed deer

Together with his research team, Dr. Christopher M. Seabury, assistant professor in the Department of Veterinary Pathobiology at the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM), has used next generation sequencing technologies to develop a working comparative knowledge of the white-tailed deer genome. Their paper, "Genome-Wide Polymorphism and Comparative Analyses in the White-tailed Deer (Odocoileus virginianus): A Model for Conservation Genomics," was recently published in PLoS ONE. It included a complete mitochondrial genome sequence assembly as well as a survey of nuclear genome sequences from both southern and northern white-tailed deer.

Before Seabury's publication, no large-scale genomics research had been done on this species, in part because of inadequate funding. Seabury and his team strongly believe in the importance of developing species-specific genomic tools and resources for the white-tailed deer, so such studies need not rely on technologies and resources borrowed from domestic cattle and sheep. Seabury's efforts are driven mainly by burgeoning wild and captive white-tailed deer populations in Texas and nationally, a strong economic impact surrounding white-tailed deer related to agribusiness, and a myriad



Dr. Christopher M. Seabury

of interesting biological characteristics, such as adaptability, fecundity, and differential susceptibility to disease.

Relevant to Seabury's recent study, a 2007 study by agricultural economists from Texas A&M determined that farmed white-tailed deer ranked sixth in agricultural products, bringing in \$652 million to the Texas economy, white-tailed deer as well as other important non-model species.

"It's not just the deer resources and analyses, but the method and workflow that can be utilized for any wildlife or minor species," Seabury said. "We literally took white-tailed deer genomics from a casual conversation with no tangible resources, to a sophisticated

"We at the TDA are excited about the potential Seabury's cutting-edge research has on our industry."

~ Dr. Dick Cain

with a national economic impact in excess of \$3 billion. White-tailed deer are distinctive in that they occur as both free ranging wildlife species and captively propagated agricultural species. Given the obvious economic impact of activities related to white-tailed deer, researchers determined that the species will be a major agricultural player for years to come.

"The research represented by this publication provides a cost-effective template for rapidly developing novel and sophisticated genomics research programs for species that don't receive a lot of funding...the so-called minor species," Seabury said.

Seabury's research also shows that one principal investigator and a small team of other scientists can make significant progress in historically underfunded species by developing tools, resources, and methodologies. The entire deer project was carried out by a single laboratory, with one computer in Seabury's office.

Seabury said he hopes this research will help in managing both free-ranging and captive populations of whitetailed deer, which should benefit both breeders and molecular ecologists. Importantly, his work can be applied to other species where funding is limited. As more information and tools become available for underfunded species, Seabury anticipates his work will help generate additional funding for the research program with thousands of deer-specific genetic markers and comparative genome annotation in a very swift fashion."

Seabury and his team enlisted help from Dr. Don Davis, the Texas Deer Association (TDA), and the Texas Parks and Wildlife Department, which provided access to DNA resources from both captive and free-ranging deer.

Dr. Dick Cain, representative of the TDA, said that TDA's relationship with Texas A&M has been longstanding.

"We at the TDA are excited about the potential Seabury's cutting-edge research has on our industry," Cain said. "His research will give a complete genetic map of white-tailed deer, will provide the opportunity to help with reproduction, will facilitate in eliminating transmissible diseases, and provide support in treatment of disease. It holds great promise, and as a tremendous contribution to our industry, it will change the way we breed deer in the future."

Seabury said, "This paper, which utilizes cutting-edge biotechnology and computing, will forever change how we approach genomic research with respect to historically underfunded species and make large-scale genomics possible for groups with very modest research budgets, including developing countries, thereby enabling sophisticated research in many new species."



Lupiani named Assoc. Dean of Faculties, ADVANCE Administrative Fellow

Dr. Blanca Lupiani, associate professor in the Department of Veterinary Pathobiology at the Texas A&M University College of Veterinary Medicine & Biomedical Sciences (CVM), became the Associate Dean of Faculties at Texas A&M University and was also named as an ADVANCE Administrative Fellow (AAF). The ADVANCE Administrative Fellowship is funded by the National Science Foundation (NSF) to provide university leadership opportunities for tenured women faculty members in the fields of science, technology, engineering, and mathematics.

"This fellowship, open to mostly associate and full professors, gives us the opportunity to learn about administration," Lupiani said. The number of professors chosen for these appointments varies depending on funds, and the administrator who hosts the fellow must write a paper which is reviewed by a committee. The AAF position is for one year, but it is anticipated that several such positions may eventually become permanent.

Lupiani works under the Interim Dean of Faculties and Associate Provost, Dr. Michael Benedik. Her position as the associate dean is a part-time appointment that she fulfills along with her teaching and research duties. Her work includes faculty grievances, mentoring programs, and tenure and promotion. "It's a big honor," she said. "I always care about faculty issues, and this opportunity will help me learn about helping them. So far it has been a great experience, and just knowing that you are helping feels great."

The fellows have many opportunities to interact with administrators and know more about their work. "We have had a couple of lunch sessions so far, and they have been very productive," she said. "Administrators do things very differently, and it's a different world altogether."

Lupiani said her experiences in the position so far have been interesting. She said that it is important for women to break the glass ceiling.

"Personally, I feel that women do more service than men do as they usually don't say no. Therefore, women spend less time writing grants and doing research," she said. "These activities make women take more time to move up the ranks, especially minority women."

"More women need to participate in administration," Lupiani said, "as they bring a different perspective." As an example, she cited Dr. Eleanor Green, Carl B. King Dean of Veterinary Medicine at the CVM; Dr. Kate Miller, dean of the College of Geosciences; and Dr. Karan Watson, provost and executive vice president for Academic Affairs.

Lupiani said that being outgoing and interacting with people was initially challenging to her, but she now enjoys the experience. "I never thought that



Dr. Blanca Lupiani

I would like administration," she said. "Now, I have a better understanding of what the different colleges do and how they contribute to the mission of the university. I hope I can bring some of this knowledge and ideas to the department and college level to make us even better."

Lupiani encourages more women to apply for the AAF program as she was given this opportunity even though no department in the veterinary medical school participates in the program. "Take a look at [the fellowship]. You may find it rewarding and fulfilling," she said. "It's a learning experience that can help you explore different directions."

Wigington named Director of Facilities

Sam Wigington, a longtime staff member of the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM), became director of facilities at the CVM in April 2011.

Wigington has been a loyal member of the CVM family since 1970, when he joined the veterinary pathobiology department as a technician. Three years later, he moved to the Veterinary Medical Teaching Hospital to become Large Animal Clinical Manager. He remained in this role until becoming director of facilities.

Dr. Eleanor Green, Carl B. King Dean of Veterinary Medicine said Wigington was the best candidate for this position and said she was delighted to announce his appointment. "He has been a mainstay of this college in each of his roles and has proven his commitment to the CVM and his ability to lead while at the CVM many times throughout his 41 years of service. I believe Sam's particular skills will make a significant contribution toward the success of this college," she said.

Wigington has been an instrumental part of many of the CVM's best-known successes. In 1995, when the Student Chapter of the American Association of Equine Practicioners was conceived, he played a pivotal role in helping the students navigate and coordinate the first wet lab. It now is the largest student-run wet lab in the



Zoran appears on CTE's 'Teaching for Tomorrow'

After winning the University Teaching Award from the Texas A&M Association of Former Students in 2011, Dr. Deb Zoran, associate professor at Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM), appeared on a segment of Teaching for Tomorrow. Teaching for Tomorrow, presented by the Texas A&M University Center for Teaching Excellence and the Division of Marketing & Communications, is a series of online videos. The series showcases a professor from each of the nine colleges interacting with students in teaching situations inside and outside the classroom.

Zoran's video, which premiered May 31, 2011, featured her discussing a diabetic cat with students in rounds instead of in a typical classroom style lecture setting.



Dr. Deb Zoran

"Since they had a lot of different people with different teaching styles, I said, 'Quite frankly, I'm not that unique in the classroom, but I do enjoy the small-group teaching that we do in our rounds session with the fourth year students. So that is what we selected for our video," Zoran said.

Zoran said it was a huge honor to be selected from her department and college because there are so many excellent teachers in the college as a whole. "The College of Veterinary Medicine & Biomedical Sciences is blessed with many highly honored teachers, so for me to be singled out, first and foremost, is very humbling," she said.

Zoran credits her teaching style to the many mentors she observed over the years and to her mother, a grade school teacher.

"I have been blessed to have many people I could learn from as role models for many different teaching styles, and this has helped shape me. It is to those people, I owe this award," Zoran said.

continued from page 48

nation, with attendees representing 23 veterinary colleges around the nation last year alone. Wigington is a strong supporter of and volunteer for the annual student-run Open House which started in 1993 and brought in 13,000 visitors from across the state in 2011. He was a key player in maintaining the Large Animal Hospital in 2005, when the state transformed it into a SURGE hospital to house and treat human patients due to the influx of sick patients evacuated from the path of Hurricane Rita. This experience initiated his interest in emergency response, and since then he has helped develop the evacuation plans for Brazos County. One of his most recent accomplishments came when he and several other members of the CVM developed the Veterinary Emergency Team, a team of first responders for disaster sites in Texas, to ensure the safety and health of animals involved.



Sam Wigington

"My history with the CVM is long and deep," Wigington said. "I have seen the CVM transform from an all-male college to almost 75 percent of the college population represented by females. I have interacted with over 5,000 graduating veterinarians who have become leaders in the veterinary profession around the state, nation, and world. I have also worked with thousands of veterinarians throughout the state and beyond for continuing education efforts during my years in the Large Animal Hospital. I have seen a lot of changes and growth in the past 41 years, and I feel this will give me a boost to keep the innovations coming at the CVM as the trends continue to change in veterinary medicine, as they do in all industries."

As the director of facilities, Wigington reports to Green and helps her formulate and implement facility policies and procedures, establish performance goals and measures to evaluate the success of facilities maintenance and planning, control expenses for facilities and equipment, and lead strategic planning for facilities and major equipment purchases.

"I have high expectations for this position as I do for the CVM itself," Wigington said. "The CVM continues to be one of the frontrunners in veterinary education in the nation, but I want the CVM to be the premier learning facility in all aspects of veterinary education in the nation. I have many ideas, and I believe we have the gumption to back them up. I feel that with the great knowledge that our faculty, staff, and students provide, we have the tools to become the predominant learning facility in the nation."

Wigington is currently working with Green and Heather Quiram, assistant to the director of facilities, on expanding the Small Animal Hospital and building the new teaching facility.



Researchers receive more than \$14 million from the USDA for cattle research

The U.S. Department of Agriculture National Institute of Food and Agriculture has awarded two major grants, totaling more than \$14 million, to investigators at Texas A&M University (TAMU) for conducting research on Bovine Respiratory Disease (BRD) and feed efficiency. These topics are of vital economic significance to the cattle industry and are priority areas for improving cattle health and production. Researchers at the TAMU College of Veterinary Medicine & Biomedical Sciences (CVM) are leading the research on the \$9.2 million BRD project and are key participants in the University of Missouri led \$5 million project aimed at improving feed efficiency in cattle.

Dr. James Womack, W.P. Luse Endowed & Distinguished Professor at the CVM, is the project director for the five-year grant to help reduce the incidence of BRD in beef and dairy cattle. BRD is the leading cause of death from disease in beef and dairy cattle, resulting in annual losses of more than \$690 million nationally.

With this grant, researchers hope to reduce the incidence of BRD by identifying genetic factors that provide resistance to pathogens that cause the disease. Therefore, Womack and his team are working with commercial feedlots to analyze the DNA of more than 6,000 cattle. They, then, will develop selective breeding programs based on their research, which will improve animal health management strategies and provide an understanding of the biological interactions between the host and the pathogens.

In addition to supporting research, this grant helps to fund undergraduate, veterinary, and graduate education. It also facilitates the translation of research findings into practical application in feedlots and dairy farms through an extension component.

"We have assembled an extremely strong team of research scientists, educators, and extension specialists to combat a serious and complex animal health issue with modern genomic technology," Womack said. "We have known for years that individual cattle vary in their response to the pathogens responsible for BRD and that much of this variation is genetic. We now have the genomic tools to identify the basis for this variation at the DNA level and to utilize this information in selective breeding programs and animal health management. This project will be a model for the power of cooperation of major research and educational institutions and animal industries to make basic scientific discoveries, to train professionals in the application of these discoveries, and to translate new knowledge into economic gain along with improved animal health and welfare."

Dr. Eleanor Green, Carl B. King Dean of Veterinary Medicine, is excited about the research. "We are elated to have such innovative investigators who have afforded the opportunity for such a prominent grant to be housed at the College of Veterinary Medicine & Bio-

"The powerful collaborations brought together through this grant will revolutionize the beef and dairy industries by saving many animals and markedly increasing production."

~ Dr. Eleanor Green



Dr. James Womack

medical Sciences," she said. "The powerful collaborations brought together through this grant will revolutionize the beef and dairy industries by saving many animals and markedly increasing production."

Dr. Bhanu Chowdhary, Associate Dean for Research & Graduate Studies at the CVM, said he is extremely proud of the achievement. "This national funding is a clear recognition of the outstanding animal genomics program at the CVM, which is comprised of a National Academy of Sciences member and several internationally renowned scientists," he said. "Their contributions will bring about lasting improvement in two areas of economic importance to the cattle industry—health and production."

Although TAMU is the lead institution on this project, the team includes scientists and educators from the University of Missouri, Washington State University, the University of California-Davis, New Mexico State University, Colorado State University, the University of Wisconsin, and the USDA ARS unit in Beltsville, MD. Participants from TAMU include Dr. Noah Cohen, Dr. Loren Skow, Dr. Lawrence Falconer, Dr. Christopher Seabury, Dr. Scott



Morris Animal Foundation supports researchers with \$111,966

Morris Animal Foundation recently awarded more than \$100,000 to two faculty members at the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) to further their research of animal health. Dr. Heather Wilson-Robles, assistant professor at the CVM, was awarded \$47,749 over two years for her work on the "Evaluation of Cycoplamine as Therapy for Canine Bone Cancer." Dr. Noah Cohen, professor at the CVM, was awarded \$64,217 over two years for his research on "Recognizing Age-Related Differences in Immune Response of Foals."

Wilson-Robles' research highlights the need to study cancer-initiating cells, otherwise known as cancer stem cells, in dogs as bone cancer is prevalent in canines and the disease is genetically identical to humans. Wilson-Robles said she hopes her research helps to identify and isolate the tumor-ini-



Dr. Heather Wilson-Robles

continued from page 50

Dindot, and Dr. Alan Dabney. The genomics program at TAMU is further supported by AgriLife Research.

The second grant is led by Dr. Jerry Taylor, Wurdack Chair in Animal Genomics at the University of Missouri College of Agriculture, Food and Natural Resources. The research, worth \$5 million, studies feed efficiency in cattle. With this grant, researchers will genotype 8,000 cattle and determine how genetic differences affect feed intake and efficiency. They will also study specific bacteria and microbes tiating cells and eradicate them using drug therapy in dogs. Until now there has been little research in veterinary medicine regarding cancer stem cells. Her team consists of Sabina Sheppard, research assistant at the CVM, and Dr. Catherine Pfent, anatomic pathology resident at the CVM.

"Our research methods can best be described by the beehive metaphor," Wilson-Robles said. "The cancer stem cell is the queen bee, and her drones are similar to the regular cancer cells. Without the presence of the queen bee the hive does not prosper and will eventually die off. Our hopes are to find a way to target the cancer stem cells so the cancer does not succeed."

Cohen's research focuses on why neutrophils, some of the major white blood cells, of newborn foals are less capable of functioning than neutrophils of older foals. Neutrophils play a critical role in protecting newborns against invading bacteria; bacterial infections are leading causes of disease and death in foals. Cohen and his research team are working to decipher which genes and their regulatory elements might explain the difference between the function of neutrophils of newborn and older foals. Dr. Scott Dindot, assistant professor at the CVM; Kyle Kuskie, veterinary technician at the CVM; and Dr. Jessica Nerren, associate research scientist at the CVM, are collaborators on this project.

"We hope to be able to better understand which biological pathways and cellular processes reduce the function of foal neutrophils so that we can devise means to improve foals immunity

that reside in the cattle's stomach and aid in food digestion.

"If we can identify and selectively breed the animals that have the best combination of genes for producing high-quality beef with the least amount of grain, their offspring could reduce environmental impacts and save producers millions of dollars," Taylor said. "Limiting the amount of feed used to produce beef could open farmland for other important crops, such as corn for ethanol, which could decrease dependency on fossil fuels and foreign oil."

Dr. Christopher Seabury, assistant professor in animal genomics at the



Dr. Noah Cohen

at birth. This information will help us to better protect them against the bacterial infections that are their leading causes of disease and death," Cohen said. "The Equine Infectious Disease Laboratory at Texas A&M University is dedicated to the control and prevention of infectious disease of horses and foals, and this grant will help us to continue that goal." Moreover, the findings of this study are likely to be relevant to neonates of other species, including human beings.

Morris Animal Foundation helps support research to prevent, diagnose, treat, and cure diseases in companion animals, horses, and wildlife. Recipients of the awards are selected through a rigorous review process carried out by Morris Animal Foundation's scientific advisory boards. Since 1973, Morris Animal Foundation has funded 67 studies at Texas A&M.

CVM and a key participant from TAMU in the feed efficiency project, said, "This project undoubtedly has the potential for major scientific advances enabling more efficient and cost-effective cattle production. I'm very excited about the opportunities it will offer to the beef industry."

The \$75 billion beef and dairy industry contributes much to the national economy, especially the rural economy. The two grants from USDA-NIFA provide tools to improve cattle health and production and increase profitability in the cattle industry.

Faculty/Haff Focus

Researchers greatly improve evolutionary tree of life for mammals

An international research team led by researchers at the Texas A&M University College of Veterinary Medicine & Biomedical Sciences (CVM) and University of California, Riverside (UCR) released for the first time a large, robust DNA matrix that represents 99 percent of mammalian families and covers the deepest divergences among all living mammals.

"Our study, a collaboration led by researchers at Texas A&M University and the University of California, Riverside, together with members of several international institutions, represents the culmination of a five-year project aimed at using large genetic datasets to better understand the evolutionary history of mammalian families and genera," said William Murphy, associate professor in the Department of Veterinary Integrative Biosciences at the CVM, who co-led the research project with Mark Springer, professor of biology at UCR. "Our findings now clarify how mammals should be properly classified, and [this research] provides us with a better understanding of the environmental and ecological basis for why mammals diversify, and a proper comparative and temporal framework for understanding the genetic changes that have led to their remarkable diversity in size and form."

Phylogeny is the history of organismal lineages as they change through



Dr. William Murphy

time. A vast evolutionary tree, called the Tree of Life, represents the phylogeny of organisms, the genealogical relationships of all living things.

Organisms are biologically classified according to a hierarchical system with seven main taxonomic ranks: kingdom, phylum or division, class, order, family, genus, and species. For example, humans are known taxonomically as *Homo sapiens*. Their genus is Homo, the family is Hominidae, the order is Primates, and the class is Mammalia.

"To estimate when different mammal groups split, we used a 'relaxed clock' approach, which allows rates of DNA to change across the tree of mammals," Murphy said. "To produce reliable estimates requires that we have access to a large collection of well-established fossil constraints to estimate rates of changes on different branches of the tree, and then we can convert the tree of relationships into a time tree, in which the branches are scaled in proportion to time. This time tree allows us to examine when different groups of mammals originated and diversified, and then associate factors which might have been responsible for these diversification events."

The study results appeared in the Sept. 22, 2011, issue of *Science Express*.

"Our phylogeny, underpinned by a large number of genes, sets the stage for us to understand how the different mammalian species are related to each other," Springer said. "That will help us understand when these species diverged from each other. It will allow us to look for taxonomic rates of increase or decrease over time in different groups in various parts of the world so that we can understand these diversification rate changes in relationship to important events in Earth's history - such as the diversification of flowering plants and changes associated with climatic events. Researchers routinely make use of phylogenies in diverse fields such as ecology, physiology, and biogeography, and the new phylogeny for mammalian families provides a more accurate framework for these studies."

"When you understand how taxa are related to each other," Springer added, "you can start to understand which changes at the genome level underpin key morphological changes associated with, say, flight and echolocation in bats or loss of teeth in toothless mammals. In other words, you can pinpoint key molecular changes that are associated with key morphological changes. This would be extremely difficult, if not altogether impossible, without the kind of robust molecular phylogeny we have developed."

The research team looked for spikes in the diversification history of mammals and used an algorithm to determine whether the rate of diversification was constant over time or whether there were distinct pulses of rate increases or decreases.

"For example," Murphy said, "we observed a distinct pulse of diversification when most of the mammalian orders began splitting from one another, near the end of the Cretaceous Terrestrial Revolutions, when flowering plants and insects diversified, and also at a time when sea levels changed and continental boundaries became reorganized."

Murphy and colleagues also detected a second spike in the diversification history of mammals at the end of the Cretaceous—65.5 million years ago, when dinosaurs, other large terrestrial vertebrates, and many marine organisms went extinct, opening up a vast ecological space.

"We also found evidence that the Cretaceous-Tertiary Mass extinction, which occurred 65.5 million years ago and was responsible for the demise of the dinosaurs, other large terrestrial vertebrates, and many marine organisms, also promoted diversification of mammals into their larger and more specialized modern forms by filling the ecological void left by the organisms that went extinct," Murphy said.

The research team also reported that their results contradict the "delayed rise of present-day mammals" hypothesis. According to this hypothesis, introduced by a team of scientists in a 2007 research paper, the ancestors of living mammals underwent a pulse of diversification around 50 million years ago, possibly in response to the extinction of archaic mammals that went extinct at the end of the Paleocene (around 56 million years ago). The earlier extinction event around 65.5 million years ago, which resulted in the

Faculty/Itaff Focus

Dr. Noah Cohen delivers 2011 Frank J. Milne State-of-the-Art Lecture at AAEP Conference

Veterinary research methods are not limited to the laboratory but are used in clinical veterinary practice every day. That is the point that Dr. Noah Cohen, professor of Large Animal Clinical Sciences at the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM), shared with fellow veterinarians and veterinary technicians attending the 2011 Frank J. Milne State-of-the-Art Lecture. The lecture was given at the 57th Annual American Association of Equine Practitioners (AAEP) Convention in November 2011.

Cohen, an expert in epidemiology and equine infectious disease, has presented many lectures nationally and internationally on applying principles of epidemiology—the branch of medical science concerned with the occurrence, transmission, and control of diseases—to specific areas of equine practice, including racing injuries, gastrointestinal disease, evidence-based medicine, and infectious disease.

"When most practitioners think about epidemiology and research, they have the traditional view that epidemiology is about public health and outbreak investigations," Cohen said. "However, using methods from this scientific discipline is something that practitioners strive to do every day in their practice."

Veterinarians use the principles of evidence-based medicine when they determine a particular diagnosis or treatment plan for their client. The scientific foundation for evidence-based medicine is epidemiology.

"As a veterinarian," Cohen said, "the most important information I have in the best treatment plan for a particular disease comes from studying cases with the same disease. As an example, if I see a patient with equine pneumonia, everything I know about the best treatments comes from studying how effective various treatment options have worked or not worked in other

continued from page 52

demise of the dinosaurs, had no effect on the diversification of the ancestors of extant mammals, according to the 2007 research paper. patients with equine pneumonia."

Additionally, Cohen addressed the concept of cumulative learning.

"At every turn, every day," Cohen said, "what I learn is based on what I have learned from other patients. Examinations are given additional context by what we have seen in previous cases. So while we may actually be examining an individual patient in a clinic, how a veterinarian proceeds with diagnosing and treating the disease or injury is based on a population approach."

Cohen pointed out that much of what is practiced in veterinary medicine came from conclusions drawn from research. Therefore, it is important for veterinarians to have a healthy appreciation for epidemiological research methods—to understand the strengths and limitations of studies, so that they can have confidence in the conclusions they choose to incorporate into their practice.

"I was truly honored to have the opportunity to address the members of the AAEP at the convention this year," Cohen said. "While it was my hope to share something meaningful with them and give them a new appreciation for interpreting research findings and putting them into practice, I found that I, too, was able to learn from this experience."

In preparing for his presentation, Cohen enlisted assistance from two

"Our results contradict findings of an earlier study published in 2007 which claimed the rise of modern mammals was somehow delayed until around 50 million years ago, presumably in response to the extinction of a



Dr. Noah Cohen

colleagues: fellow veterinarians, Bo Brock, a practitioner in Lamesa, Texas, and Jim Moore, a faculty member at the University of Georgia College of Veterinary Medicine.

"Both of these gentlemen helped me to develop my presentation by suggesting content and helping with some illustrative graphic elements," Cohen said. "I found that they inspired me, encouraged me, and challenged me with my presentation skills. It was a learning experience for me about teaching. I learned new presentation techniques in preparing for this lecture that will benefit my students in the classroom."

Cohen returned to the CVM to work on a study investigating laminitis, an inflammation of horses' hooves. The study is funded by the AAEP Foundation.

group of archaic mammals. Our study finds no evidence for such a delay, and validates a role for the Cretaceous-Tertiary Mass extinction in the diversification of modern orders of mammals," Murphy said.



Janecka works to save the ocelot population in Texas

The ocelot (Leopardus pardalis), native to Texas, Mexico, Central America, and South America, is similar in appearance to a domestic cat but is slightly larger and has a beautiful coat resembling that of the leopard or jaguar. During the 20th century, people precipitated the ocelot's decline in Texas by colonizing and removing their dense thorn-shrub habitat and taking advantage of their unique coat in the fur trade. This led to eradication of ocelots in many areas where they were once common. Without conservation efforts, the ocelot may become extinct in its native Texas habitat.

Dr. Jan Janecka, a research assistant professor at the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) and strong supporter of conservation efforts for many exotic cats, recently published a paper with the help of other researchers and scientists to understand the genetic diversity of ocelots and the reasons for their slow disappearance from Texas. The project generated a wealth of knowledge on the Texas ocelot population that will be incorporated into conservation initiatives designed to help species recovery and lead to eventual ocelot population growth in their native environment.



Dr. Jan Janecka

"There are only two ocelot populations left in Texas," Janecka said. "Over-harvest of the species and removal of habitat in the 1900s led to major population reductions. Today, ocelots in Texas are restricted to the Lower Rio Grande Valley, and less than 80 remain between the two different populations, although there may be a few additional cats in nearby areas." The small population size, the inability of ocelots to move through the fragmented habitat, and loss of genetic diversity in Texas all indicate that an initiative to help save the ocelots from extinction in Texas is imperative.

The major players most important for ocelot conservation are the landowners whose ranches are capable of supporting ocelot populations.

"I have formed a group of ranchers who are interested in learning about ocelot ecology or surveying for ocelots on their property. The key to ocelot recovery will be private landowners who own most of the land occupied by ocelots."

~Dr. Michael Tewes

Janecka added, "Ocelots prefer a dense brush habitat, and they cannot move through large open land separating brush patches because of their shy nature. Dr. Michael Tewes, [coordinator of the Feline Research Center and regents professor at the Caesar Kleberg Wildlife Research Institute at Texas A&M University-Kingsville], and his students and colleagues have radio-collared ocelots for over 30 years to understand their ecology, behavior, and dispersal patterns. Over this period, there has not been a single observed successful migration between the two populations in Texas. This is consistent with the genetic data that revealed complete isolation of these areas. This complete isolation results in genetic erosion and inbreeding depression that compromises persistence of the ocelots."

Janecka's research was the result of several collaborations between different institutions including Texas A&M University (Janecka, Rodney Honeycutt, William Murphy, and Brian Davis), Caesar Kleberg Wildlife Research Institute, Texas A&M University–Kingsville (Mike Tewes, Janecka, Aaron Haines, Arturo Caso, and David Shindle), and the US Fish and Wildlife Service (Linda Laack). "Credibility is the key to working with the ranchers and landowners of south Texas," Tewes said. "I have spent over 30 years cultivating dozens of relationships with these critical landowners, and they realize that I am able to maintain confidentiality with them and the role they play for ocelot management."

"Jan and his lab team work with Dr. Randy DeYoung, [assistant professor and research scientist with the Feline Research Center at the Caesar Kleberg Wildlife Research Institute at Texas A&M University-Kingsville], and our molecular genetics lab to produce cutting-edge results and information critical in planning ocelot recovery," Tewes said. "We also provide the field research on ocelots and interface with the various ranchers, while Jan contributes the key analyses and interpretations of data that identify the directions we need to pursue in ocelot management."

The research team is developing partnerships with government agencies including Texas Parks and Wildlife and the U.S. Fish and Wildlife Service to provide incentives for landowners to support conservation efforts. The team is also working closely with ranches to



Dr. Sharman Hoppes selected as president-elect of AAV

Dr. Sharman Hoppes, associate professor at the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM), was recently selected as the president-elect of the Association of Avian Veterinarians (AAV). Her tenure as president will be three years.

Hoppes joined the CVM in 2006 in the Zoological Medicine Department of Small Animal Medicine where her research focuses on Avian Bornavirus, proventricular dilation disease, and behavior, training, and enrichment of exotic pets and birds.

The AAV, established in 1980, has a membership composed of veterinarians from private practices, zoos, universities and industry, as well as allied personnel, technicians, and students. Its mission is to advance and promote avian medicine and stewardship throughout the veterinary profession. The AAV is one of the American Veterinary Medical Association's (AVMA)



Dr. Hoppes with Angel

continued from page 54

help initiate an education outreach program and an action plan for ocelot management.

"Ocelot conservation is occurring on several fronts," Tewes said. "I have formed a group of ranchers who are interested in learning about ocelot ecology or surveying for ocelots on their property. The key to ocelot recovery will be private landowners who own most of the land occupied by major resources on bird-related issues and educates veterinarians on avian care.

Originally, Hoppes did not see herself specializing in a particular field of veterinary medicine. "When I first started my veterinary career, I wanted to treat everything. But in my first practice, we saw dogs, cats, birds, and exotic pets, and birds were the most challenging because no one knew much about them at the time," Hoppes said. "If they needed surgery, we couldn't really find anyone unless we sent clients out of state."

Hoppes said the AAV began as a dialogue between veterinarians who treated birds in mixed practices but needed more information on specific avian medical cases. "There was simply very little information out there on avian veterinary care. Everyone was struggling," Hoppes said. Now the AAV is one of the leading exotic organizations, and one of two with representation within the AVMA.

Hoppes received her DVM from Oklahoma State University in 1993. She attended her first AAV meeting in 1995, and completed an avian medicine and surgical residency in 1999, at North Carolina State University. Perhaps one of the most pivotal moments in becoming an avian veterinarian was when Hopes became a bird owner herself.

"I adopted a cockatoo named Angel from a client who couldn't take care of her anymore. The owner simply couldn't handle her," Hoppes said. "Adopting Angel completely changed my life and inspired me to be more involved with avian research and education." Hoppes said she believes that most difficulties with birds originate with behavioral issues, much like those

ocelots. We continue to document new ranches where ocelots occur, a process fundamental to their recovery. And we are monitoring their population size and change over different conditions such as drought. Eventually, we believe it is important to augment the existing ocelot populations in Texas in order to alleviate the problems associated with low genetic diversity identified in our collaborative research."

This research indicates that the extinction rates in Texas have exceeded



Dr. Sharman Hoppes

experienced between Angel and her first owner. Hoppes attributes this difficulty to the intelligence of the animals; that, combined with the general lack of education in avian behavior and medicine, makes veterinary care for birds challenging. Angel inspired Hoppes to become residency-trained and boarded in avian medicine, which led to her being an active member in AAV.

Hoppes' first position within the AAV was as chair of the Avian Rescue and Sanctuary Ad Hoc Committee. She later served on the Board of Directors. "I am so excited to serve as presidentelect. Over the last six to seven years, I really hoped I might reach this position, and I am so excited about what I can contribute to the association," Hoppes said.

the rate of colonization, as populations have become reduced in abundance and distribution. Janecka and his team understand that the ocelot is an important part of the natural history of Texas. Janecka hopes that, with the research of his team, the work of the Caesar Kleberg Wildlife Research Institute, and the cooperation of the landowners, the ocelot's majestic beauty will be visible for Texas generations to come.

Faculty/Haff Focus

Texas A&M researchers unlock Quarter Horse genome

The American Quarter Horse originated in the early colonial era and is now one of the most popular breeds in the nation. The journal *BMC Genomics* recently published a collaborative study by researchers at the Texas A&M University College of Veterinary Medicine & Biomedical Sciences (CVM), Texas A&M College of Agriculture and Life Sciences, and the AgriLife Genomics and Bioinformatics Center that sequenced the first Quarter Horse genome—unlocking the secrets of what makes this breed so distinctive.

Genome sequencing is not a new science, but advances in sequencing technology, often referred to as nextgeneration sequencing, have made it easier and less expensive to sequence the genome of an individual, which then can be analyzed for clues causing genetic disorders and distinctive traits. The Texas A&M Quarter Horse is the first horse to be sequenced using nextgeneration sequencing technology.

"Genome sequencing aids our study of normal and abnormal genetic variation," said Dr. Scott Dindot, assistant professor in the Department of Veterinary Pathobiology at the CVM. "This project is important because it is a start toward understanding what genetic factors make breeds unique, and what mutations may play a role in preventing or diagnosing disease.

Dr. Noah Cohen, professor in the Department of Large Animal Clinical Sciences at the CVM and collaborator in the study, underscored the importance of the role genetic variation plays in disease.

"This study represents a valuable contribution to our understanding of genetic variation in horses," Cohen said, "including efforts to study the relationship between genetic variation and susceptibility to important diseases in Quarter Horses and other breeds."

The first horse genome to be sequenced and assembled, that of a Thoroughbred mare, was completed by a large international consortium. This reference assembly was used to map the Quarter Horse genome and to identify differences in genetic information between the two horses. The sequence data from the project was made available publicly for researchers interested in equine genetics.

"The horse used in the study, a mare named Sugar, is the descendant of key foundation sires in the Quarter Horse



Dr. Scott Dindot with Sugar, the horse used to sequence the American Quarter Horse genome.

breed," Dindot said. "We were able to identify several genetic variants in this mare, both good and bad, known to be common among Quarter Horses. Results from this study have increased our knowledge of genetic variation in

"Results from this study have increased our knowledge of genetic variation in horses three- to four-fold..."

~ Dr. Scott Dindot

horses three- to four-fold, and proved that through collaborations such as this, we can one day apply this stateof-the-art technology to identify and possibly to manage genetic disorders not only in horses but also in other species."

The genome sequence of a Quarter Horse has the potential to have a tremendous impact on the equine industry, as the American Quarter Horse Association represents the largest breed registry in the United States. The information from this study may lead to improvements in performance in horses, and facilitate the management of horse health everywhere.

"Many diseases and syndromes are the result of genetic variation," said Dr. Jason Sawyer, Texas AgriLife Research scientist and associate professor of animal science at the CVM. "Perhaps more importantly, the ability to combat infectious diseases may be greatly impacted by the underlying genome and the variation that arises during recombination. This study has identified areas of variation that may play a role in the health and disease resistance of horses. While more research must be done to specifically identify desirable and beneficial variants, this study has set the stage to enable those future studies."

Funding for the study was provided by the G. Willard and Ginger Pool Equine Teaching and Research Endowment, the Link Equine Research Endowment, Texas A&M AgriLife Research, the Texas A&M Department of Animal Science, and the Department of Veterinary Pathobiology.

Faculty/ Staff Focus

Phillips honored as University Distinguished Professor

One of the five Texas A&M University faculty members appointed a university distinguished professor was Dr. Timothy D. Philips, professor of veterinary integrative biosciences at the College of Veterinary Medicine & Biomedical Sciences (CVM). Effective Sept. 1, this permanently bestowed honor is awarded to a maximum of five faculty members each year.

Philips is a Texas AgriLife Senior Faculty Fellow and also holds the Chester Reed Endowed Chair in Toxicology. He earned a B.S. from Mississippi State University and an M.S. and Ph.D. from the University of Southern Mississippi.

Phillips joined the faculty of Texas A&M University in 1979. He also has held adjunct positions with The University of Texas Medical Branch in Galveston, Texas, and Texas Tech University in Lubbock, Texas. Since 2009, he has held a joint appointment with The Texas A&M University System Health Science Center School of Rural Public Health.

While at Texas A&M, he has dedicated himself to research with the potential to improve the health of infants and children in Africa, teaching what he has learned, and engaging in outreach that has resulted in meaningful relationships with people all over the world. Phillips' major achievement is the development of a novel, easily dis-

seminated, inexpensive way to remediate aflatoxin in staple foods such as corn, peanuts, and rice, and thus prevent diseases associated with aflatoxicosis, including liver disease, liver cancer, malnutrition, and compromised immunity to infectious organisms. Aflatoxins are naturally occurring mycotoxins that are among the most toxic and carcinogenic substances known.

Other 2012 recipients of this honor include Dr. Paul S. Cremer, professor of chemistry, College of Science; Dr. Christopher Layne, professor, George Bush School of Government and Public Service; Dr. David M. Lee, professor of physics, College of Science; and Dr. Guoyao Wu, professor of animal science, College of Agriculture and Life Sciences.

The 2012 university distinguished professor honorees join a select group of 64 current faculty members that hold



Dr. Timothy D. Phillips

the prestigious title. This designation denotes a faculty member who is rec-

ognized as being in the top 2 percent of active researchers in his or her field by peers in top-ranked academic institutions throughout the world.

"University Distinguished Professors represent the highest level of achievement for our faculty," said Dr. Karan L. Watson, provost and executive vice president for academic affairs. "Their scholarship will have a lasting impact on their respective fields of study for many generations to come, and it demonstrates to the world the high quality of scholarship underway at Texas A&M University."

The Texas A&M Foundation provides funding for the annual \$5,000 bursary that each new distinguished professor will receive for the next five years.



Remediating aflatoxin in staple foods, such as corn, in Africa is Phillips' primary research focus.



Texas A&M, MD Anderson team up to treat canine non-Hodgkin Lymphoma

A new immunotherapy for companion dogs with advanced-stage non-Hodgkin Lymphoma (NHL) has been shown to improve survival while maintaining quality of life, according to a study reported in the journal *Scientific Reports*. The study resulted from a collaboration between the University of Texas MD Anderson Children's Cancer Hospital in Houston and the Texas A&M University College of Veterinary Medicine & Biomedical Sciences (CVM).

Using a T-cell therapy developed at MD Anderson Children's Cancer Hospital, veterinarians from Texas A&M saw a nearly four-fold increase in tumor-free survival compared to survival in dogs who received only chemotherapy. The median tumorfree survival for the Texas-based dogs increased by nearly nine months, which is roughly equivalent to seven years in a human life.

NHL is one of the most common cancers in dogs, according to Texas A&M veterinarians. Although standard chemotherapy can achieve remission, it is rarely curative, with the two-year survival rate remaining less than 20 percent. Therefore, when investigators from MD Anderson and Texas A&M met, they explored the feasibility



Dr. Heather Wilson-Robles

of administering T-cells to improve survival.

"We followed the same rigid standards that we practice for human clinical trials at MD Anderson to ensure the safety of each dog," said Laurence Cooper, M.D., Ph.D., professor and section chief of cell therapy at the children's hospital and senior investigator on the study. "While these pets are benefiting from the T-cell infusions, this collaboration with Texas A&M is a driving force for investigators on the study. "We learned important details about the interaction between chemotherapy and tumor cells that can be harnessed to improve the body's immune response. This is something we hadn't appreciated thus far from our clinical research in humans."

From the trial, investigators found that:

• Chemotherapy, in addition to damaging the canine tumor, also makes the tumor cells susceptible to

"Treating dogs with cancer provides us with a great comparative oncology model for humans."

~ Dr. Colleen O'Connor

undertaking similar clinical trials in humans."

To accomplish the T-cell therapy, researchers took a sample of blood from each dog entering the study. Then, the T-cells were separated and expanded in Cooper's laboratory over several weeks. As the T-cells grew at MD Anderson, the dogs received a chemotherapy regimen at the CVM similar to what humans with NHL receive: a combination of cyclophosphamide, vincristine, doxorubicin, and prednisone. The T-cells were then given back intravenously after the chemotherapy to improve the anti-tumor effects.

"The therapy was well tolerated in all dogs who received the infusions. We saw fewer side effects than with traditional chemotherapy, and the pet owners were pleased with how their dogs tolerated the protocol," said Dr. Heather Wilson-Robles, assistant professor at the CVM. "The owners were also very pleased to be supporting research that may further enhance cancer therapy in humans and pets with cancer."

"Treating dogs with cancer provides us with a great comparative oncology model for humans," said Colleen O'Connor, Ph.D., postdoctoral fellow at MD Anderson and one of the primary recognition by the infused T-cells.

• Infusing back the patient's T-cells after chemotherapy can work to improve the survival of dogs with NHL, since these T-cells were held outside the body preventing damage from the chemotherapy.

• Biomarkers were identified that can potentially play a role in determining prognosis.

Overall, the study affirmed the ability to use the body's own immune cells, such as T-cells, to fight cancer. As a result, MD Anderson and the CVM collaborators are creating a program focusing on harvesting and expanding T-cells on a large scale for broad clinical use.

Investigators at both institutions are working to begin a new trial that will infuse genetically modified T-cells that are tumor specific and potentially even more effective against the canine cancer cells.

Other contributors to the *Scientific Reports* study include Sabina Sheppard, research associate, and Dr. Mark Johnson, clinical associate professor, from Texas A&M, Cassie Hartline, Helen Huls, Shana Palla, Sourindra Maiti, Wencai Ma, Eric Davis, Suzanne Craig, Dean Lee, and Richard Champlin from MD Anderson.

Faculty/ Staff Focus

Green, Klemm recognized as Auburn Distinguished Alumni

Two notable members of the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) family, Dr. Eleanor M. Green, Carl B. King Dean of Veterinary Medicine, and Dr. William Klemm, emeritus professor of neuroscience and veterinary integrative biosciences, were honored with the Wilford S. Bailey Distinguished Alumni award from the Auburn University College of Veterinary Medicine in May 2011. Each year the Auburn University's College of Veterinary Medicine identifies three graduates as Wilford S. Bailey Distinguished Alumni in honor of their contributions to animal welfare, to the veterinary profession, and to their communities.

As the first female dean of the CVM, Green has been a trailblazer in various facets of the veterinary profession. She was the first woman named as head of the large animal department at both the University of Tennessee and the University of Florida. She was also the first woman president of several organizations, including the American Board of Veterinary Practitioners, the American Association of Veterinary Clinicians, and the American Association of Equine Practitioners.

"It is a special honor to be recognized by my alma mater," Green said. "While I don't know for sure if I am a distinguished alumn[a], I do know that



Dean Green and Dr. Klemm pose with Auburn University College of Veterinary Medicine Dean Timothy Boosinger (center) after the commencement exercises. (Photo credit: Flip Flop Foto)

Department of Large Animal Clinical Sciences, and director of the Large Animal Veterinary Medical Teaching Hospital at the University of Tennessee. She also has served on the faculties of the University of Missouri-Columbia College of Veterinary Medicine and

"At Auburn, ethics, professionalism, and the honor code were instilled in students. I am forever indebted to the faculty, my peers, and the many friends and mentors along the way."

~ Dr. Eleanor M. Green

Auburn is a distinguished college of veterinary medicine. At Auburn, ethics, professionalism, and the honor code were instilled in students. I am forever indebted to the faculty, my peers, and the many friends and mentors along the way."

Before joining the CVM, Green was a professor and chair of the University of Florida Large Animal Clinical Sciences department, professor and head of the the Mississippi State University College of Veterinary Medicine. She has also been a partnership owner in a private veterinary practice. She is a diplomate of the American College of Veterinary Internal Medicine and a diplomate of the American Board of Veterinary Practitioners.

Klemm, a DVM graduate of Auburn and a Ph.D. graduate of University of Notre Dame, has taught veterinarians and scientists for almost 50 years. His teaching also reaches a wider audience through 16 books that cover several topics. These books include: *Blame Game: How to Win It, Core Ideas on Neurosciences, Thank You Brain for All You Remember, What You Forgot Was My Fault,* and his latest book, *Atoms of Mind.*

"I have spent my career helping communities and developing minds that will help shape future generations through science," Klemm said. "I love what I do, and I am so grateful for Auburn which gave me the foundation to do what I am passionate about. This recognition is accepted with much gratitude, and I am truly honored."

Aside from teaching and research, Klemm is a retired colonel in the United States Air Force Reserves and is president and co-founder of Forum Enterprises, Inc. He is also a project director for educational outreach grants through the college to aid in teaching science concepts to middle school students, and students in community colleges, as well as providing professional development training for science teachers.



Stereotactic biopsy of brain tumors begins at CVM

Brain tumors are an important cause of neurologic dysfunction in dogs, and early, accurate diagnosis is important to achieving the best outcomes. "Brain biopsy is one way of non-invasively getting tumor tissue or other parts of a diseased brain," said Dr. Jonathan M. Levine, assistant professor at Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM). "While MRI allows us to locate lesions and make reasonable assumptions about the likely disease process, brain biopsy can help confirm the tumor type, how aggressive it is, and rule out lesions that mimic brain tumors."

Most biopsy equipment is bulky and frame-based, which can be a problem in the veterinary setting. "Imagine putting the head of a Chihuahua, a Great Dane, or a cat into a frame made for a human head. Some of them might fit,



Dr. Jonathan M. Levine

while some of them will not," Levine said. The stereotactic biopsy technique eliminates these problems because it is image-guided, not frame-based.

In this method, the anesthetized animal is locked into position by a bag around its body. The teeth are held on a dental block with a hardening man medicine for both brain biopsies and nasal surgeries. This equipment, however, is relatively new to the veterinary world. Only about five veterinary hospitals in the world currently use it, making its use a milestone at the CVM.

As is common with new technology, there were challenges along the way.

"Naturally occurring diseases in animals can lead to better treatments in both animals and people, and hence be a win-win for both."

~ Dr. Jonathan M. Levine

gummy paste. "We can pretty much fit any size animal from one that weighs five pounds to 105 pounds," Levine said about the dental block. Markers are inserted along the sides of the nose to allow the dog to be registered to the biopsy equipment.

A CT or MRI image of the dog in the frame is then generated. Next, the animal is transported to an operating room and a surgical probe, that has reflective balls is placed on the animal's head. These balls are detected by an infrared camera, which helps map the 3-D position of the probe on the scan. This allows the doctors to pinpoint the location and depth of the tumor. "You can now correlate the instrument to the exact spot on the MRI or the CT scan," Levine said.

This technique can also be used for computer-guided simulation to indicate how deep the instrument must be inserted. It is also useful for minimally invasive surgery. The frameless imageguided system is quite common in huThe equipment is expensive, it takes time to set up, and there is a learning curve involved, all of which may dissuade private practitioners from using it, Levine said. The CVM, however, successfully used this equipment with more than seven dogs and a cat undergoing image-guided biopsy and surgery between March and December 2011. Levine thanks the pediatric neurosurgeons at the University of Texas at Houston, especially Dr. Stephen Fletcher, for advice and help. "Having their experience and expertise has been invaluable," Levine said.

The tissue and DNA of these biopsies are stored in a bank for future scientific research with a contract grant from UT Houston. "Brain tumor is an area which will always be explored. Trying to help these animals is also going to help people," Levine said. "Naturally occurring diseases in animals can lead to better treatments for both animals and people, and, hence, be a win-win for both."

Levine receives DOD grant to aid with spinal cord injuries

The One Health Initiative is represented again at the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM). Dr. Jonathan Levine, assistant professor of neurology at the CVM, and his team were recently awarded a Department of Defense (DOD) grant of more than \$900,000 to develop non-invasive treatments and therapies for spinal cord injuries (SCIs) in dogs, with the hope of translating results to humans with SCIs.

Levine's study, which focuses on dogs with naturally occurring SCIs, started in October 2011 and will last until October 2014. Levine's prior SCI research focused on spinal cord imaging and biological molecules associated with injury. With the help of this grant, Levine and his team hope to produce findings that may be more applicable to humans with SCI than traditional models are, as dogs have similar injuries to humans.

"Because these injuries happen naturally, they are more diverse," Levine said. "Affected dogs are out in the environment, they're not all the same breed, the injuries don't happen



Klemm selected as a Sigma Xi Distinguished Lecturer

Dr. William Klemm, professor at the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM), has been selected to be a Sigma Xi Distinguished Lecturer. From July 1, 2012 through June 30, 2014, he will be invited to give presentations at Sigma Xi chapters around the nation covering three different topics: "Atoms of Mind: The 'Ghost in the Machine' Materializes," "What Teachers Can Do To Improve Student Learning and Memory," and "Better Grades, Less Effort," all featured in his most recent books.

Sigma Xi, the Scientific Research Society, is an honor society for research scientists and engineers and is celebrating its 125th anniversary this year. With more than 500 chapters in North America and around the world, Sigma Xi is a chapter-based society that makes an impact locally and globally. This highly coveted role as a distinguished lecturer is awarded to scholars who have made an impact in the world of science.

Klemm, a DVM graduate of Auburn and a Ph.D. graduate of Notre Dame,

has taught veterinarians and scientists for almost 50 years. His teaching also reaches a wider audience through his 16 books that cover several different topics, including: "Blame Game. How to Win It," "Core Ideas on Neurosciences," and "Thank You Brain For All You Remember, What You Forgot Was My Fault," and his latest book, the capstone of his career, entitled "Atoms of Mind." Also known as the "Memory Medic," Klemm is a contributor to The Eagle and Psychology Today. He also helps online audiences understand the concepts of the brain with his popular blog, "Improve your Learning and Memory" at thankyoubrain.blogspot.com.

"I have several hopes for these presentations, and I am grateful for the opportunity to present them in specialized forums at universities around the nation," Klemm said. "I want to persuade researchers to investigate new avenues focusing on the human consciousness through my theories and ways to test the human conscious mind. I also plan to give new insight to students and professors by teaching the

"I have several hopes for these presentations and I am grateful for the opportunity to present them in specialized forums at universities around the nation."

~ Dr. William Klemm



Dr. William Klemm

students how to become better learners and by giving professors new options to teaching that can make learning easier to remember."

Aside from teaching, writing, and performing research, Klemm is a retired Colonel in the United States Air Force Reserves. He is also the project director for educational outreach grants through the CVM to aid in teaching science concepts to middle school students and he provides professional development training for science teachers.

continued from page 60

the same way. So the diversity probably gives a little advantage to exploring theories into the possible treatment of dogs and humans with SCI."

The DOD was particularly interested in Levine's research because of the possible implications for troops with SCI. Not only are SCIs in humans physically debilitating, they can also be extremely expensive. Described as the second most costly injury, a person who has sustained a SCI at age 25 may incur anywhere from \$729,000 to \$3.2 million in expenses over a lifetime.

Along with CVM researchers Dr. Sharon Kerwin, Dr. George Lees, and Dr. Virginia Fajt, Levine will partner with two researchers at the University of California, San Francisco: Dr. Linda J. Noble-Haeusslin, professor in the Department of Neurological Surgery and the Department of Physical Therapy and Rehabilitation Science, and Dr. Tom Lue, professor and vice chair of the Department of Urology.

"Noble and her team are leading researchers in traumatic brain and spinal cord injuries," Levine said. "We are thrilled to have their expertise in working on this project."

Clinical trials for this grant are being performed on young to middleaged dogs with canine thoracolumbar intervertebral disk herniation (IVDH). IVDH is a spontaneous disease that is similar to acute SCI in humans. About half of the cases of IVDH occur in dachshunds.

The grant comes at a good time for Levine and his team, as the CVM recently unveiled the new Diagnostic Imaging and Cancer Treatment Center (DICTC). The DICTC features a 3 Tesla MRI unit which helps advance Levine's research efforts through high resolution diagnostic imaging. This state-of-the-art MRI unit produces images much faster, and the highresolution images make it easier to identify problems of the spinal cord more precisely.



West honored, class scholarships grow, new construction under way

Wow! What an exciting year at the College of Veterinary Medicine & Biomedical Sciences (CVM). It makes our heads spin to look back on all of the wonderful things that have happened since last summer. The pages of this issue of *CVM Today* remind us of the latest Outstanding Alumni honorees for the college, and, in addition, Dr. Joe West '56 was honored this past year as a Distinguished Alumnus of Texas A&M University, joining Dr. Fred Palmer '69 as the only CVM graduates to obtain this prestigious designation.

Friends of the college have also continued to bless us with their generosity and are responsible for our position at or near the top of the charts for charitable receipts for the various units at Texas A&M. You will note the recent gift from the Burnett Foundation of the Dr. Glenn Blodgett Equine Chair, along with the announcement of several new scholarships. In addition, we continue to book and receive planned gifts on a regular basis that will be placed in endowments to benefit the students and faculty of the CVM for many years to come.

Speaking of scholarships, the Class Scholarship Program has recently had several classes reach endowed scholarship status. We want to thank those graduates who have generously donated to their class scholarship funds and who have made these scholarships possible. We appreciate it, and we assure you, so do our students. After thanking you, however, we would remind you that these endowed scholarship funds can still accept contributions, so please feel free to continue your financial support.

For those classes who don't yet have endowed scholarships, we have good news for you. It is very likely that your class scholarship fund lacks very little in reaching endowed status, and it usu-



ally requires only a little bit of good-natured encouragement from a classmate to spur the class members to action. If you are so inclined, please feel free to call our office and ask us how you can lead your classmates to fully endow their class scholarships. We are looking forward to the centennial celebration of the CVM in 2016, and we can't think of a better way to celebrate the centennial anniversary

than to have all class scholarships fully endowed.

The future for the college is even brighter than the past, and excitement is building for what will be. New educational space, renovations in the Small Animal Hospital, a new aviary, and marked progress on the Equine Initiative will keep us very busy for the foreseeable future, and we know you'll want to be a part of it. Please keep in mind that a very large portion of the donated funds received by the CVM comes from the grateful clients of you, our graduates. As you go about your daily work of providing capable, caring, and compassionate care to the animals of Texas and beyond, please keep us in mind if you run across clients who express an interest in supporting animals or veterinary medicine financially. The CVM Development staff would love to visit with you and your client about the possibilities.

Please let us know if there is anything that we can do for you at the college. Give us a call or stop by for a visit when you are in town.

Also, be sure to look us up if you attend the North American Veterinary Conference, Western Veterinary Conference, AVMA Annual Meeting, Southwest Veterinary Symposium, AABP Annual Meeting, or AAEP Annual Meeting. We hold Aggie Alumni Receptions at all of these meetings, and we would love to have you join us.

Thanks again for your support, and Gig 'em!

Of "Bubba" Water

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

Lay Cl. Sheppend

Guy A. Sheppard, DVM, '78 Director of Development

hospity

Chastity Rodgers Director of Development

Development News

Equine Initiative receives \$2.5 million grant in honor of CVM Outstanding Alumnus

The Burnett Foundation recently awarded a \$2.5 million challenge grant to the Texas A&M Foundation for the Equine Initiative in honor of Dr. Glenn Blodgett, leader in equine veterinary medicine and a 2011 Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) Outstanding Alumnus, establishing the Glenn Blodgett Equine Chair.

This cornerstone gift will help support the Equine Initiative, a collaboration between the CVM and the College of Agriculture and Life Science Department of Animal Science at Texas A&M University, to establish the premier equine program in the nation. The Equine Initiative will utilize 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: outreach and engagement expansion, facility construction, and partnership development.

A 1974 graduate of the CVM, Blodgett has worked as a large animal veterinarian for more than 35 years. Throughout his veterinary career, he has contributed to the horse industry in many areas, particularly in equine embryo transfer and artificial insemination. Since 1982, Blodgett has been the resident veterinarian and horse division manager for Burnett Ranches, LLC (6666 Ranch) in Guthrie, Texas. Under his leadership, the ranch has consistently produced and developed some of the most highly recognized racing and western performance quarter horses worldwide, earning the ranch numerous awards and distinctions from the American Quarter Horse Association.

"I am truly honored and thankful to be recognized with a chair that bears my name and to help support such a distinguished program," Blodgett said. "The Burnett family has a rich heritage in the equine industry, and this recent award to the Equine Initiative is another reminder of what the Burnett Foundation has done for the welfare of the horse. I wish nothing but the best for my alma mater, and I know that Texas A&M has the knowledge and tools to house a premiere horse facility. This grant will help to initiate and fulfill the hopes of the equine industry, particularly at Texas A&M."

"Both Dr. Glenn Blodgett and the Burnetts are icons in Texas," said Dr. Eleanor M. Green, Carl B. King Dean of Veterinary Medicine. "How special it is for the Burnett Foundation to honor Dr. Blodgett in this meaningful way. 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. Students for years to come will know of Dr. Blodgett as a role model for equine veterinarians and as a quintessential horseman, as they will know the generosity of the Burnetts."

Dr. Jim Heird, executive professor and coordinator for the Equine Initia-

tive, said the grant challenged them to raise \$2.5 million for the Glenn Blodgett Equine Chair. "We are thrilled to have a cornerstone gift honoring such a deserving friend of the



Dr. Glenn Blodgett

program to kick off our fundraising efforts," he said.

If you would like to contribute to the Glenn Blodgett Equine Chair or any other program through the CVM, please contact the Development Office at the CVM at 979-845-9043 or visit our website at vetmed. cvm.tamu.edu/giving.

"I wish nothing but the best for my alma mater, and I know that Texas A&M has the knowledge and tools to house a premiere horse facility. This grant will help to initiate and fulfill the hopes of the equine industry, particularly at Texas A&M."

~ Dr. Glenn Blodgett

Development News

Daniel Resnick Memorial Scholarship

Daniel Resnick dreamed of becoming a veterinarian ever since he was a teenager. With hard work and determination, Resnick earned a coveted interview for acceptance into veterinary school. Two days before his interview, he passed away unexpectedly. However, his passion for veterinary medicine will continue to inspire future generations of veterinary medical students thanks to the Daniel Resnick Memorial Scholarship, established in his memory at the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM).

To honor his memory, an endowed scholarship for \$25,000 has been established by his parents, Steve and Holly Resnick, along with contributions from Steve Resnick's colleagues at Emerson, and Emerson's matching gift program. Beginning in Spring 2012, this fund is providing an annual award of \$1,000 to one full-time veterinary student enrolled at the CVM. The recipient is selected by the scholarship committee.

This scholarship is a gift to one Aggie in memory of another. Resnick's association with Texas A&M University goes back a long way. He worked with Dr. Scott Grant, a veterinarian from the CVM, to learn more about the profession. He completed his undergraduate degree at Texas A&M and was working toward his master's degree in biomedical sciences when he passed away. He was later awarded the degree posthumously in May 2011 after an appeal submitted by his professors.

"Daniel never met anybody who did not become his friend immediately," Steve Resnick said. "He was a very motivated and positive young man who always had a smile on his face." His dad

Patsy Nichols "Heart of Service" Endowed Scholarship



The loss of a close friend is never easy, and on October 3, 2012, Texas A&M University lost not only a treasured friend, but also an ardent supporter, leader, and devoted Aggie fan. Patsy Nichols, who with her husband Bruce was named 2006-07 Texas A&M University Parents of the Year, died as a result of a brief chronic illness. Her love of Aggieland and her visionary leadership 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 Patsy Nichols "Heart of Service" Endowed Scholarship. This special award, funded by the Texas Pioneer Foundation and through generous donations from friends of Patsy and 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.

More about Patsy and her contributions to the CVM will be featured in the next edition of *CVM Today*. 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*.



described Resnick as a true Aggie who went to Fish Camp, loved football, and was deeply influenced by A&M culture. Even people who met Resnick for a short time felt that they had known him forever.

Resnick was known as someone who always found a way to help people. He was a member of the PALS (Peer Assistance and Leadership) program where he tutored school students in need.

"Daniel's goal in life was to help people, and this scholarship is an extension of his spirit," Steve Resnick said. This scholarship is open to all full-time veterinary students at the CVM. Qualified students can apply for the scholarship via the scholarship portal on the college website. The Resnicks hope that the awardees of this scholarship have "the courage to dream and the determination to succeed in reaching their goals."

The generosity of the Resnicks and their friends has been inspiring to many, and the contributions are a testament to the drive and motivation of this bright student.

"There was a great outpouring of compassion from family and friends on behalf of Daniel. Many people who knew the Resnicks well called here and wanted to contribute to the scholarship," said Dr. Guy Sheppard, Director of Development and Alumni Relations at the CVM. "It is inspiring to see how generous people can be when they see something they believe in."



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 Sept. 1, 1991, through Dec. 31, 2011.

New Members:

Rick and Lori Bucholz Omaha, NE

Ken M. Carson Pilot Point, TX

Vivian M. Clark Houston, TX

Dr. and Mrs. Van W. Crouch Bryan, TX

Dr. Randall G. Deutsch Carrollton, TX

Madelyn A. Dexter College Station, TX

Betty R. Duval Baytown, TX

Mr. and Mrs. Paul F. Gardner College Station, TX

Dr. and Mrs. Ira F. Greenbaum Bryan, TX

Nancy J. Hamilton Hillsdale, NJ

Dr. Gale G. Hannigan Albuquerque, NM

Mr. and Mrs. Jeffery Hildebrand Houston, TX

Dr. Marcus D. Hutka Navasota, TX

Dr. and Mrs. Joseph P. Kerwin College Station, TX

Dr. Powell Knight College Station, TX

Donna M. Lee Spring, TX

Mr. and Mrs. Calvin Roy Lott Ft. Worth, TX

Dr. and Mrs. David C. Luedeker Navasota, TX

Nathalie R. Luiggi Pharr, TX

LaVera Meaders Montgomery, TX

Mr. and Mrs. Stewart Mercer Dallas, TX

Robert S. Merriam Houston, TX Brock D. Nelson Wichita, KS

Dr. Walter F. Norvell Mount Orab, OH

James and Dr. Carol D. Ong Houston, TX

Dr. Jules B. Puschett Houston, TX

Dr. and Mrs. Perry L. Reeves McKinney, TX

Joe B. Reuss Cuero, TX

Heather H. Smith Nashville, TN

Dr. and Mrs. Ronald O. Stried Austin, TX

Janine M. Terry Las Vegas, NV

Linda Thompson Southlake, TX

Dr. and Mrs. Fehrlin E. Tutt Sugarland, TX

Melanie D. Typaldos Buda, TX

Gabriela Vigo Trauco College Station, TX

Mr. and Mrs. Lou A. Waters Utopia, TX

> Members Advancing to a Higher Level of Giving:

Dr. and Mrs. Christian R. Abee Paige, TX

Dolly Bille Pearland, TX

Dr. and Mrs. Gary C. Brantley Richardson, TX

Dr. Edward J. Cakl Midland, TX

Dr. and Mrs. Kenneth D. Cantrell Dallas, TX

Ardeth Cardwell Elgin, TX BG and Mrs. Michael B. Cates Manhattan, KS

Joan Chatterton Hockessin, DE

Dr. Troy L. Cobb Dallas, TX

Tana Daughtrey Houston, TX

Mr. and Mrs. David M. Doll Houston, TX

BG Charles Van L. Elia San Antonio, TX Dr. and Mrs. Milton K. Herrmann Houston, TX

Dr. and Mrs. James R. Holcomb West Lake Hills, TX

Mr. and Mrs. Dennis G. Johnston Lufkin, TX

Bonnie Kamenar Austin, TX

Dr. and Mrs. Robert L. Knauss Burton, TX

Dr. and Mrs. Ben F. Knotts Cocoa Beach, FL

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

Mr. and Mrs. Niles Lusk Bryan, TX

Jo Roberts Mann Amarillo, TX

Allan A. Marburger Paige, TX

Dr. Cornelia A. Porter Knoxville, TN

Dr. and Mrs. Harold D. Putnam Burleson, TX

Mr. and Mrs. Steve Resnick Friendswood, TX

Dr. and Mrs. William A. Roach College Station, TX

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

Dr. and Mrs. Leon H. Russell College Station, TX

Dr. Jack M. Sanders Marshall, TX

Dr. Rance K. Sellon Pullman, WA

Mr. and Mrs. Willard F. Smith Ilion, NY

BG and Mrs. Edmond Solymosy College Station, TX

Mr. and Mrs. Thomas M. Sullivan Humble, TX

Billy R. and Marilyn Thompson Tyler, TX

Ron E. Whitley Houston, TX

Dr. Callie D. Willingham Chandler, AZ

Dr. O. J. "Bubba" and Jane Woytek College Station, TX

Aumni News

CVM honors 2012 Outstanding Alumni

The Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) proudly honored six Outstanding Alumni with a special reception and dinner at Miramont Country Club on Friday evening, March 23. The 2012 Outstanding Alumni are: Dr. John R. Herbold, Class of 1969, from San Antonio, Texas; Dr. JoGayle Howard, Class of 1980, from Washington, D.C.; Dr. J. Michael McFarland, Class of 1985, from Long Valley, New Jersey; Dr. Harold D. "Putt" Putnam, Class of 1960, from Burleson, Texas; Dr. Ronald O. Stried, Class of 1971, from Austin, Texas; and Dr. Michael A. Walker, Class of 1972, from College Station, Texas.



Dr. John R. Herbold, '69 San Antonio, Texas

Dr. John R. Herbold's dedication to veterinary medical and public health practice locally, nationally, and internationally has helped to advance the One-Health Initiative.

Within a year of graduation and private practice in Houston, Herbold was called to active duty and assigned as Base Veterinarian, Hanscom Field, Massachusetts. Selected for long-term education, he completed his master of public health at the University of North Carolina in 1973. His next assignment was chief of veterinary services, Zweibrucken Air Base, Germany. In 1976, he was reassigned to the office of the command surgeon as assistant to the command veterinarian and chief, Environmental Medicine Branch, Headquarters, U.S. Air Forces in Europe. Within two years, he developed a prototype public health and epidemiology program, which was adopted by the Office of the Air Force Surgeon General.

Again selected for long-term education, Herbold received his Ph.D. from Ohio State University in 1981 and was assigned to the USAF School of Aerospace as chief of epidemiologic investigations and disease surveillance. His next assignment was to the Office of the Assistant Secretary of Defense (Health Affairs) at the Pentagon in 1984. Serving as senior policy analyst for Preventive Medicine and Health Promotion, he directed the Department of Defense worldwide substance abuse survey series and coordinated all HIV/AIDS surveillance efforts. After in-residence completion of Air War College, Herbold became the vice-commander of the Air Force Occupational and Environmental Health Laboratory. His final assignment was as chief scientist for Aerospace Medicine at the consolidated Air Force Armstrong Laboratory. His military honors include the Legion of Merit, the Department of Defense Meritorious Service Medal, three Air Force Meritorious Service Medals, and two Air Force Commendation Medals.

Upon retirement from the Air Force in 1993, Herbold joined the faculty of University of Texas School of Public Health, teaching graduate courses in epidemiology, emerging infectious diseases, and disaster preparedness. Herbold has been principal investigator for nine grants, and co-investigator for an additional nine grants, published 29 peer-reviewed articles, authored or coauthored 3 book chapters, and 11 government publications, and made more than 100 presentations. Additionally, Herbold serves as an adjunct instructor for the National Emergency Response & Rescue Training Center.

He has served as president of the Veterinary Medical Association of Bexar County, Sigma Xi (Alamo Chapter), and the Texas Public Health Association; district director for the Texas Veterinary Medical Association; chair of the American Veterinary Medical Association Council on Public Relations and the American Public Health Association Veterinary Public Health Special Interest Group. He represented public practice on the AVMA Convention and Management Committee for nine years. He is a fellow of the American College of Epidemiology and a diplomate of the American College of Veterinary Preventive Medicine (president 2006-2008). He served on the organizing committee of the American College of Animal Welfare and is a charter diplomate. Elected to the National Academies of Practice (NAP) in 2007, he co-chaired the Veterinary Medicine Academy (2009–2010) and currently serves as president-elect (2011–2012) of NAP.

Herbold's career achievements are distinctive and epitomize the One Medicine-One Health philosophy. Notably, in 2003, he was awarded the Secretary of Defense Medal for Outstanding Public Service as a civilian appointee to the Armed Forces Epidemiological Board. Herbold and his wife, Jo, reside in San Antonio within 200 miles of their three sons, daughters-in-law, and six grandchildren.



Dr. JoGayle Howard, '80* Washington, D.C. *Awarded Posthumously

Instrumental in saving lives of several species, Dr. JoGayle Howard will be remembered for her lifelong service to the most charismatic of creatures, as well as serving as a mentor to the next generation of biologists.

Howard started her career at the National Zoo, where she did a postgraduate internship in comparative reproduction. She developed approaches for and conducted fertility examinations on a host of wildlife species ranging from bats to elephants. She



traveled the world extensively, working predominantly in the field, zoos, and breeding facilities across Africa. In 1989, she received a Ph.D. from the University of Maryland in animal science and reproductive physiology. Starting in the mid-1980s, and until her death in 2011, Howard worked at the Smithsonian Conservation Biology Institute, National Zoological Park, in Washington, D.C. She lectured extensively at universities, at conferences, and to audiences worldwide. She had adjunct appointments at the University of Maryland and George Mason University.

Howard's research focused on fertility, infertility, and the role of reproductive technologies for assisting reproduction in wildlife. Her basic research resulted in the publication of more than 100 peer-reviewed papers, 20 book chapters, and many reports. She was a principal investigator or coinvestigator on 95 grants and contracts, representing a total of \$4,252,566 in funding. She was a champion for numerous species close to extinction, such as the black-footed ferret. Florida panther, cheetah, giant panda, and clouded leopard. She was a mentor to 46 undergraduates, seven graduate students, 10 post-doctoral fellows, and 12 visiting scientists, who will continue her legacy of preserving animal species.

During her career, she was the recipient of several prestigious awards, including the Special Emphasis Research Center Award (SERCA) from the National Institute of Health, the Ulvsses S. Seal Conservation Award. the Distinguished Research and Scientist Award from the American Association of Zoo Veterinarians, and the Recovery Champion Award from the U.S. Fish & Wildlife Service for her leadership in helping to save the blackfooted ferret from extinction. The U.S. Fish & Wildlife Service also recognized her work in research advancement. She was a Featured Conservation Scientist in the British Airways exhibit at the Millennium Dome in London.

Howard was active in the Conservation Breeding Specialist Group of the IUCN-World Conservation Union, the Field Taxon Advisory Group, and numerous Species Survival Plans of the Association of Zoos and Aquariums. She was also an active member of the Society for the Study of Reproduction. Howard died on March 9, 2011, in Washington, D.C., after battling malignant melanoma. She was 59 years old.



Dr. J. Michael McFarland, '85 Long Valley, New Jersey

His innovative approaches to the clinical and teaching settings of the veterinary profession prove that Dr. J. Michael McFarland is a man of vision.

McFarland started his career as a veterinarian in a companion animal hospital in Texas where he practiced for 10 years. He has 15 years of experience in emergency medicine, including five years as the medical director of one of the country's first and largest emergency practices in Dallas. In 2000, McFarland joined Pfizer Animal Health as a companion animal area veterinarian in Texas, and he helped build the company's sedation and pain management team. He was promoted to director of specialty hospital services and led a cross-functional team that evaluated critical capabilities needed to support specialty referral hospitals and colleges of veterinary medicine.

In his most recent position, Mc-Farland served as group director of Veterinary Medical Services for Pfizer Animal Health–U.S. Operations. In this capacity he also assumed the role of chief medical officer, with responsibility for pharmacovigilence, medical information, and academic and professional affairs, as well as leading Pfizer's philanthropy strategy in the United States.

During his career at Pfizer Animal Health, McFarland has been instrumental in the establishment of the Pfizer Animal Health Scholarship Program, which provides hundreds of scholarships to veterinary students each year. In addition, he helped to lead an exciting initiative to better support the ongoing development of continuing education for practicing veterinarians through a newly formed e-learning platform, Veritas. The program, launched in January 2012, is in collaboration with the Texas A&M and Cornell Colleges of Veterinary Medicine.

McFarland is well known for his support and research concerning the human-animal bond. He serves on the Board of Directors for the American Humane Association and is vice president of the Board of Trustees for the Human-Animal Bond Research Initiative.

McFarland married his wife, Becky, in 1999, and they have two children. They also have one Mainecoon cat and two energetic Finnish Lapphund dogs. Outside the veterinary profession, his interests include, competitive cycling, sky diving, rapelling, mountain climbing, traveling to scenic places, canoeing, camping, hiking, scuba diving, snow skiing, gardening, reading, and enjoying time with his family.



Dr. Harold D. Putnam, '60 Burleson, Texas

A well-known equine practitioner and community supporter, Dr. Harold "Putt" Putnam has faithfully served the veterinary profession for more than 50 years.

Before graduating from Texas A&M, Putnam joined the Navy in 1950 and served as a medic in the Korean War. After his graduation, he and Dr. Bob Ables built the Burleson Animal Hospital. Putnam began as a dairy practitioner, but the practice grew. In 1975, Putnam was able to begin focusing on

continued on page 68



continued from page 67

his primary interest—horses—and the Burleson Animal Hospital eventually became known as the Burleson Equine Hospital.

In 1986, Putnam decided that he and his fellow veterinarians needed to increase their skills in equine dentistry. He began studying the field and advised his colleagues to do the same, and he soon became one of the most qualified veterinarians in the area in equine dentistry. He has also been instrumental in developing ultrasonography as a tool to predict ovulation in mares. Aside from equine dentistry and reproduction, he is known for his work in lameness and with miniature horses.

Putnam has been a member of the Texas Veterinary Medical Association (TVMA) since 1960, served as president in 1997, and served in all chairs on the TVMA Executive Board. During his TVMA Presidency, Putnam initiated the formation of the Southwest Veterinary Symposium (SWVS), and he worked with TVMA to resolve equine dentistry issues in Texas. He is also an active member in the American Veterinary Medical Association (AVMA), the American Association of Equine Practitioners (AAEP), and the Texas A&M Association of Former Students Century Club. He was president of the American Cutting Horse Association in 1986. He has served as president of the Central Texas Polled Hereford Association and president of the Tarrant County Veterinary Medical Association.

Putnam has been honored with numerous awards throughout his career. Most recently, he received the Visionary Award from SWVS in 2006. In 1993, he was named Equine Practitioner of the Year by the TVMA. The Morris Animal Foundation honored him with the Veterinary State Chairman of the Year award in 1985.

Putnam has served as a leader in his local community and at his alma mater for many years. He has been a member of the College of Veterinary Medicine & Biomedical Sciences Development Council since 1996, and he became a Mark Francis Fellow in 1995. In 1986, he became the president of the Burleson Area Chamber of Commerce. He was the organizing director of the First National Bank of Burleson, and he served as its first treasurer in 1980. In 1977, he was appointed to the Board of Directors of Cleburne Savings and Loan. For many years, he served on the Burleson Independent School Board, where he was president for two years. As evidence of his dedication to youth, he was named an Honorary Chapter Farmer by the Burleson FFA chapter.

Putnam is married to Janie Putnam. He has two sons, his wife has two daughters, and they enjoy spending time with their grandchildren.



Dr. Ronald O. Stried, '71 Austin, Texas

As a mentor and advocate for veterinary medicine, Dr. Ronald O. Stried has faithfully served his profession for more than 40 years.

After graduation, Stried practiced at the Austin Cat & Dog Hospital for nine years, becoming the owner of the practice from 1980 to 1995. In 1986, he established the Tangelwood Pet Hospital, also in Austin, Texas. In 2002, he became the medical director of VCA Tanglewood Animal Hospital, where he currently works.

Stried's commitment to veterinary medicine extends beyond his clinical and administrative experiences. Since 1971, he has been a member of the Texas Veterinary Medical Association (TVMA) where he has played an active role as president, treasurer, chairman of the Board of Directors, district director, co-chairman of the VAL conference, and chairman of the Ethics and Grievance Committee. He is also the TVMA Veterinary Political Action Committee Chair. He is currently a member of the American Veterinary Medical Association (AVMA), the Capital Area Veterinary Medical Association, of which he was president in 1975, and the American Animal Hospital Association (AAHA), for which he was area representative from 1986 to 1994. He was the treasurer of the Texas Veterinary Medical Foundation from 1994 until 2008. He was also the president of the Austin Woods and Waters Association in 1990.

Stried also spent several years helping to form the Southwest Veterinary Symposium (SWVS), for which he served as the TVMA delegate. He has been the president of the organization.

Stried has been recognized with many awards for his dedication and commitment to veterinary medicine. The TVMA named him Companion Animal Practitioner of the Year in 1990. In 1996, the AAHA Western Region named him Outstanding Practitioner of the Year and in 2009, he was presented with the SWVS Visionary Award.

He has been married to Janice Brunner since 1967, and they have one son, a grandson, and a granddaughter. In his leisure time, Stried enjoys going to his ranch and spending as much time outdoors as possible. He also enjoys woodworking and metalcrafting.



Dr. Michael A. Walker, '72 College Station, Texas

As a mentor to residents, graduate students, and hundreds of veterinary students, Dr. Michael A. Walker has changed the veterinary profession for the past 40 years through his teaching, research, and writing.

After graduating with his DVM, Walker completed a residency in radiology at the University of Georgia. He then joined the faculty of Ohio State University as an assistant profes-



sor in 1975. In 1976, he moved to the University of Tennessee as an assistant professor. During his 12-year career at the University of Tennessee, he was promoted to professor and radiology section head. He returned to the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) in 1989 as a professor and radiology section head. After almost 40 years of teaching, he retired in 2009.

Walker is a diplomate of the American College of Veterinary Radiology (ACVR) and of the ACVR Subspecialty of Radiation Oncology. Widely regarded as one of the fathers of his field, he has authored or co-authored more than 80 reviewed publications, more than 30 book chapters, and other articles on radiologic diagnosis, special procedures, and radiation treatment of cancer. He also has served on two editorial boards: as a reviewer for the Journal of the American Veterinary Medical Association and associate editor of the Veterinary Radiology and Ultrasound Journal.

To strengthen his teaching and collaborations within the industry, Walker has been active in the ACVR. He was president in 1989 and served on several committees. He also served as the

president of the radiation oncology sub college of the ACVR in 2002.

Walker's many awards and honors reflect his impact on veterinary medicine. He was inducted into three honor societies throughout his career: the Phi Zeta Veterinary Honor Society in 1975, the Gamma Sigma Delta Agriculture Honor Society in 1986, and the Phi Beta Delta Honor Society for International Scholars in 1994. In 1997 and 2007, he was awarded the Veterinary Medical Teaching Hospital Service Award at the CVM. He was also honored with the Dean's Impact Award in 2005.

Walker is among a select few who managed to make a sizable contribution to the body of research literature while developing and actively working in two concurrent clinical services, diagnostic radiology and radiation oncology.

Walker was married to his high school sweetheart, Christie, until she passed away in 2005. Together they have four children, three of them Aggies. Walker enjoys golf, running, teaching Sunday school, and spending time with his precious grandchildren. He is truly a gentle man and a gentleman. 🦸

2013 CVM Outstanding **Alumni Dinner** to be held Apr. 5, 2013

We hope you will join us for dinner beginning at 6:00 p.m. on the evening of Fri., Apr. 5, 2013 as we honor the 2013 CVM Outstanding Alumni-individuals whose contributions to veterinary medicine are a credit to the educational standing of our college. This year's event will again be held at the beautiful Miramont Country Club in Bryan, Texas.

We want to be able to plan for you, therefore advance reservations are required.

For more information, please contact Noell Vance at 979-845-9043 or email nvance@cvm. tamu.edu or visit http://vetmed.tamu.edu/ homecoming.

Sheppard serves as a Muster speaker

Muster is one of the most powerful traditions at Texas A&M University. This annual memorial service occurs on April 21 around the world as Aggies come together to honor Aggies who have passed.

Dr. Guy Sheppard, Director of Development and Alumni Relations at the Texas A&M University College of Veterinary Medicine & Biomedical Sciences (CVM), spoke at Muster in Palestine, Texas, in 2011.

"To me, it gave me a sense of belonging, and it still gives me a sense of belonging. That when you're gone, you're not forgotten and that other Aggies remember you," Sheppard said.

Sheppard said Muster is one of the greatest traditions at A&M, and is a huge part of his life. He has been attending Muster since he was a freshman in 1973. Since then, he has missed only one Muster. Sheppard was also the chairman of Muster for San Angelo, Texas, for several years and helped organize Musters when he was in the

Army at Fort Sill, OK. Besides speaking this past year, he also spoke at the 2010 Muster in Wichita, KS.

"So, I went to Wichita, KS and spoke in 2010, and when I got back, they asked if I'd mind putting my name on the speaker resource list at the Association of Former Students. I did and the Muster chairman of Palestine sent me an email. So I guess he got my name off the list," he said.

Sheppard said his experience as a speaker was more meaningful than as an attendee.

"I feel like I got more out of the Muster...when I spoke at it than when I participated. I know in preparing my talk and looking at what I wanted to talk about, it stirred a lot of memories for me. It was very meaningful to me," he said.

In his speech, Sheppard explained the importance Muster has played in his life since he first stepped foot on A&M's campus until today. He talked about several memorable events in his been related to Muster

if he would continue to speak at Muster, Sheppard said he was going to keep his name on the list at the Association of Former Students.

"I enjoy



Dr. Guy A. Sheppard

doing it and being around Aggies. And, I like talking about one of the greatest traditions that A&M has," he said.

Sheppard will speak at the 2013 Muster in Marco Island, Florida.

To find more information about Muster, visit the Association of Former Student's website at http://www.aggienetwork.com/ Muster/. 🧋

life that have When asked

In Memoriam

Timothy A. Cudd, DVM, PhD ~ Sep. 2, 1956–Aug. 26, 2012

On Aug. 26, 2012, the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) lost a beloved member of the CVM family. After a lengthy struggle with Amyotrophic Lateral Sclerosis (ALS) or Lou Gehrig's Disease, Dr. Timothy Cudd died peacefully surrounded by family and friends.

Cudd received his Doctor of Veterinary Medicine degree from the University of Tennessee, his undergraduate alma mater, in 1982. Afterward, he entered private practice in Kentucky at two of the leading equine hospitals in the state. It was during this time that he established the first private practice neo-natal foal clinic in the United States. In 1988, he returned to academia to complete a Ph.D. in the Department of Physiological Sciences at the University of Florida College of Veterinary Medicine. He joined the CVM family as an Assistant Professor in 1994.

Cudd was a leader in the college and recognized as an outstanding teacher and researcher. As a professor and member of the faculty in the Department of Veterinary Physiology and Pharmacology at the CVM, Cudd's research lab investigated alcoholism and the impact of alcohol on fetal development. His expertise in this area is world renowned, and at the time of his departure from the CVM, Cudd's lab had been funded with a \$1.6 million grant from the National Institutes of Health to study Fetal Alcohol Syndrome utilizing a sheep model. Cudd was recognized for the quality and significance of his research efforts with the Pfizer Award for Research Excellence in 2003.

Collaborating on both research and teaching initiatives, Cudd held a joint appointment with the Texas A&M University System Health Science Center in the Department of Medical Anatomy and Neurobiology, and he was also a member of the Interdisciplinary Faculty of Reproductive Biology. Through his multidisciplinary approach, Cudd also included biomedical engineering concepts in the classroom and regularly facilitated courses focused on the



Dr. Timothy Cudd's research lab investigates alcoholism and the impact of alcohol on fetal development.

physiological implications for biomedical engineers.

Teaching, in addition to research, was an important part of Dr. Cudd's career at the CVM. He served as a longterm member on the curriculum committee, chairing the group for nearly five years. Cudd was instrumental in facilitating the significant shift in the curriculum for the professional DVM program at the college. He attended the Bayer Animal Health Communication Project Faculty Development Program in 2009, and implemented many of the learning concepts into his classroom to enhance student learning and to work toward his goal of graduating compassionate and caring veterinarians that were ready to lead in the veterinary profession. In addition to his nomination from the CVM for a Texas A&M University Presidential Professor for Teaching Excellence Award in 2004, Cudd received the Bridges Teaching and Service Award in 2010. In 2011, the Association of Former Students recognized Cudd with a College-Level Distinguished Achievement Award for Teaching. Letters from students in his nomination packet noted Cudd's high expectations for his students, his willingness to listen, and his compassionate mentoring skills.

When not working with students or in his lab, Cudd loved horses and was an equestrian enthusiast and, with his family, bred and trained competition dressage horses. He also enjoyed cowboy action shooting. As his ALS began to progress, Cudd made the decision to leave the CVM and return to Florida to be near family. His departure this past spring was difficult for everyone at the CVM, and news of his death has been difficult for all. While missed by the faculty, staff, and students, Cudd has left a legacy of leadership and excellence that will continue to permeate the halls of our college.

In Cudd's honor, contributions are being accepted to establish a memorial scholarship at the CVM. Contributions may be made with checks payable to the Texas A&M Foundation and mailed to the CVM Development Office at 4461 TAMU, College Station, Texas 77843-4461. Please include in the memo or in a note that the contribution is in memory of Dr. Tim Cudd.



Dr. Charles H. Bridges

Dr. Charles H. Bridges died on Jan. 12, 2012, at the age of 90. He attended Texas A&M University and graduated in 1945 with a degree in veterinary medicine. He received his Ph.D. in veterinary pathology in 1957. He was certified by examination as a veterinary pathologist by the American College of Veterinary Pathology in 1956. He was a Captain in the USAF Veterinary Service (1951-1953) and retired as a Major in the USAF Reserve Biomedical Sciences Corps in 1968.



Dr. Charles H. Bridges

Bridges was a professor and the head of the Department of Veterinary Pathology at the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) from 1960 to 1978. He retired as professor emeritus in 1986. He was also an adjunct professor of pathology at Baylor University College of Medicine, from 1978 to 1995, and a professor of comparative pathology, Institute of Comparative Medicine, Texas A&M University, from 1976 to 1979.

He was past president of the American College of Veterinary Pathologists and a member of the Texas Veterinary Medical Association, the American Veterinary Medical Association, and the International Academy of Pathology (Emeritus). He was a member of Phi Zeta, Sigma Xi, Phi Kappa Phi, and Gamma Sigma Delta. He received numerous awards for his work including the Charles L. Davis Foundation Harold W. Casey Award for Sustained Excellence in Teaching of Veterinary Pathology in 1998, CVM 1994 Distinguished Alumni Award, Academia MS/PhD and the Peter Olafson Medal, Cornell University–Teaching, Service, Research, 1994. He was a Morris Animal Foundation Fellow. His research interests included mycotic diseases, neuropathology, toxicologic pathology, and inherited diseases.

In 2000, he and his wife established the Dr. Charles H. and Mildred Kruse Bridges Chair in Veterinary Medical Education, currently held by Dr. Kenita Rogers, associate dean for professional programs.

Class of 1939

Stanley E. Cohen, 96, of Austin, Texas, died Aug. 27, 2011

Class of 1941

Horace T. Barron, 92, of Taylor, Texas, died Mar. 5, 2012

Class of 1943

George H. Muller, 92, of Concord, California, died Oct. 3, 2011 Billie Cole "B.C." Roberson, 89, of Abilene, Texas, died Jan. 23, 2012

Class of 1944

Richard W. "Doc" Winters, 89, of Brady, Texas, died Oct. 3, 2011

Class of 1945

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

Class of 1946

David Gage Smokler, 85, of Dallas, Texas, died Apr. 6, 2012 Charles Theron Caraway of Covington, Louisiana, died Dec. 6, 2011

Class of 1949

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

Class of 1948

Willie Lee Trahan, 93, of Baton Rouge, Louisiana, died Feb. 09, 2012 Howard Lee Underwood, 89, of Huntsville, Texas, died Mar. 09, 2012

Class of 1950

Frederick Bryan Clooney, 87, of Houston, Texas, died Oct. 3, 2011 Herbert Joshua King, 91, of San Antonio, Texas, died Aug. 27, 2011 Lester Johnson, 93, of Stillwater, Oklahoma, died Sep. 4, 2011

Class of 1951

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

Class of 1952

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

Class of 1954

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

Class of 1955

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

Class of 1956

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

Class of 1961

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

Class of 1963

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

Class of 1964

Dennis Wayne Jansen, 70, of Houston, Texas, died Jun. 29, 2012 Karon Gale McCreary, 72, of Greenville, Texas, died Jun. 26, 2012 Joe T. McKnight, 70, of Longview, Texas, died Sep. 17, 2011 Harold Joseph Whitehead, 78, of Houston, Texas, died Mar. 24, 2012 Albert Clarence Wurster, 76, of Jonesville, Louisiana, died Oct. 23, 2011

Class of 1966

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

Class of 1970

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

Class of 1971

William "Rob" Dominy, 64, of Abilene, Texas, died Jun. 24, 2012 Dennis M. "Doc" Reed, 64, of Mount Vernon, Texas, died Sep. 12, 2011

Class of 1973

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

Class of 1977

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

Class of 1979

Terry Wayne Hicks, 62, of Cleveland, Texas, died Mar. 9, 2012 Janice (Glass) Mouser, 56, of Madisonville, Texas, died Feb. 20, 2012

Class of 1980

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

Class of 1984

Rob Frederick, 53, of Teaneck, New Jersey, died Apr. 28, 2012

Class of 1988 Jeffrey David Rose, 49, of San Antonio, Texas, died Jan. 1, 2012

Class of 1994

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

Class of 1990 Junior H. Radney, 51, of Amarillo, Texas, died Dec. 3, 2011

Class of 2001 John Patrick "Pat" Baugh, 41, of Plano, Texas, died Apr. 13, 2012



CVM Today

Public Relations, Office of the Dean Veterinary Medicine & Biomedical Sciences Texas A&M University, 4461 TAMU College Station, TX 77843-4461





CHANGE SERVICE REQUESTED



by Larry Wadsworth

Members of the Fort Sam Houston Caisson Section carry a fallen soldier to his final resting place in the National Cemetery at Fort Sam Houston in San Antonio. The horses that pull the caisson serve the fallen with honor and dignity.