



VETERINARY MEDICINE & BIOMEDICAL SCIENCES



MART

200

Dean's Message

The current world-wide economic recession has been at the forefront of the news lately. Even here in the great State of Texas, agencies and institutions are seeking additional funding sources and trying to identify belt-tightening measures.

Here at the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM), we have worked to ensure that faculty and staff involvement is paramount to designing our budget reduction process. We're looking to the CVM family for recommendations not only because they are creative, resourceful professionals, but also because they have a fundamental understanding of the impact of decisions at the local level where programs are implemented. In our college process, faculty and staff have been involved in the understanding and development of the CVM budget reduction plan from the very beginning. Constant communication and appropriate levels of transparency are maintained throughout this process with participation at all levels. Every effort is made to maintain faculty, staff, and student morale and to infuse a commitment to a future of excellence through strategic development.

While the negative impact of a budget reduction cannot be denied, the strategic nature of our college budget reduction plan will ensure our viability and continued progress. With a focus on and

renewed dedication to preserving essential areas of excellence, and to streamlining operations, our strategic reinvestments will ultimately make us stronger.

As a result, our faculty remain even more committed today to fulfiling the mission of 'One Health' as outlined in the joint American Veterinary Medical Association and American Medical Association proclamation. As veterinarians, we find ourselves intertwined with our human medicine counterparts as we work to solve environmental, human, and animal health problems. This is particularly evident in times of disaster, so it is timely that our main feature for this edition tells the story of how the CVM is preparing for emergencies. It is acts of dedication and commitment, like the creation of the emergency response team as well as other opportunities, that have positioned veterinary medicine at the forefront of building a healthier tomorrow for everyone. The faculty and staff of the CVM are leading the way in that effort.

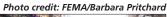
> At the same time, this college would not be in the position to explore new ways to make a healthier world or to educate the veterinary leaders of tomorrow if it weren't for the support we receive from our alumni and friends of the college. With their continued guidance and support, we will be able to be even more responsive to the demands and expectation 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, students, and the incoming freshmen here for their new student conferences. Even though the hottest part of summer is fast approaching, the summer will come to a close quickly, and the pace of daily activity will begin to pick-up. If you find yourself in Aggieland this summer, or even for a football weekend in the fall, please stop by for a quick "Howdy!" and a cup of coffee! We'd love to hear from you!

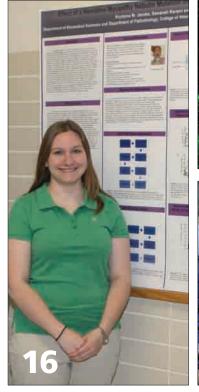
Theman Marce

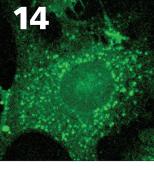
Eleanor M. Green, DVM, DACVM, DABVP Carl B. King Dean of Veterinary Medicine













The Four C's

- **6 Caring** A Special Kind of Donation: Giving the Gift of Life
- 8 Curing

Do Right By The Horse Carol Rose Inducted into AQHA Hall of Fame

10 Creating

Veterinary Researchers Achieve Cloning First

11 Communicating

CE Presents First Farmed Deer Conference CVM Reaches Out Through PEER Program



20 When Disaster Strikes

Veterinarians Prepare to Respond to Emergencies and Disasters

On the cover: Dr. Brian Stacy, NOAA veterinarian, prepares to clean an oiled Kemp's Ridley turtle. Photo credit: NOAA/ Georgia Department of Natural Resources.

14 Research Spotlight

Nanotoxicology: Exposing Hidden Dangers Researchers Confirm Cause of Avian PDD

16 Biomedical Sciences Spotlight

Undergaduate Research Scholars Program

18 Leadership Lab

Mentorship: An Intentional Relationship









Departments

- 2 Dean's Message
- 4 College Information
- 5 Continuing Education Calendar
- 24 College News
- 34 Faculty/Staff Focus
- 44 Development News
- 46 Alumni News
- 51 In Memoriam
- 52 Parting Shot

College Information



Editor: Angela Clendenin, '91

Communications Specialist: Elizabeth Janecka

Student Writers: Tiffany Friedrich, '10 Becky Mahon, '11

Contributing Writers:

Dr. James Heird Stacie Kopecki, '02 Dr. Dan Posey, '82 Dr. Guy Sheppard, '77 Marilyn Snell, '06 Kristina Twigg, '10 Roma Subramanian, '11

Art Director: Jennie L. L<u>amb</u>

Associate Art Director: VeLisa Ward Bayer

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 twice a year 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. Texas A&M University does not discriminate on the basis of race, color, age, national origin, gender identity, sex, marital status, disability, or status as a

Communications Advisory Team

U.S. veteran.

Louise Abbott, Alice Blue-McLendon, Barbara Gastel, Ellie Greenbaum, Sandee Hartsfield, John Roths, Guy Sheppard, W. Terry Stiles, Noell Vance, Dickson Varner, and O.J. "Bubba" Woytek

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) 8455-9043

Continuing Education/ Public Relations Office: (979) 845-9102

4 • CVM Today • Summer 2010

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

Executive Committee

Carl B. King Dean of Veterinary Medicine Dr. Eleanor M. Green

Associate Dean, Professional Programs Dr. Kenita Rogers

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

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

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

Assistant Dean, Finance and Administration Mr. Charles Vrooman

Interim Dept. Head, Veterinary Pathobiology Dr. John August

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

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

Dept. Head, Large Animal Clinical Sciences Dr. William Moyer

> **Chief of Staff** Mr. John M. Scroggs

Assistant Vice President, Development Dr. O. J. "Bubba" Woytek

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

Director, Communications & Public Relations Ms. Angela Clendenin

> Department of Veterinary Small Animal Clinical Sciences: (979) 845-9053

> Department of Veterinary 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

Veterinary Medicine: A Lifelong Learning Experience



2010 CONTINUING EDUCATION Schedule





September 19, 2010 Football Weekend CE Program Medical & Surgical Management of Urinary Tract Disorders Speakers: Dr. Audrey Cook & Laura Peycke

October 1–3, 2010 Annual Equine Conference: Respiratory Disease Chair: Dr. Keith Chaffin

October 8–10, 2010 Small Animal Emergency Medicine & Critical Care Chair: Dr. James Barr

October 17, 2010 Football Weekend CE Program Fluid Therapy: Crystalloid, Colloids & Other Stuff Speaker: Dr. James Barr or Cattle Medicine: Getting a Diagnosis Makes It Easier Speaker: Dr. Allen Roussell

October 31, 2010 Football Weekend CE Program Diagnosis & Therapy of Round-Cell Tumors in the Dog Speaker: Dr. Claudia Barton or Colic: Interpretation of Diagnostic Test Speaker: Dr. Joanne Hardy

November 7, 2010 Football Weekend CE Program Derm 101: Back to the Basics Speaker: Dr. Adam Patterson or Caceous Lymphademitis in Small Ruminants; Interesting Small Ruminant Cases; Food Animal Neurology Cases Speaker: Dr. Kevin Washburn

November 21, 2010 Football Weekend CE Program Diabetes: Getting Started, DKA, Feline Issues Speaker: Dr. Audrey Cook

All dates subject to change.

Tel. 979.845.9102 Fax 979.8622832 vetmed.tamu.edu/ce

August 21, 2010 Orthopedics Conference Chair: Dr. Don Hulse

August 27–29, 2010 2nd Annual Canine Conference Chair: Dr. Audrey Cook

September 5, 2010 Football Weekend CE Program Feline GI Disease Speaker: Dr. Deb Zoran **or** Working Up the Sick Foal Speaker: Dr. Joanne Hardy

September 12, 2010 Football Weekend CE Program Seizures: Neuro Examination, Emergency Care, & Maintenance Therapy Speaker: Dr. Jon Levine

> Continuing Education Veterinary Medicine & Biomedical Sciences Texas A&M University, 4470 TAMU College Station, TX 77843-4470

Caring for animals, people, & the environment

A Special Kind of Donation: Giving the Gift of Life by Elizabeth Janecka

Paula Plummer and Maddie

Blood shortages are common in human hospitals around the country, and it is imperative that blood is readily available for those who are injured or undergo surgery. What many people don't realize is that these same shortages also impact animal hospitals. The Texas A&M University College of Veterinary Medicine & Biomedical Sciences (CVM) is more than aware of this need. In fact, a blood bank like the ones in human hospitals can be found in the Veterinary Medical Teaching Hospital (VMTH). The technicians that oversee the operations of the blood bank realize the critical need for donor pets to help keep a steady supply of blood and blood components on hand for emergencies. For this reason, they maintain an on-call list of available blood donors for "fresh draw" components such as platelets and they also purchase and maintain a stock of other frozen/refrigerated components.

The feature in this edition of *CVM Today* focuses on what happens when disaster strikes, and highlights the college's Veterinary Emergency Team. However, when emergencies happen and disasters occur, not all clinicians are deployed to the disaster zone. Many remain at the VMTH to care for pets arriving from hard hit areas—the ones that may need an emergency blood donation. Not all emergencies arise from disaster, and not all patients needing blood arrive from a disaster zone. In fact, most are pets that have become critically ill. The blood bank is there to provide a needed resource that gives these pets a second shot at life.

"It's important to have a supply of different blood components available at all times because we are both a primary emergency facility and a large referral facility," explains Mary Radcliffe, blood bank coordinator of the VMTH's Small Animal Hospital ICU. "We see high risk, critical cases which often require immediate treatment. These types of patients may not even survive a 24–48 hour delay in receiving a particular component."

Radcliffe explains that there is a greater need for animal blood banks in today's veterinary ICUs than there was about 10 to 15 years ago. In the past, most animals would only have about one surgery in their lifetime. Today, animals will average about two to three major surgeries or medical issues in their lifetime due to the increased owner care and the stronger social role that pets play in society.

Volunteer blood donors are crucial to the supply the clinic has on hand. Privately owned dogs and cats serve as blood donors, and a friendly personality is a must.

"I have been in veterinary medicine for 10 years and I have always allowed my dogs to be blood donors," said Paula Plummer, veterinary technician at CVM. "People do not realize that blood banks are just as important in veterinary medicine as they are in human medicine. I allow my dog to be involved because it truly is an amazing

feeling to know that she helped save another dog's life." Both dogs and cats must be between one and six years of age, spayed or neutered, and in good health. Cats must weigh at least 12 lbs. and dogs must weigh at least 55 lbs.

Many blood banks have several Greyhounds and Pit Bulls in their donor programs due to the relatively higher incidence of the universal blood type in these breeds, as well as their easygoing nature, which works best during the donation.

There are multiple blood types in dogs, but there are universal donors who can generally donate to any dog in need. The technicians at the VMTH make sure to routinely perform a crossmatch on canine patients to rule out any incompatibility as a result of a previous transfusion. Universal donors do not exist in cats as they have three different blood types: A, B, and AB. The most common blood type is A. The feline patients must be typed and transfused with their identical blood types as the need arises. Most type A cats are domestic short hair mixed breeds, while there is a higher incidence of the rarer type B and AB in some of the purebred cats.

"Before accepting a dog or cat into the program they are blood typed and then if they are suitable, they come in to the clinic for a complete physical examination and blood draw to rule out any medical problems," states Radcliffe. "They remain in the program for approximately two years and may donate once every three months."



D'Lisa Ryland collects blood while Paula Plummer holds Maddie.

Right now there are 12 dogs and one cat that participate in the program. All typing, testing, annual physical exams, and vaccinations for the donors are done at no charge to the owner.

Radcliffe notes that if necessary they can purchase blood from a commercial blood bank for exotic animals.

"Between the commercial blood bank supplies, which we purchase, and our volunteer donors, we generally manage to cover our blood needs. Holidays and times of natural disasters are always a particular concern. This is due to the increased case load, as so many other facilities are closed," remarks Radcliffe.

While the majority of the blood bank program's needs are currently being met, many of the donors' owners are students who graduate and move away with their pets. Also, as pets get older, they may have to "retire" from the program based on

age, or they may develop medical problems unrelated to being a donor that may force them into "early retirement."

"I am always accepting new applications for the program," states Radcliffe. "Interested people in the Bryan/College Station area can contact me by email at *mradcliffe@cvm.tamu. edu.*"

"Our cases range widely considering the injury," said Radcliffe. "We provide a service that can help save lives for animals every day. Whether we help to save their lives long term, or just extend them so their owners can have a time to say goodbye and get closure, we realize that this is a necessary service in veterinary medicine and we are grateful for the opportunity to provide it."

Curing & preventing diseases in animals & humans

Do Right by the Horse

by Dr. James Heird

The following is an excerpt from a speech given by Dr. James Heird, executive professor and coordinator of the Equine Initiative at Texas A&M University, at the American Quarter Horse Judges' Seminar in December 2009. This speech was given to judges of the American Quarter Horse Association (AQHA) with the intent to inform industry leaders to take a stand on the issue of horse welfare. While his comments were directed to judges, many of his comments resonate with veterinarians and horse owners everywhere. We are pleased to be able to share these comments with you.

As a judge, an educator, and as a horseman, I have never known our industry to face as many challenges as it does today. The economy has been devastating to our industry. We are a "disposable income" industry. Thus, the people capable of spending money on horses, training, and shows have less money to spend and are more careful where they spend it. Another challenge to our industry is that there are simply more activities to pursue during our free time than ever before. This is especially true of our youth.

Competing on the athletic field takes more time than it did a few years ago and (that activity) competes with the horse industry—and don't forget that many competitions in which our young people participate have definitive ways to evaluate success that are not based on a judge's opinion or reasoning. Plus, a soccer ball doesn't eat, need a trailer, wear fancy clothes or have to be trained to use it.

We all know about the issue of unwanted horses. Most of us have definite opinions about the issue of equine slaughter. Some of us may even think it is the most important issue facing our industry. It is certainly one of the most contentious. Some of the



other issues facing our industry include competition for trails, fuel prices, alternative medicine, the use of drugs and medications in competition horses, compounding of pharmaceuticals, and many others.

I personally believe that the greatest danger to our industry is the inhumane treatment of our horses during their training and the resulting appearance in the show ring. The magnitude of this issue is heightened by a society that is more broadly informed and aware, and by our own habituation and blind defense of what we do. I believe that we, as an industry, are in a period when many of our personal ethics conflict with those of society. There are many activist groups in our society. Yet, I think we always have to remember the words of former Chief Justice Louis Brandeis when he said, "The greatest deterrent to freedom are men and women of zeal, well-meaning, but without knowledge or understanding." The fact of the matter is, if there is nothing that goes against the norm of society, there will be no activist groups. So rather than just automatically condemning activists, I believe we need to make sure that in the eyes of society, we are not violating societal ethics.

Society loves horses; people see them as noble and majestic animals. I suspect most of us started out our love affairs with horses feeling exactly the same way. However, as we become more deeply entrenched in the showing/winning aspect of our industry, we often lose contact with why we entered the industry in the beginning and we shift our emphasis to winning rather than on the well-being of the horse. The descriptive term for this is "habituation" which is "a reduction of a behavioral response to a specific stimulus that occurs repeatedly." In other words, in the case of extreme training techniques, we learn to ignore those stimuli that at first we find offensive. We ignore them because we want to win and believe these techniques are necessary to win. We ignore them because we see successful people do them. Worse, we ignore what we see happening because we are afraid of being embarrassed and ostracized for speaking out. Sometimes we forget who brought us and forsake our original intent for "winning at all costs."

Further, we learn to ignore our responsibility to the societal ethics in which we were reared. This is where the tension between societal ethics and personal ethics reaches an impasse and eventually conflict results. If a piece of society chooses to ignore societal ethics long enough, these violations will come to the attention of the people in the segments of society that are looking for a cause for which they can be the spokespeople. That's where we are with animal welfare, especially equine welfare. Society has seen too many horses abused, over-worked, and broken down.

I know most of you love horses, and you want to give something back to the industry. Go a step farther and take on the responsibility of protecting the horse—our horse, the American Quarter Horse—the animal that we loved and respected enough to get into this industry. So what can we do as judges? We can walk by the warm-up arena, we can watch the schooling that takes place in the ring and we can refuse to reward intimidation regardless of who is showing. We can look for abuse, either mental or physical. As leaders of our breed and the chosen few who are respected by our fellow members, we can choose not to accept or defend or, more importantly, practice actions that are inhumane.

At Colorado State University, I was privileged to work with Bernie Rollin, Ph.D., a philosopher who has taken on the task of protecting the welfare of all animals, particularly farm and laboratory animals. He believes that as an industry we are "low-hanging fruit" for the animal activists of the world. He believes we must immediately cease what we are doing that is inhumane and that can't be defended to any rational audience that loves horses. My favorite quote of Dr. Rollins' is that we "need to stop doing the 5 percent that society spends 95 percent of its time criticizing." Think about that for just a moment: Let's stop doing the small pieces of what we do that society spends the most time criticizing. Each of us can think of a few things that are so obviously wrong at our shows and in training that we would all agree are not pleasant, comfortable, or enjoyable for the horse.

If we as an industry don't want outside authorities dictating how we show and present our American Quarter Horses, we need to begin cleaning up our industry. I don't think any of us wants the government to control what and how we show. There are all sorts of ways to address an issue: We can defend it, ignore it and hope no one notices, or we can fix it. As judges, we can do the right thing for the benefit and the future of the horse. Be a judge who is known to protect the horse, our industry and our future. Think about all that could happen to us as a breed if we don't do something ourselves to stop the criticism we are receiving. The American Quarter Horse has been good to each of us; let's make sure we are good to it in return.

Carol Rose inducted into AQHA Hall of Fame

The Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) congratulates Carol Rose on her induction into the AQHA Hall of Fame. In an unprecedented manner, both Carol and her legendary horse, Zan Parr Bar, were inducted at the same time in 2010.

Rose is a pioneer. She was the first woman ever to qualify for the National Cutting Horse Futurity finals. She went on to be the NCHA non-pro world champion in 1967, 1968, 1969, and again in 1975. Her performance in the show ring has translated to her contributions to the horse industry. In addition to being an AQHA judge she was the first woman to serve on the prestigious AQHA judges committee. Rose is known for her keen business acumen. Her Quarter Horse operation ranks among the best, having produced 25 world championships and 30 reserve world championships, among a multitude of other award winners.

Zan Parr Bar is the second of Rose's horses to be inducted into the AQHA Hall of Fame. He was world champion halter stallion three times, the first ever to achieve that mark. He was also a multiple award winning performance horse who went on to become an outstanding sire. At the time of his death in 1987, he was AQHA's leading sire of performance horses. Today, 23 years after his death, he ranks 6th on the list of all-time leading point earners. His influence on the breed persists today.

Rose is definitely a friend of the CVM. She has been a long-time client of the Veterinary Medical Teaching Hospital and supporter of the college in a variety of ways. She has contributed to the success of the Legends Premier Stallion Season Auction, not only through her own donations, but also through encouragement of other donors. Recently she served as an important member of the Assessment Team for the newly forming Equine Sciences Initiative at Texas A&M. She understands the importance of strong educational, research, and outreach programs, as well as strong connections with the animal industries.

We congratulate Carol Rose on this recognition and look forward to her continued involvement in the CVM.



Creating opportunities for new knowledge, new therapies, & new learning

Veterinary Researchers Achieve Cloning First

Researchers at Texas A&M University's College of Veterinary Medicine & Biomedical Sciences (CVM) have achieved another cloning first with the successful delivery of a foal using oocytes from a live mare, the first such clone in the world.

The delivery of the foal highlights Texas A&M's long tradition of leading science in equine reproduction and has been a great experience for the owner of the new foal.

"I've always liked having three horses to ride," said Kit Knotts, proud owner of Mouse, the foal that represents the successful cloning efforts and the latest in equine reproduction science at the CVM. "I called and emailed breeders to spread the word that I was looking. Everything I could turn up was either too small, too young, too old, not quite sound, etc. I realized I didn't want just another horse to have another body in the barn, I wanted another Marc."

Knotts' efforts to find a horse that had the same qualities as her prized Lipizzan stallion, Marc, (Pluto III Marcella) would lead her to Texas A&M University and equine reproduction expert, Dr. Katrin Hinrichs.

"My local veterinarian, Dr. Brad Newman, mentioned that Texas A&M was cloning, but it was when Dr. Adam Eichelberger joined Newman Equine that we began to pursue the possibilities."

Dr. Hinrichs' lab is noted for achieving the first cloned foal in North America, and the third in the world with Paris Texas, who arrived in 2005. The lab has since produced twelve cloned foals. Currently there are only three labs in the world that have reported the successful birth of cloned horses: Texas A&M University, Viagen (a commercial venture based in Texas), and the lab of Dr. Cesare Galli, in Italy.

"We have worked on this clone for about two years," said Hinrichs, a professor in the Department of Veterinary Physiology & Pharmacology. "This is actually our first foal produced using oocytes, or egg cells, from live mares. We recovered the oocytes from our herd of research mares using the same method used to recover eggs from women for in vitro fertilization. We used the oocytes for the cloning process, which made it difficult as we had very few to work with at any one time. During the cloning process, we tested a new technique that has been reported in mice to decrease birthing problems. Mrs. Knotts has been very supportive of our efforts to clone her horse, and has even named the foal 'Mouse' in honor of the research that produced him."

The process began with a biopsy of skin cells from Marc, the horse to be cloned. Through the cloning process using oocytes recovered from a live mare, viable embryos were developed and sent to Hartman Equine Reproduction Center, an embryo transfer facility in North Texas which works closely with Hinrichs' lab, for transfer into surrogate mares. Minnie, the mare carrying Mouse, stayed in North Texas for approximately 200 days, then was sent to her new home in Florida.

Minnie began to show signs of an early delivery, and was taken to the University of Florida College of Veterinary Medicine for observation and intervention. That's where Mouse arrived and was cared for by a team of neonatal experts that helped make sure he would make it through this critical time.

"Having Minnie with us for several months prior to foaling has been great," added Knotts. "The teamwork between Dr. Hinrichs and her colleagues at the University of Florida has been outstanding, frankly saving Mouse's life more than once before and after birth.

Hinrichs noted that while Mouse is truly an identical twin to the original horse, Marc, that there will be differences as the foal grows due to environmental influences.

"I have become really interested in the science involved," notes Knotts. "Dr. Hinrichs has been wonderful about keeping me informed about what is going on in the lab and feeds my interest by explaining things in terms I can largely understand. I am very proud of the contributions our project has made to the body of knowledge about cloning, which benefits far more areas of equine reproduction than most realize."





with clients, students, veterinarians, other scientists, & the public

Continuing Education program presents first farmed deer conference, among other new trends



BY ELIZABETH JANECKA



This year, the Continuing Education Office of the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) held a conference focusing on "Veterinary Opportunities with Farmed Deer." This is the first time this topic has been highlighted in continuing education efforts in any veterinary college across the nation. Attendees arrived from all over the country to learn how they can diversify their veterinary medical practice and improve their bottom line.

The conference resulted from a collaboration between the Texas Deer Association (TDA) and the Continuing Education Office and provided education for veterinarians about the growing farmed deer population and the implications for this new growth area on the veterinary industry. Since its formation in 1999, TDA has seen a huge growth in whitetail breeders in Texas from 350 to 1200 today. In a 2007 study, agricultural economists from Texas A&M discovered that farmed whitetails ranked sixth in agricultural products bringing in \$652 million to the Texas economy. The national economic impact is in excess of \$3 billion.

With growth brings the opportunity to expand veterinary medical practices to fulfill the demand for large animal specialization, especially as the farmed deer industry continues to seek veterinary expertise and support. The conference focused on practices, health issues, regulations, treatments, and discussions for the farmed deer industry, as well as how these may be incorporated into large animal veterinary practice. The overall message, however, was very clear—the opportunity to add a valuable client base to established large animal clinics is a way to keep practices growing in difficult economic times. In addition to the deer conference, the Continuing Education Office offers a wide variety of learning topics throughout the year.

"We want the Continuing Education Office of the Texas A&M University College of Veterinary Medicine & Biomedical Sciences to be the premiere learning experience for veterinarians who need to receive their continuing education," said Beth Johnson, coordinator of continuing education. "We offer world renowned faculty and state of the art equipment to help teach the courses. We have also worked really hard to provide topics and content that will accommodate most, if not every, veterinarian. While some topics are offered every year with a different focus, we try our best to offer new conferences to best feature the latest trends in veterinary medicine."

"Last year, there were 859 individuals from all over the country who attended our conferences," explained Johnson. "We awarded 310 continuing education hours to veterinarians. Each veterinarian is required to have 17 hours a year from the Texas Board of Veterinary Medical Examiners, while a registered veterinarian technician is required to have five hours. We keep all of their contact information and continuing education hours in a database so that at anytime an attendee can call and get that information verified. We try to provide a supportive environment so that we can be as helpful as possible to the attendees."

Please refer to the CE website (vetmed.tamu.edu/ce) and the Continuing Education Calendar on page 5 for upcoming events and new conference dates.



with clients, students, veterinarians, other scientists, & the public

BY ELIZABETH JANECKA





CVM REACHES OUT TO YOUTH AND TEACHERS ACROSS TEXAS THROUGH PEER PROGRAM

Science, and the ability to understand the scientific process, is an increasingly important skill. For this reason, it has become imperative to find new ways to engage middle school children with scientific concepts. The Partnership for Environmental Education and Rural Health (PEER) at the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) is reaching across the state of Texas to educate teachers to teach science using a different approach that children in middle school can get excited about.

"The Veterinarian's Black Bag" is one program through PEER that enhances the understanding of grade school students, sixth through eighth grade, about the world of science and discovery. This program is in its third year of a five-year grant that is funded by a Science Education Partnership Award from the National Center for Research Resources at the National Institutes of Health. The program encourages veterinarians all over the state to visit local rural schools and teach science through the use of animals. The veterinarians receive free lesson plans, Power-Point presentations, and other relevant information to help present science in a different light. The corresponding lesson materials are already broken down for use in a middle school classroom to better promote student understanding. The teacher is then able to follow up with free curriculum available through the PEER website.

"We not only want to increase students' interest, but ignite a sincere passion for science," said Dr. Larry Johnson, professor of veterinary medicine-anatomy and founder of PEER. "It truly is a wonderful opportunity for youth to gain experience and understanding in science and for our undergraduate, graduate, and professional students to hone their communication skills."

Johnson explains that "The Veterinarian's Black Bag" is a team effort. Dr. Dan Posey, director of special programs and clinical associate professor; Dr. Bill Klemm, professor of neuroscience and of veterinary integrative biosciences; Michele Ward, research associate and teacher;



Tammy Fernandez, research associate and teacher; Vince Hardy, research assistant; veterinary medical students; graduate students; and undergraduate students all combine efforts to make the program a success.

Less than a year ago, Michele Ward and Tammy Fernandez joined the PEER team. They are former middle school teachers who were brought on board to take the information from the veterinarians and alter the content into "teacher-friendly language" as well as to update the curriculum so it is compliant with TEKS (Texas Essential Knowledge and Skills) standards.

"Teachers are looking for something they can grab on to, tweak just a little bit and immediately bring into the classroom," said Fernandez. "This is a program to be added to a teacher's bag of tricks, helping them enhance their classroom. It gives them a tool to make a topic more interesting and more engaging than maybe it was the previous year."

PEER also puts on workshops during the summer months throughout the state of Texas to teach different techniques and to provide curriculum for teachers. This summer, teachers signed up for workshop classes in College Station, Huntsville, Lubbock, San Antonio, El Paso, and Amarillo.

The PEER program has generated huge success and has made teachers more excited than ever to put new techniques into practice. Since its inception three years ago, the program has grown from 116 attendees to the 414 attendees who signed up for the workshops this summer. Johnson explained that one of the teachers said she had never been so excited to get back into the classroom to teach her students and her summer vacation had just begun.

"Using the animals in the classroom is beneficial because children love animals," said Ward. "The focus of the class is on animals, but the students are really learning about themselves. Providing appropriate lesson plans is an important part of helping teachers achieve this accomplishment in the classroom."

PEER continues to devise innovative programs to reach young students across the state of Texas. The goal of PEER is to ignite a passion for science in youth so they will want to learn and discover about the world around them for the rest of their lives.

"We can use (children's) love for animals to stimulate people's knowledge about their environment and surroundings," Johnson said.

Through a combined effort of the CVM team, local veterinarians, and teachers, the PEER program is able to continue developing new ways to reach out to youth and to help the next generation of scientists discover a new found passion.



Nanotoxicology: Exposing hidden dangers

From drug delivery systems to cosmetics, the science of nanotechnology has a wide range of applications. This science is based on the unusual properties that materials exhibit when their dimensions are reduced to the nanoscale, that is, to less than 100 nanometers (which is 1000 times smaller than the width of a human hair). For example, while inert at normal scales, gold nanoparticles are catalytically active and are being used to improve the performance of fuel cells. Further, unlike its bulk form, zinc oxide nanoparticles have better UV blocking properties, making them ideal for use in sunscreens.

While the unique properties of nanoparticles are being exploited to generate a range of products, questions about the potential toxicity of these particles have not been adequately addressed. For example, how do nanoparticles incorporated into food matrices to increase longevity and freshness affect the immune system? How does inhaling an aerosolized mixture of nanoparticles affect the lungs?

Such questions are the focus of Dr. Christie Sayes' research at the Texas A&M University College of Veterinary Medicine & Biomedical Sciences. Sayes, an assistant professor in the department of Veterinary Physiology & Pharmacology, and her research group are at the forefront of a relatively new and rapidly developing field—nanotoxicology.

Toxicity studies

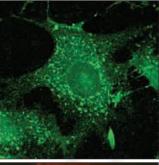
The toxic effects of nanoparticles are attributed to their various physicochemical properties, for example, size, surface reactivity, optical and electronic properties, agglomeration state and composition.

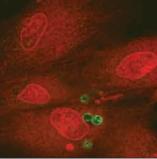
"Studies in my laboratory and in the labs I was trained in, as well as the experiences of our collaborators all over the world [have indicated] that nanoparticle exposure results in inflammatory responses [for example, through the generation of reactive

oxygen species]," Sayes said. "We've seen membrane oxidation, protein oxidation and even DNA oxidation."

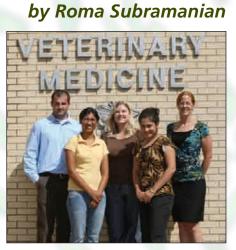
In a previous study, Sayes showed that at high concentrations, nanoscale titanium dioxide particles, which are used in solar cells, for example, disrupted the normal activity of human dermal fibroblasts and human lung epithelial cells in culture through oxidative dam-

Top image: A human skin cell exposed to green quantum dots, which preferentially associate with the cell's mitochondria. Bottom Image: A human skin cell exposed to green quantum dots encapsulated in polymer microcapsules. The red stain shows the healthy morphology of the cell by highlighting the cytoplasm.





age. Further, she has shown that depending on their surface reactivity, nanoquartz particles intratracheally instilled in rats produced different degrees of pulmonary inflammation and cytotoxicity. These and other studies conducted by her lab on the biological effects of different types of nanoparticles have helped provide evidence for nanoparticle toxicity.



(From left to right) Michael Berg, Aishwarya Sooresh, Dr. Christie Sayes, Nivedita Banerjee, and Amelia Romoser make up the research team studying nanoparticles.

Currently, Sayes'

lab is investigating the mechanisms underlying nanoparticleinduced inflammatory cascades and adverse immune responses.

"Some of the cells in the body look at nanoparticles as antigens, and it's the [resulting] increase in antibody production that's really interesting," Sayes said. "We know that antibodies are recruited, but do antibodies know to bind to nanoparticles to get rid of them? Can macrophages [cells involved in the body's defense response] see nanoparticles and if not, will the particles persist in our body, or will we able to excrete them out?"

The lab is also investigating the effect of a nanoparticle's agglomeration state on cytotoxicity. Although nanocrystals, which can be in the form of a powder, tend to agglomerate in water, this agglomeration is not irreversible.

"As nanoparticles move from one compartment of the body to another, they could de- and then reagglomerate," Sayes said. "For example, when an agglomeration of nanoparticles gets immersed in lung surfactant fluid [secreted by lung alveolar cells], you sometimes immediately see a deagglomeration of particles, that is, the particles separate from each other."

Since cells appear to treat individual nanoparticles differently from the way they treat nanoparticle agglomerates, Sayes is interested in investigating the differential cellular uptake mechanisms of individual versus aggregated nanoparticles.

Also, in collaboration with Swansea University, UK, Sayes' lab is investigating the toxicological effects of nanoparticles in composited materials. The project will examine whether in a car crash involving car bumpers made of nanomaterial composites, the nanoparticles embedded in the composited material are released and if so, whether they retain their physical and chemical characteristics and what would be the implications for the environment or human health.

Challenges

"The dose makes the poison," is an oft repeated maxim in toxicology. However, the absence of a standardized unit to express the toxic dose of a nanoparticle means that different metrics, for example, nanoparticle number and nanoparticle mass, are used for nanoparticle toxicity. This "dosimetric conundrum," as Sayes refers to it, makes it difficult to compare the results of nanotoxicity studies.

In a recent study, Sayes and her coauthors suggested that because there are few analytical methods currently available to measure nanoparticle mass, nanoparticle number per unit volume be used as a metric for expressing nanoparticle toxicity.

Another challenge in conducting nanotoxicology studies is the lack of correlation between the results of in vitro and in vivo studies. This means that in vitro assays need to be further standardized and validated before they can be used to effectively screen nanomaterials for toxicity.

Developing such in vitro assays would require careful characterization of the properties of the nanoparticles being evaluated as these properties, for example, catalytic activity or high adsorption capacity, might interfere with the results of the assay.

"A detailed and comprehensive physicochemical characterization of the test material being studied...is a critical factor for correlating the nanoparticle surface characteristics with any measured biological/toxicological responses as well as [for providing] an adequate reference point for comparing toxicity results with the hazard-based findings of other investigators," Sayes explained in a paper she recently coauthored, stressing the importance of determining nanoparticle properties.

Other projects and future directions

In addition to studies on nanoparticle toxicity and characterization, Sayes is investigating the use of nanoparticles in drug delivery and diagnostics.

For example, a recent grant to the lab awarded from the Texas AgriLife Research Vector-Borne Disease division will be directed toward using nanoparticles to prevent the toxic effects of pyrethroid pesticides after accidental exposure.

In another study, in collaboration with the university's Department of Biomedical Engineering, Sayes is investigating how quantum dots, nanocrystal semiconductors with fluorescent properties, can be used as biosensors to monitor changes in blood chemistry.

Researchers confirm cause of proventricular dilatation disease

The cause of proventricular dilatation disease (PDD), a fatal neurological disorder that affects mainly captive parrots, is avian bornavirus (ABV). A group led by researchers at the Schubot Exotic Bird Health Center of the Texas A&M University College of Veterinary Medicine & Biomedical Sciences confirmed this revelation in a recent study.

The study, published in the March 2010 issue of the journal *Emerging Infectious Diseases*, is based on the fulfillment of Koch's postulates for ABV. The postulates are a set of criteria that must be met to prove that a particular pathogenic agent causes a disease.

First identified in 2008 in birds affected with PDD, ABV has been suggested as the possible cause of this disease. However, thus far, conclusive evidence demonstrating the virus actually causes PDD has not been presented.

Establishing such a causal relationship between ABV and PDD, the researchers explain in the study, would require satisfying Koch's postulates, that is, "isolation of the agent [in this case, ABV] from infected birds; its propagation in culture; and, after reintroduction of the isolate into a susceptible host, manifestation of the disease."

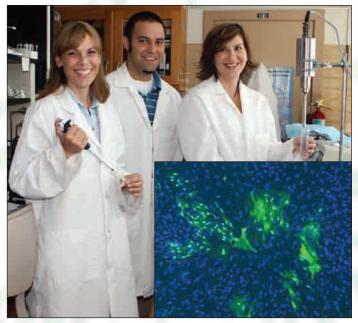
The researchers have demonstrated precisely these steps.

The group isolated ABV from the brain tissues of eight parrots with PDD. The virus was then propagated under laboratory conditions; specifically, the virus was grown in a culture of duck embryonic fibroblasts. Fibroblasts infected with the virus were then injected into two PDD-free Patagonian conures. One Patagonian conure was injected with fibroblasts that did not contain the virus.

The two Patagonian conures infected with ABV developed clinical signs of PDD. Further, brain tissues from these birds tested positive for ABV. The conure that was not infected with the virus did not develop PDD.

"It's the final act in proving that the virus actually causes PDD," said Dr. Ian Tizard, director of the Schubot Center and head of the research group, commenting on the successful experimental reproduction of the disease in healthy birds.

The study, funded by Texas A&M University's Richard M. Schubot Endowment, represents a major step forward in understanding PDD, a disease that has befuddled scientists for more than 30 years.



Members of the Schubot research team are (from left) Dr. Patricia Gray, Dr. Itamar Villanueva, and Dr. Paulette Suchodolski, and a slide of the PDD virus.

First reported in the late 1970s, PDD affects more than 50 species of parrots as well as other birds. Many of these species are endangered and are raised in captivity, making PDD a serious threat to their conservation.

The disease is characterized by damage to the nerve supply in the organs in the gastrointestinal tract. This affects the birds' ability to digest food, resulting in the accumulation of undigested food in the proventriculus, the first part of the stomach, which consequently dilates (hence the name of the disease).

Common clinical signs include weight loss, regurgitation of undigested seeds and loss of appetite. PDD can also damage nerves in the brain and spinal cord, resulting in neurological symptoms such as imbalance and lack of coordination. The disease eventually results in death.

Further studies at the Schubot Center will focus on the origin, prevention and treatment of the disease.

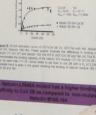
Biomedical Sciences

Nemaline-Myopathy Nebulin Mutation on Desmin Association to Sarcomeros Kostyna M. Jacobs, Samaneh Karami and Gloria M. Conover

<text><text><text><text><text><text>



As the function of the end of th





Undergraduate Research Scholars Program

by Tiffany Friedrich

From left to right: Samaneh Karami, Krystyna Jacobs, and Gloria Conover.

"I remember seeing an ad on television of a female scientist holding a microscope," laughed Jacobs. "Once I saw that, I knew I needed to become a scientist so that I could have a microscope!"

Fortunately, Krystyna Jacobs and research assistant professor, Dr. Gloria Conover, share the same passion and enthusiasm for science.

"Research is so much fun. It's like putting a giant puzzletogether based on experimental evidence for the scientific community," comments Conover. "Research definitely takes a great deal of work and patience, it may take a week to get even one result from an experiment, but it's all worth the effort when you are the first person to see the result. It can also make a great impact on the diagnosis and treatment of disease."

Jacobs is a member of the prestigious Undergraduate Research Scholars program and presented a project in the Molecular Biology & Microbiology category during Student Research Week. With the assistaince of Dr. Gloria Conover and prospective graduate student Samaneh Karami, Jacobs won

first place with her poster presentation.

Jacobs has been conducting research for two and a half years, and has been working with Conover since September 2009. Conover has convinced Jacobs to write a thesis for the Undergraduate Research Scholars Program.

The program gives undergraduate honor students the opportunity to showcase their hard work and research by writing a thesis at the end of their senior year.

"Krystyna has put a huge amount of time and dedication into her thesis so far," said Conover. "The Undergraduate Research *"I remember seeing an ad on television of a female scientist holding a microscope," laughed Jacobs. "Once I saw that, I knew I needed to become a scientist so that I could have a microscope!"*

the effect of this association in nemaline-myopathy, the most common non-dystrophic skeletal myopathy in humans.

"Our main research interest in the laboratory focuses on the role of intermediate filament proteins in disease," said Conover. "Our goal is to decipher the functional significance of the association of the filament desmin to the giant thin filament nebulin, at the sarcomeric Z-discs, and its relation to muscle disease. Mutations in nebulin cause nemaline-myopathy; a debilitating genetic muscle disease that affects children and adults alike. Interestingly, there are reports in the literature that describe this condition in cats."

Conover's previous research showed that nebulin has high affinity binding to desmin. However, little is known about the involvement of this interaction in nemaline-myophathy.

"We still are searching for the effect that nebulin has on certain mutations," said Jacobs. "We do know that the mutation has an effect, we just need to figure out the mildness or severity of that effect on the binding."

Jacobs has many aspirations. Upon her August graduation from Texas A&M with a degree in Biomedical Sciences with

her extensive research experience behind her, she will apply to medical school for the fall of 2011. This will give her a year-long break from school and will also allow her the chance to work with Conover on the nemaline-myopathy research.

"I enjoy research because you get to be right on the edge of new discoveries," said Jacobs. "As a researcher in Conover's lab, I have learned the value of patience. Research does not happen overnight. It takes days, weeks, sometimes months to produce viable results that help convey new information. It is a

Scholars program requires a minimum of 12 hours a week, and she puts in at least 16 to 20 during that timeframe, and is willing to work on the weekends if needed for the experiments."

Student presentations are hosted every three weeks. This gives the students a chance to practice presenting their research, as well as making sure that what they have found is consistent with what other researchers have found, and that the information makes sense to the audience.

Jacobs' thesis will describe the research in muscle disease that she and Conover have conducted over the past two semesters. The project, entitled "The Effect of a Nemaline-Myopathy Nebulin on Desmin Associated to Sarcomeres," was the subject of the winning poster presentation. Their research, which is still in the beginning stages, is on investigating the molecular mechanisms underlying muscle diseases. The focus of Jacobs' thesis is on the relationship between the intermediate filament protein desmin, and nebulin, and great feeling when you have results that no one has ever seen or produced before. Knowing that my research helps others to better understand the 'why' of nemaline-myopathy gives me a feeling of accomplishment."

Conover feels that it is important to give Biomedical Science undergraduate students the opportunity to conduct research, right here at the Texas A&M College of Veterinary Medicine & Biomedical Sciences.

"I feel strongly that early experiences for undergraduate research are essential for the advancement of the biomedical sciences, because I believe that if a student experiences the joy of the discovery process it will enhance and expand his or her career choices," said Conover. "I like to foster the innate creativity of our students in our research, and I also like to mentor students about the many ways they can contribute to science and pursue scientific careers at a professional level."



Mentorship: An Intentional Relationship

by Dr. Dan Posey

Dr. Dan Posey (back center) discusses veterinary medical education with Regent Bill Jones (left), while a student, Matt Moskosky, examines a sample.

18 • CVM Joday • Summer 2010

It is quite remarkable how important the mentoring relationship has become within the veterinary profession. As discussed in a previous edition of CVM Today, the mentoring relationship has always been an important aspect of our society demonstrated through apprenticeships, work/study and shadowing programs, internships, and preceptorships. There are numerous professions, careers and vocations that depend on mentoring to assist individuals in their training and aid them in their assimilation into the culture. Veterinary medicine is no different. As veterinarians, if we are able to accomplish excellence in mentoring, we are bound to attract new faces to our profession and our practices, to recruit and retain individuals to different areas within the veterinary profession, and to share our passion for our profession. Mentorship is one of the keys to our professional success. In this edition, we will look at the mentoring contract.

Mentoring is relationship that is as much for our professional development as veterinarians as it is a benefit to those we mentor. To be a successful mentor requires an intentional investment of time.

Why do some individuals not value investing in the mentoring relationship? The reasons vary as much as the veterinarians that make up our profession. The reasons include:

not having the time to invest in a relationship, not believing they possess the skills, or the lacking understanding, (due to their own history), of the value of mentorship. However, by learning a few simple steps, even the most inexperienced practitioner can prove to be a valuable mentor.

Most veterinary students enter in the educational process with some level of understanding of basic communication, leadership, and technical skills. While the educational process

can help develop these skills further, the intentional mentoring relationship is where they are more finely honed.

The mentor should understand the responsibility of transitioning the new graduate into a professional veterinarian. Upon graduation, the new veterinarian has mainly attained only entry-level skills. The mentoring relationship is an opportunity to increase confidence and productivity in a newly graduated DVM. To be successful, there must be mutual respect and frequent feedback. Both parties are hoping for a successful relationship, but it takes more than wishful thinking, it takes intentional investment. One of the ways to fulfill this in a mentoring relationship is through the "Mentoring Contract."

The contract helps make this an intentional process and not just a haphazard one, and begins with the defining of roles and expectations There are four parts to a mentoring contract:

- 1) Objectives
- 2) Schedule
- 3) Format
- 4) Evaluation Process

The objectives define what both parties want to achieve through the mentoring relationship. The objectives need to be mutually agreed upon by the mentor and mentee because each individual brings different expectations to the relationship. These objectives should be the focus of the first scheduled meeting.

The second part of the contract is the schedule. By holding regularly scheduled meetings, we express commitment to the process. The schedule should be mutually agreed upon by both parties. Mentor meetings should take place away from the workplace. If they are pursued within the walls of the workplace, constant interruptions will provide distractions from the process. Finding time in our busy schedules is difficult, but a necessity. One way is to schedule the mentoring meeting around a meal. Breakfast meetings might work well for some while others enjoy meeting during lunch or after work. The important aspect is not when we meet, but that we are meeting on a regular basis. Postponed meetings are common and can be the death to this relationship.

In the beginning, the investment of time is greater and more frequent. The first mentoring meeting should be at least 2–3 hours in length. This meeting is to discuss the objectives, scheduling time, and format. Recommendations include: investing one to two hours each week for the first month of the relationship, one to two hours on a biweekly basis in the second and third month, and at least once



monthly for two hours in the 4th, 5th, and 6th month. Before a transition in schedule occurs, the mentor and mentee should discuss their needs. Many times the relationship requires maintenance and renegotiation of the schedule. Flexibility is important, so intention can be maintained.

Another key part of the mentoring contract is the format. One of the common concerns is what to discuss for long periods of time. In the beginning of the relationship, most of the effort

is about getting to know each other. As the individuals work together, the conversations are shaped by client and staff interactions, clinical cases, financial aspects of the job, projects, recommendations for individual improvement, and the development of specific technical skill. As trust and mutual respect are reinforced through this mentor/mentee relationship, deeper discussions that are focused on personal and professional attributes can be initiated. It is important to remember each mentor/mentee relationship is different. Encouraging mutual respect and trust is important in developing rapport by both parties.

Critical evaluation is the final part of the mentoring contract and is important in building a relationship by mentors and mentees. Both should ask themselves if they are mutually receiving what they were expecting. This relationship, if properly developed, will last for years. The mentoring relationship doesn't have to end when there is a professional separation or redirection. I have had the great fortune to ask advice and receive great counsel from mentors whom I no longer see on a regular basis. Sometimes they give the best advice because they have the least amount at stake.

By using this simple contract format and ensuring that expectations are understood, a relationship based on respect, trust, and regular communication is fostered. Both the mentor and the mentee will develop professional skills that last a lifetime.



The photos on this page represent only a fraction of the imaginable emergency and disaster situations that can leave animals devastated and in need of assistance from caring and trained response personnel.

From right to left around the page, starting at the top:

Galveston Island, TX, Sep. 2008 ~ A volunteer for the Humane Society tends to dogs in a shelter set up to help animals displaced by Hurricane Ike. Photo credit: FEMA/Jocelyn Augustino.

New Orleans, LA, Sep. 2005 ~ A veterinarian (left) and veterinatian's technician examine a towel-wrapped cat rescued from the floodwaters left behind by Hurricane Katrina. Photo credit: FEMA/Win Henderson. Beaumont, TX, Sep. 2005 ~ Several horses were brought in to the Animal

Disaster Response Facility staged in the Ford Arena following Hurricane Rita's landfall. Photo credit: FEMA/Bob McMillan.

New Orleans, LA, Feb. 2006 ~ Members of Best Friends Rescue join the parade down Bourbon Street during Mardis Gras with some of the animals abandoned and rescued from Hurricane Katrina. Photo credit: FEMA/Barbara Pritchard.

Galveston Island, TX, Sep. 2008 ~ A stray cow walks along areas where sand and debris cover the island due to Hurricane lke. Livestock as well as domesticated animals were displaced throughout the area. Photo credit: FEMA/Jocelyn Augustino.

Houston, TX, Oct. 2008 ~ The U.S. Fish and Wildlife Service rescued this endangered pelican, injured in Hurrican Ike, and turned it over to the Houston Society for the Prevention of Cruelty to Animals (SPCA), an agency licensed to treat wildlife. Photo credit: FEMA/Leif Skoogfors.

Florida/Georgia Coasts, Gulf of Mexico, Jun. 2010 ~ One of 10 Kemp's Ridley turtles recovered not far from the site of the Deepwater Horizon accident. He was cleaned and treated by a team of sea turtle experts. Photo credit: NOAA - LA Times/Carolyn Cole.

Eureka, MO, Mar. 2008 -- Members of the Missouri Humane Society along with a volunteer large animal rescue group, Missouri Emergency Response Service, attempt to rescue 13 cattle that are stuck in flood waters. Photo credit: FEMA/Jocelyn Augustino.

Background image of Hurricane Katrina over the Gulf of Mexico courtesy of Department of Atmospheric Sciences, Texas A&M University.





ands

bestfriends.org

Rescue

when the solution of the solut

by Angela Clendenin

Veterinarians prepare to respond to emergencies and disasters

When disaster strikes, the most shocking statistics include lives lost and dollars in damage, but the actual cost of disaster also includes the toll it takes on the health of the survivors and of the environment. Because of the long-term damage suffered by those that survive a disaster, it can take years to fully recover from a devastating event. This makes it even more imperative to minimize the impact a disaster causes.

For concerned clinicians at the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM), this first became evident with Hurricanes Katrina and Rita. As the events unfolded, it became clear that there had to be a better direction for response efforts. People refused to leave their homes because they were unable to take their pets with them, and in the aftermath, were left wading through fetid waters contaminated with salt water, toxic chemicals, and the bacteria from decaying animal and human corpses. With major access points flooded, and supplies in short order, the suffering continued for weeks as rescue teams worked to retrieve those they could and provide food and water to those that had to continue to wait. ➡



Waiting was unacceptable for the Texas A&M team. In response to Brazos County's designation as an evacuation hub for future hurricane threats. and eager to find a solution where experts in animal welfare could respond in the event of a disaster, talks were initiated between the Emergency Response staff of Brazos County and faculty from the CVM.

"We wanted to learn more about the direction that emergency response efforts were going to take in the future," said Dr. Wesley Bissett, clinical professor in the large animal clinical sciences department, "and if there was a role we could play. As the only veterinary medical college in the State of Texas, we felt we had expertise and facilities that could provide much needed support in future response efforts."

Soon after talks began with Brazos County, CVM officials began working on developing an agreement with the Texas Animal Health Commission (TAHC), the lead agency for animal health issues in times of emergencies. By partnering with the TAHC, the CVM could support the TAHC mission by projecting the CVM's capabilities around the state.

"Once we had a rough agreement in place with TAHC," added Bissett, "we went to the Executive Committee of the CVM and requested that a formalized Emergency Response Committee be established at the college level. This request was approved, and we began to identify clinicians, scientists, administrative staff, and technicians who would need to have a place on these response teams."

To respond in an emergency, the teams would need special equipment and the funds to not only purchase this equipment, but also to support the team. Funds were requested and received from the Texas Division of Emergency Management, and have immediately been used to build the necessary infrastructure for the emergency response teams.

"Once we knew that we were going to be able to develop formalized teams, we began to organize under the name TAMU VET, or Texas A&M University Veterinary Emergency Team," said Bissett. "We were able to purchase some special tents, satellite equipment, portable stocks & stalls, kenneling materials, etc. so that when we are out in the field, we are able to deploy as a fully self-sustaining unit."

While responding to a disaster, the teams are able to do environmental assessments, and triage of injured animals. This process can include doing toxicity sampling of water supplies to better know what is available to stranded livestock and pets, evaluating food and nutrition needs, and developing ways to stabilize the injured animals and get them to safety and shelter.

"We want to limit animal suffering," said Bissett. "So, animal welfare will be paramount to our thinking. Our college was founded on service to the state, so being able to respond when animals in the state are in need is in our tradition of service."

Not only have these teams dedicated themselves to being available to provide needed aid during a disaster, but they also are using these opportunities as a teaching tool for future veterinarians. A new elective is now offered to third year veterinary medical students that prepares them to play a role in emergency response efforts regardless where they end up in practice. Three students also serve on the TAMU VETs at any given time.

"There are many roles to fill in a time of disaster," added Bissett. "Our students are able to see how emergency response is something that brings in faculty from the clinics in a multi-disciplinary effort. Not everyone is deployed. As a major referral hospital, the CVM also needs faculty to remain in the hospital to take care of emergent animal needs that arrive from shelters, from evacuees passing through, and from the deployed teams. There's a role for everyone, and it takes everyone to be successful at what we do."

The TAMU VETs had the opportunity to test their roles in a recent disaster preparation exercise held in April with renowned disaster response team, Texas Task Force-1 (TTF-1). The scenario was an explosion in an urban area, and TTF-1

Preparing to respond to disasters and emergencies requires special equipment as well as mobile units in which to set up on-site operations. Photos to the left show satellite equipment, a trailer, and tents that will be used to establish headquarters for the TAMU VET in disaster areas, as well as members of the team practicing set up. Photos by Larry Wadsworth.

Photos on the opposite page show Danene Burtel, Dr. Heather Nevill, and Dr. Erica Miller, members of the Louisiana State Wildlife Response Team, cleansing a pelican of oil at the Clean Gulf Associates Mobile Wildlife Rehabilitation Station on Ft. Jackson in Plaquemines Parish, La., May 15, 2010. Photo credits: U.S. Navy/Justin Stumberg. was using some their most valuable team members—their dogs—to assist in the search and rescue effort. The TAMU VETs were able to respond and test their ability to deploy with equipment and operate in the field.

"Overall, the drill went exceedingly well," said Bissett. "We sent teams out with specific routes to simulate assessment activity and also conducted a triage exercise. We were also able to identify holes and rough spots in our process and plans so that they could be ironed out prior to the beginning of hurricane season."

Representatives from the Department of Homeland Security attended the exercise as guests of TTF-1. Impressed with what they saw from TAMU VETs, they asked a lot of questions of the team. There is interest in potentially pursuing the TAMU VET program as a national model. "We think we have a good set up and a great plan," notes Bissett. "Moving forward, we intend to pursue additional funding to better equip our teams to provide all-species, all-hazard response. We hope that in the future, we will be able to establish a national center for emergency response training for veterinarians, and potentially others interested in emergency response, right here at the CVM."

With minimizing animal suffering as the primary directive, the TAMU VETs are able to use their expertise and equipment to make an impact on human health and the health of the environment as well by helping a disasterstricken area move more quickly towards recovery through effective assessment, triage, and teamwork.

Caring for the animals affected by the

Dr. J. Jill Heatley, clinical associate professor at the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM), has taken a leading role in the recent efforts to help animals affected by the oil spill in the Gulf.

While Heatley teaches a Zoo and Exotic Medicine class at the CVM, she has also spent the past seven months teaching training classes at the Wildlife Rehabilitation and Education Center (WREC) in Houston. The WREC's Oiled Wildlife Response Team is on call 24/7 and is currently on standby to respond to any and all wildlife impacted by the oil slick caused by the fire and sinking of the drilling platform *Deepwater Horizon*.

"Even though we do have the occasional veterinary student take our classes, we are open to the public, so we mostly teach oil field workers, public safety officials, public health workers, and really anyone whose job crosses paths with the oil spill," said Heatley.

She explains that all different species of animals have been affected by this disaster including birds, fish, sea turtles, mammals, otters, etc. with the exception of sea otters which are not found on this part of the coast.

"The animals most visible to the human eye are birds, so our main focus is teaching recovery procedures for them. Part of what we teach our students is how to take care of the animal within the first critical 24 hours. Also, how to correctly handle and properly clean affected animals," said Heatley.

To work with oil affected animals one must be certified and trained, therefore a civilian who comes into contact with such an animal should contact a wild animal control officer immediately.



College News

CVM's Teaching Hospital breaks ground for Imaging & Cancer Treatment Center



An artist's rendering of the Imaging & Cancer Treatment Center, situated between the Large and Small Animal Hospitals at the CVM.

The future of veterinary medicine is coming to Texas A&M University College of Veterinary Medicine & Biomedical Sciences (CVM) in the form of a state-of-the-art Imaging and Cancer Treatment Center, and with that comes diagnostic and treatment capabilities never before possible in one location. On May 26, members of the Texas A&M University System and Texas A&M University Administration joined the administrative team of the college in breaking ground on this future

facility that will combine leading edge

equipment with clinical specialists in an effort to provide the highest quality care and diagnostics for patients of all species and better service to referring veterinarians—as well as to the veterinary profession.

"The ceremony today not only breaks ground physically so that construction of this facility may commence, but it is also a symbolic gesture that represents the groundbreaking science and healing that will take place here," said Dr. Eleanor M. Green, Carl B. King Dean of Veterinary Medicine. "The Imaging and Cancer Treatment Center will become the referral center for veterinary cancer and imaging, and will provide a place of hope for our clients as well as a center for knowledge and teaching for our students."

The new facility will accommodate both large and small animals, and will house a 3 Tesla MRI unit, a Tomotherapy unit, and an advanced CT imaging system. In addition, the new technology will allow veterinary medical students to experience the latest in diagnostic and therapeutic imaging and will equip them with new knowledge that leads to becoming better veterinarians in the future.

At a total cost of approximately \$10.5 million, the Imaging and Cancer Treatment Center will not only put Texas A&M at the forefront of diagnostics, but it will also enable clinicians at the college to engage in research collaborations with scientists at human hospitals to help define the future of cancer treatment and neuroscience for humans and animals.

Completion of the center, which is located between the Large and Small Animal Hospitals, is expected by August 2011.



Mr. W. Terry Stiles, director of the Veterinary Medical Teaching Hopsital; Dr. Mark Hussey, vice chancellor and dean for Agriculture and Life Sciences; Dr. Stephen Fletcher; Dr. Charles A. Johnson, senior associate vice president for research; Dr. Fred A. Palmer; Mrs. Vola Palmer; Dr. H. Richard Adams, former dean of the CVM; Mr. Hunter Bollman, outgoing student member of the Texas A&M System Board of Regents; Mr. Cresencio Davila, incoming student member of the Texas A&M System Board of Regents; Dr. Eleanor M. Green, Carl B. King Dean of Veterinary Medicine; Mr. Jim Schwertner, member of the Texas A&M System Board of Regents; Dr. R. Bowen Loftin, President of Texas A&M University, Mr. Richard Delgado, Jr.; Dr. Benjamin Young, clinical assistant professor, department of large animal clinical sciences; and Dr. Sandee M. Hartsfield, professor and head, department of small animal clinical sciences; at the ground breaking for the new Imaging & Cancer Treatment Center.

College News

TVMA Annual Meeting held at CVM in March

Location, location, location. This may be the mainstay for prime real estate, but it also can apply to the alma mater of the majority of Texas licensed veterinarians and the state's professional veterinary organization. Knowledgeable experts and classroom facilities also provide a favorable location to present continuing education lectures.

That is why in the spring of every year the Texas A&M University College of Veterinary Medicine & Biomedical Sciences (CVM) partners with the Texas Veterinary Medical Association (TVMA) to host the TVMA Annual Conference in College Station, Texas.

"A vast majority of our members graduated from Texas A&M. There is something special about getting our initial veterinary education here and then coming back home for our CE," notes Dr. Lori Teller, President of TVMA and a CVM graduate. "We also enjoy the time we get to spend with each veterinary class and love to interact with future colleagues. TVMA greatly appreciates our continued relationship with the CVM and looks forward to every visit we spend there."

The 2010 TVMA Annual Conference, held March 5–7 at the CVM, provided licensed veterinarians and their support staff a choice of quality lectures. Topics covered medical diseases and concerns for companion animals, food animals, horses, and cervids (deer, elk, and moose). Speakers from the Texas Veterinary Medical Diagnostic Lab (TVMDL) presented information to help practitioners in their diagnosis of toxins and endocrine imbalances. The TVMDL director, Tammy Beckham, discussed diagnostic technologies for veterinary laboratories of the future.

The business side of veterinary medical practice featured discussions on developing, growing and buying/ selling a veterinary practice as well as practice management.

Ellen Forsythe, TVMA director of education and meetings, said that the conference registrants included 341 DVMs, 35 veterinary students, and 92 hospital personnel. Two hundred sixtyeight TAMU DVM graduates attended the TVMA Conference this year.

Producers Meetings provide educational opportunities

One communication mission of the Texas A&M University College of Veterinary Medicine & Biomedical Sciences (CVM) is to provide animal health educational opportunities for the local community. The Second Annual Beef Cattle Meeting and the Second Annual Equine Evening at the Expo were two such events made available to area beef producers and horse enthusiasts. These events addressed key issues affecting beef production as well as equine health and technological advances.

The 2nd Annual Beef Cattle Producers Meeting, held April 29, provided a platform for informative and timely topics for livestock producers. The two-hour meeting at the Brazos Expo Center featured presentations from clinical faculty and invited speakers on topics, which producers could implement in their cattle operations.

Dr. John Davidson, clinical assistant professor of large animal clinical sciences, chaired the meeting and presented the topic, "Trichomoniasis-The Impact on Herd Health and Productivity". Beef producers also heard Dr. Jason Cleere, associate professor and extension beef cattle specialist, discussed "Maximizing the Potential of Your Calf Crop". A historically timely topic, "Pregnancy Diagnosis in Cattle: Why is it so Important?" was presented by Dr. Juan Romano, associate professor at the CVM.

"It is always very rewarding to speak to a group of livestock producers that have such an interest in learning and making improvements in their operation," notes Davidson. "In addition to producer education, a key goal of this meeting was to increase awareness of our clinical services, faculty, and talented staff to area beef producers."

While the Beef Cattle Meeting was organized by the CVM, An Equine Evening at the Expo, held March 23, was a joint effort of the CVM, the Texas A&M University Department of Animal Science Equine Section, and the Brazos Extension Horse Committee. This meeting was organized to educate equine owners and enthusiasts residing in the greater Brazos Valley area.

Guest speaker, Dr. Katrin Hinrichs, Patsy Link Chair in Mare Reproductive Studies and professor of both veterinary physiology & pharmacology and large animal clinical sciences, gave a presentation entitled "Horse Cloning—State of the Art."

Hinrichs noted technological advances that now promote cloning as a viable means to preserve for future breeding generations the equine genetics of great competitive horses that are often gelded before their athletic prowess can be discovered. Hinrich explained that cloning is also a powerful research tool which can help scientists find cures for equine diseases by isolating and studying the effects of genetics and environment.

Other equine health topics discussed included "Piroplasmosis and Your

Horse-What You Need to Know" and "Hoof Trimming Fundamentals."

Dr. Tracy Norman, clinical assistant professor, large animal clinical sciences, presented information on piroplasmosis, a tick-borne protozoal infection of horses that presents as an acute infection with fever, decreased appetite, depression, labored or rapid respiration, and congestion of the mucus membranes among other symptoms. She noted that carrier animals or infected ticks can introduce equine piroplasmosis into new regions and this disease is a major constraint to the international movement of equines.

Jason Maki, CJF, RJF, farrier at the Veterinary Medical Teaching Hospital, presented information on the fundamentals of equine hoof trimming. Maki noted that properly trimmed hooves keep a horse's feet more sound and decrease long-term problems.

From beef herd health practices to fundamental training and new scientific technology, the subject matter presented to local beef cattle producers and equine enthusiasts addressed current industry issues and techniques. Educational opportunities such as these provide area livestock owners with valuable information they can use to help improve their cattle and horse operations.

College News

Dream becomes reality for Research Building Extension

Once it was a dream. It became a proposal. With more effort, it became a financially backed plan. Finally, that plan has been implemented and fabricated into reality, which today proudly stands in the form of the new Veterinary Medical Research Building Extension (VMRBE).

Excitement fills the air as more office and research space becomes available to the College of Veterinary Medicine & Biomedical Sciences (CVM) in the form of labs, faculty offices, and graduate/post-doctoral offices.

The VMRBE is providing three floors of additional space for an ever growing faculty and research team at the CVM. The VMRBE space has been allocated to individual investigators based on research funding and evidence that further funding will become available, number of graduate students and/or post doctoral associates working in each principal investigator's laboratory, and physical proximity of laboratories using common equipment or involved in collaborative research. Twenty-six labs, 30 faculty offices, and 22 post doctoral offices are a welcomed addition to the CVM.

"The research building extension is a clear statement by the CVM that the college is committed to being among the national leaders in veterinary and biomedical research," states Dr. Bhanu Chowdhary, associate dean for research and graduate studies at the CVM. "While the building will help meet some of the current needs for research space, it will also significantly facilitate the expansion of our highly successful research programs, attract



Dr. Bhanu P. Chowdhary, associate dean for research and graduate studies; Dr. Michael D. McKinney, Chancellor of the Texas A&M System; Dr. H. Richard Adams, former dean of the CVM; Dr. Loren C. Skow., professor, department of veterinary integrative bioscisnces; Dr. Eleanor M. Green, Carl B. King Dean of Veterinary Medicine; Mrs. Vola Palmer; and Dr. Fred A. Palmer open the Veterinary Medical Research Building Extension on the CVM campus.

new faculty members, and launch new initiatives that will increase the scope of our research, education, and training abilities."

From dream to reality, May 21, featured the VMRBE ribbon-cutting

ceremony. This was a momentous occasion that marked the official dedication of new CVM research facilities and amore spacious working environment for faculty and graduate/post-doctoral students.

CVM Today is now an environmentally friendly magazine

CVM Today has gone green! The paper that is used throughout the process of creating the magazine, from the proofing stage to the final distributed copies, is recycled and Forest Stewardship Council (FSC) certified.

Certification from FSC recognizes printing companies who have undertaken a rigorous program of training combined with continual auditing by FSC authorities. The FSC seal guarantees that the paper used has met requirements that forest operations, paper mills, and paper merchants have the proper chain-of-custody certificates throughout the entire process of producing the paper.

The paper produced comes from responsibly managed forests worldwide, and with offices in more than 40 countries, FSC has created a global network to monitor compliance with their requirements. The Insite Group, *CVM Today's* printer, underwent a year-long process of readying for this certification.

Because of the influence of veterinary medicine on environmental health, and because many stories in the magazine illustrate the involvement of the college in environmental concerns, the decision to "Go Green" was an easy one.

"Our printer has chosen to use an FSC certified recycled paper as its 'house stock'—the least expensive paper a printer offers to its clients," said Jennie L. Lamb, graphic designer in Media Resources at the CVM and art director for *CVM Today*. "We are able to both help save the environment and save the CVM money in production costs with this change."

The decision to go green has never looked or felt better!



CVM and Blinn College collaborate for Veterinary Technology Program

The Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) is pleased to announce its unique collaboration with Blinn College's new Veterinary Technology Program. This two-year technical program leads to an Associates in Applied Science degree in Veterinary Technology from Blinn College.

In the first year of the program, students will take classes at Blinn's Bryan campus. During the second year of the Veterinary Technology Program, the students will receive much of their laboratory and clinical education in both the Small Animal and Large Animal Teaching Hospitals at the CVM, where they will work alongside registered veterinary technicians (RVTs), clinicians, and veterinary students. Graduates of the Veterinary Technology Program are then eligible to sit for national and state credentialing examinations to become a Registered Veterinary Technician. The program has a competitive application process that requires previous coursework, veterinary-supervised clinical experience, and health occupations testing. Deadline for submitting applications for Fall semester admission is May of the previous semester.

For more information on the program and to register for an information meeting where you can receive an application packet, please visit the Veterinary Technology home page at www.blinn.edu/twe/vet_tech.

"3+3" agreement formed with Texas Chiropractic College

Administrators from the Texas A&M University College of Veterinary Medicine & Biomedical Sciences (CVM) entered into a "3+3" articulation agreement with Texas Chiropractic College (TCC), providing a seamless transition of BIMS students into both TCC's Bachelor of Sciences in Human Biology and Doctor of Chiropractic degree programs.

"We are proud to partner with other educational institutions to increase educational opportunities for students," said Dr. Eleanor M. Green, Carl B. King Dean of Veterinary Medicine. "This type of partnership is a testimony to the quality and diversity of our students at this college."

Under the terms of the agreement, after three years in the BIMS program at Texas A&M, those students satisfactorily completing the prerequisite courses would be admitted into TCC's Bachelor of Science in Human Biology program and their Doctor of Chiropractic Program concurrently. Students who complete this coursework will receive a Doctorate in Chiropractic from TCC.

"We are pleased to partner with Texas A&M's Biomedical Sciences program. The caliber of students in this program will definitely be an asset to our school," stated Dr. Richard G. Brassard, president of Texas Chiropractic College.

Texas Chiropractic College is the fourteenth college in the state of Texas

that has signed an articulation agreement with the Texas A&M Biomedical Sciences program and the first to sign a 3+3 agreement.

According to Dr. F. H. "Skip" Landis, assistant dean for biomedical sciences, articulation agreements benefit students in a number of ways.

"One of the most important ways this agreement will benefit our students is by defining the exact courses and grades that are required for a facilitated admission into Texas Chiropractic College. This will allow them to be admitted after their junior year, thus beginning their senior year already in the professional program—saving one year of time and tuition," notes Landis.

For more information on the Biomedical Sciences program at the Texas A&M College of Veterinary Medicine & Biomedical Sciences, please visit our website at vetmed. tamu.edu/bims.



(From left to right, back row) Dr. Fred Zuker, dean of enrollment management at TCC; Dr. Robert Cooper, admissions counselor at TCC; Mr. Bill Clements, vice president for institutional advancement at TCC; Dr. F. H. "Skip" Landis, assistant dean for biomedical sciences; and Dr. Evelyn Tiffany-Castiglioni, associate dean for undergraduate studies, professor, and head, department of veterinary intergrative biosciences; join (front row) Dr. Richard G. Brassard, president of TCC, and Dr. Eleanor M. Green, Carl B. King Dean of Veterinary Medicine, as they sign the 3+3 articulation agreement between the two institutions.

College News

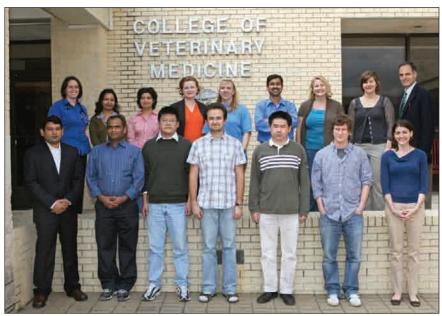
Post-doctorate research recognized with awards

The Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) has instituted a new initiative to financially assist post-doctorate and graduate students. Until this point, the CVM has had no program to promote the post doctorate students in getting any real-world preparation.

"The CVM Postdoctoral Research Awards are a cooperation between the Dean's office, various departments at the CVM, TVMDL, and Agri-Life Research, to provide funding in a competitive manner to post-doctorate students," said Dr. Bhanu Chowdhary, associate dean of research and graduate studies. "These collaborative efforts give students the opportunity to learn how to write grant proposals for generating preliminary data which they can use for submitting proposals to various state and national funding agencies, as well as non-profit organizations."

The CVM Postdoctoral Research Award committee received 30 trainee proposals, and 18 of these were selected to receive a grant of \$10,000 each.

"This type of award has never been done at the university level," said Chowdhary. "We are pleased that postdoctorate students will now be able to promote the abilities that will help



This year's winners include top (left to right): Meighan Daly, Nandina Paria, Vandana Sarin, Gina Lungu, Tennille Lamon, Sankar Prasad Chaki, Kim Tessanne, Paulette Suchodolski, and Dr. Bhanu Chowdhary, associate dean; bottom: Ranjeet Dongaonkar, Dhruva Kumar Mishra, Gang Li, Kirill Grushin, Liheng Shi, Andrew Steelman, and Candice Brinkmeyer-Langford. Not pictured: Leo Njongmeta, Jan Janeka, and Gayathri Chadalapaka.

them be successful in the real world as researchers, or wherever they go."

"I'm excited," said Kim Tessanne, "this is the first award I have received for an idea that I came up with! I plan to use the money to work on a proposed study model, in hopes of carrying the idea into research and later on into academia."

Chadalapaka receives Distinguished Graduate Student Award



Gayathri Chadalapaka (center left) receives the Distinguished Graduate Student Award in the presence of Association of Former Students Vice President, Ms. Cecile Herd (left), Interim Associate Vice President for Graduate Studies, Dr. Robert Webb (center right), and Texas A&M University President Dr. R. Bowen Loftin (right).

The Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) would like to offer congratulations to Gayathri Chadalapaka, the 2010 recipient of the Distinguished Graduate Student Award from The Association of Former Students. Chadalapaka has exemplified excellence in research and is well qualified to receive this award.

A total of five students have been selected as winners for the Distinguished Graduate Student Awards. Each recipient received a framed certificate and a distinctive watch from the Association of Former Students on Thursday, April 1st, when the awards were presented. The ceremony took place in the Zachry Room at the Association of Former Students, Clayton Williams Building.

"I am humbled and honored to be receiving the Association of Former Students Distinguished Graduate Student Award this year" said Chadalapaka. "I would sincerely like to thank my mentor Dr. Safe, my colleagues, the CVM, and excellent research environment here at the college, for the constant encouragement and support."

College News

Bordin receives Bush Presidential Library Foundation Grant

The Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) congratulates Dr. Angela Bordin, who has been selected by the college to receive the George Bush Presidential Library Foundation Grant.

Dr. Bordin was selected by the college on behalf of her exemplary academic record. The \$500 award allowed her to travel to the Conference of Research Workers in Animal Diseases held in Chicago, Illinois, giving her the opportunity to increase her professional network, improve her research project, and interact with some of the best researchers in the world.

"I feel proud and honored to have been chosen for this grant, out of all the dedicated students," said Bordin.



Dr. Angela Bordin

"The travel award enabled me to attend a conference that provided invaluable experience for my career. The grant was used to fund the travel expenses I incurred while attending the Conference of Research Workers in Animal Diseases in Chicago where I presented a poster on a project that was conducted in the Equine Infectious Diseases Laboratory at the CVM."

Bordin attributes her success of winning the George Bush Presidential Library Foundation Grant to hard work and persistence combined with the support she receives from her advisor, Dr. Noah Cohen, Dr. William Moyer, Head of the Department of Veterinary Large Animal Clinical Sciences, the CVM, and of course, the Bush Foundation.

New competitive awards for graduate research

A new program has started for graduate students that is similar to the post-doctoral research award program. The Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) Graduate Research Award is a competitive program in which students must develop proposals for grant applications that are reviewed by professors inside and outside of the program.

"This program encourages graduate students to compete for grant proposals at the state and national level," said Dr. Bhanu Chowdhary, associate dean for research and graduate studies.

"The program serves as an incentive for students and mentors to gather funds in order to generate preliminary data. It also lays the foundation for them to get acquainted with the process of grant writing, and to further develop skills that will help them be successful in providing funding for themselves."

"This is the first time I have won something," said Aishwarya Sooresh. "It gives me confidence to know that something I have written is recognized. I just started the graduate program, so winning this award is an encouragement to keep going. I would like to thank my advisor, Dr. Christie Sayes, for all of her encouragement and support," Sooresh said.

"The Graduate Student Research Award is the first grant I have received," said Ahmed Ridha. "I am happy; this is very meaningful to me. The money will be used to support the experiments I proposed. I would also like to thank my advisors, Dr. Kraemer and Dr. Sayes, for their support and encouragement."



This year's winners of the Graduate Student Research Awards include (left to right); Dr. Bhanu Chowdhary, associate dean, Aishwarya Sooresh, Lauren Dobson, Priyanka Kachroo, Lavoisier Akoolo, Ahmed Ridha, Mike Peoples, and (not pictured) Glenda Bingham, Jana Caldwell, Christina Du, Xin Guo, Sara Mashoof, and Lisbeth Ramirez-Carvajal.

College News



College News













College News

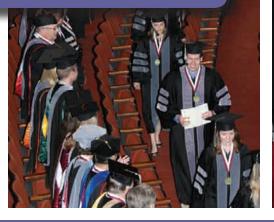




Commencement May 13, 2010

































AFS honors four CVM faculty members with Distinguished Achievement Awards





Dr. Louise Abbott

Every year, for more than 50 years, The Association of Former Students (AFS), Texas A&M University's official alumni association, has been recognizing outstanding members of the faculty and staff with Distinguished Achievement Awards, one of the highest university honors. This year, four faculty members of the College of Veterinary Medicine & Biomedical Sciences (CVM) have been honored with this very special recognition.

Dr. Louise Abbott and Dr. William Murphy, associate professors in the department of veterinary integrative biosciences, are this year's recipients of the awards in the categories of teaching and research, respectively. Dr. James Womack, distinguished professor in the department of veterinary pathobiology, has been honored with a graduate mentoring award, and Dr. Debra Zoran, associate professor and chief of small animal internal medicine in the department of veterinary small animal clinical sciences, has also won the award for teaching.

"These four distinguished faculty members are a credit to our college," said Dr. Eleanor M. Green, Carl B. King Dean of Veterinary Medicine. "Their dedication and commitment to our students and our programs, as well as that of their colleagues, are why Texas A&M's College of Veterinary Medicine is an international leader in animal, public, and environmental health."

For Abbott, a faculty member in the CVM's neuroscience and toxicology



Dr. William Murphy

program, the award is the latest teaching accolade of several she has earned during her career. She was named the university's 1997–98 Montague-Center for Teaching Excellence Scholar.

Abbott says she has particularly enjoyed the opportunity to have one-onone interactions with various students, whether it has involved helping veterinary students to make a contribution to the profession, encouraging research at the undergraduate level or exposing graduate students to the latest advancements in research.

"It's a prestigious honor," she said, commenting on the award. "The fact that it included letters [of nomination] from students makes it particularly special."

Also honored in the teaching category, Zoran is involved in clinical, teaching and research activities in the fields of small animal gastroenterology, nutrition, and feline medicine.

"This really is overwhelming and humbling," Zoran said. "There are so many wonderful teachers and teaching role models in our college that I just feel blessed to be chosen for this very special award. I wish to thank my mentors who have supported me and [have] helped me learn how to be a better teacher."

For Murphy, recipient of award in the research category, the award is the second research award he has received in the past six months. Last December, Murphy won the university's JoAnn Treat Research Excellence Award. (See story on page 42.)



Dr. James Womack

Dr. Debra Zoran

Murphy's research is targeted toward improving our understanding of the organization and evolution of genes that may be of relevance to feline diseases and traits of interest through genome mapping. He also studies the genetic and environmental changes responsible for the diversification and extinction of mammalian populations and species.

"I would like to thank all of my fantastic students, staff, and colleagues in the CVM and elsewhere who make coming to work every day a pleasure, and without whom I would not be deserving of this honor," Murphy said in recognition of the award.

For Womack, the award is an addition to the numerous prestigious honors he has received during the course of his career. A member of the National Academy of Sciences, Womack is credited with creating the first genome map of cattle. His research interests include identifying genes responsible for disease resistance in mammals, developing animal models for human disease research, and for improving animal health and productivity.

Commenting on the award, Womack said, "Graduate students are the glue that holds a research university together. They are the link between teaching and research. I've been fortunate to have some truly outstanding young men and women train in my laboratory, and their postdoctoral success is much more of a tribute to them than to me. I am honored to receive this award on their behalf."

Faculty/Itaff Focus

Burghardt wins Distinguished Service Award from Society for the Study of Reproduction

Dr. Robert Burghardt, professor in the veterinary integrative biosciences department of the Texas A&M University College of Veterinary Medicine & Biomedical Sciences (CVM), has been honored by the Society for the Study of Reproduction with a Distinguished Service Award.

The society presents this award to individuals who have demonstrated "unselfish service and leadership in advancing the discipline of reproductive biology." Marked by prestigious leadership positions, teaching awards and prolific contributions to research, Burghardt's academic career, spanning more than three decades, is a stellar example of this accomplishment.

"It's a great honor, unexpected, but much appreciated," Burghardt said, reflecting on the significance of the award.

Burghardt collaborates with a group of reproductive biologists who refer to themselves as the Uterine Biology and Pregnancy Team, which was honored in 2005 with the university's Agriculture Program Vice Chancellor's "Award in Excellence for Team Research." The award was in recognition of "exceptional leadership in advancing the understanding of the processes that affect [the] reproductive health of animals to benefit both agriculture and human sciences."

"Dr. Burghardt is a tremendous asset to our college," said Dr. Eleanor Green, Carl B. King Dean of Veterinary Medicine. "His commitment to not only his research but also his students has made a significant contribution to animal and human health today and in the future."

Over the course of his career, Burghardt has published over 200 peer-reviewed papers. He also holds a patent titled "Cryopreservation of tissue for use in nuclear transfer," along with a fellow colleague and a graduate student. The patent was awarded for developing methods to preserve tissues harvested from animals postmortem for future use in cloning for purposes such as the conservation of endangered species.

Burghardt's other accomplishments include serving as a grant reviewer for

federal agencies such as the National Institutes of Health and the National Science Foundation; serving as the associate editor of *Biology of Reproduction*, the Society for the Study of Reproduction's official journal; and being awarded the Wiley Distinguished Teaching Professorship in Veterinary Medicine.

Burghardt's work in reproductive biology began at Harvard Medical School, where as a postdoctoral researcher he studied mechanisms underlying communication between ovarian cells in mammalian models. An interest in the use of imaging techniques for research in reproductive biology brought him to Texas A&M University. He joined the university's department of biology as an assistant professor in 1978 to teach a course in microscopy. He later become associate professor in this department as well as director of the university's Electron Microscopy Center, posts which he held until 1987.

That same year, Burghardt made the transition to the CVM. He joined the department of veterinary anatomy and public health (now veterinary integrative biosciences) as associate professor. Besides the pursuit of research interests, the transition was motivated by an invitation to develop a laboratory based on emerging microscopy technologies, which resulted in Burghardt founding the college's Image Analysis Laboratory in 1987.

In addition to investigating how smooth muscle cells in the uterus are activated during the induction of labor, Burghardt's research projects include studying the mechanisms of cell signaling between the placental and fetal tissue compartments during the establishment and maintenance of pregnancy and studying mechanisms of cytotoxicity using non-invasive fluorescence imaging techniques.

Further, under Burghardt's direction, the Image Analysis Laboratory has become one of the premier cellular imaging facilities in the nation. It



Dr. Robert Burghardt

has also served as a core facility for projects funded by major grants from the National Institute of Environmental Health Sciences, for example, the Superfund Research Program.

Advancing the services provided by the laboratory and continued engagement in teaching and collaborative research are Burghardt's future goals.

"For the college to be on the forefront of imaging, we have to find the funding to purchase a new instrument every two or three years," Burghardt says.

He aims to continue to provide state-of-the-art analytical microscopy resources and training facilities to students and researchers to utilize this technology to advance their research.

Reflecting on his career, Burghardt credits the college for giving him "the perfect job," one that has allowed him to balance and enjoy his many academic interests.

"I've been very lucky to have the opportunity to teach the courses I really like," Burghardt says. "I've been fortunate to work with colleagues and trainees in research areas that are very stimulating and motivating, and to have the opportunity to provide service through the Image Analysis Laboratory."

Faculty/Haff Focus

Chowdhary named assoc. dean for research & graduate studies



Dr. Bhanu P. Chowdhary

After conducting a national search, the Texas A&M University College of Veterinary Medicine & Biomedical Sciences (CVM) didn't have to go any further than down the hall to find the new Associate Dean for Research and Graduate Studies, Dr. Bhanu P. Chowdhary.

"Dr. Chowdhary's strong reputation in the research community, his commitment to service, and his dedication to students will be key to ensuring the bright future of the research enterprise at the CVM," said Dr. Eleanor Green, Carl B. King Dean of Veterinary Medicine.

"I am grateful for the opportunity provided to me and am excited to serve the college and all its constituents to take research and graduate education to the next level of advancement. We are fortunate at the CVM to have a bunch of faculty members who are very successful and are internationally renowned for their work," said Chowdhary. "I will work to support their continued success by encouraging and promoting them to target various funding sources and by increasing opportunities for expanded collaborations."

The same excitement Chowdhary wants to bring to the research faculty also applies to the graduate students in the college.

"I have been very close to graduate students all of my career," said Chowdhary. "I would like to see graduate education at the CVM further organized so that we can attract the best students and can create and matriculate graduate students of the highest caliber."

In addition, Chowdhary wants to incorporate more research opportunities into the professional DVM curriculum, as it adds a very important dimension to education and professional development.

"I would like to help create an atmosphere whereby our veterinary medical students have a better idea of the research that goes on within the college and even outside the college that supports the discovery of novel tools for treatment and diagnostics," said Chowdhary. "By doing this, and helping these students develop a research aptitude, their awareness of the latest developments will dramatically increase and they will be better equipped with ways of understanding and addressing complex problems they may see in their clinics."

Another group that Chowdhary is working with is the post-doctoral students, or "postdocs."

"By encouraging them to be actively involved in research, proposal writing, teaching, we can ensure they continue to advance, they develop a CV that speaks volumes, and they are better positioned to be the future leaders in their field," said Chowdhary.

Chowdhary began his education with a Veterinary Degree from the College of Veterinary and Animal Sciences in Bikaner, India, followed by a Masters in Veterinary Science in Animal Breeding and Genetics. He received his PhD from the Swedish University of Agricultural Sciences in Uppsala, Sweden.

In addition to numerous articles and book chapters, Chowdhary has played an active role in professional genetics societies. In 2009, he was named as the President-Elect of the Texas Genetics Society. He has also served regularly on many department, college, and university-wide committees.

August appointed interim department head of pathobiology

Dr. John August, professor of feline internal medicine at the Texas A&M College of Veterinary Medicine & Biomedical Sciences, has been named as Interim Head of the Department of Veterinary Pathobiology. His appointment replaces previous Interim Department Head, Fuller Bazer, whose research is taking him out of the country. With the appointment comes new duties and responsibilities for August.

"I will be responsible for the quality and scope of instructional, research, and clinical service programs of the department and one of my responsibilities will be to ensure a smooth transition for the next permanent leader in the department," said August. As a faculty member in Small Animal Clinical Sciences, August is looking forward to having an opportunity to become better acquainted with his colleagues in Pathobiology, through his interim administrative appointment.

"As a faculty member in Small Animal Clinical Sciences, I've always had a great deal of respect for my colleagues working in Pathobiology, and this interim appointment gives me a unique opportunity to get to know the faculty and staff of the department better, and to learn more about their many contributions to the academic programs of our college."

August's term as interim head will conclude in late August, when Dr. Lin-



Dr. John August da Logan will return to the Pathobiology department to assume the helm.



Rogers appointed to Bridges Chair in veterinary medical education



Dr. Kenita S. Rogers

Dr. Kenita S. Rogers, associate dean for professional programs, has been appointed to the Charles H. and Mildred Kruse Bridges Chair in Veterinary Medical Education. The chair is believed to be the first in North America specifically devoted to advancing the future of veterinary medical education.

Throughout her career, Rogers has devoted herself to the education

of veterinary students. She has held positions as lecturer, assistant professor, associate professor, professor, and associate dean at Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM).

The Bridges Chair provides funds through an endowment to go toward advancing the education of veterinary medical students. Rogers is the second recipient of this chair, with the first being Dr. E. Dean Gage who retired from the college in late 2008.

"My hope is that these funds will help to advance the curriculum, help support faculty development of meaningful outcome assessments, and focus on initiatives that will specifically benefit both students and faculty," remarked Rogers. "In particular, I'm very open to funding ideas that the faculty have for improving the DVM curriculum and their teaching."

Rogers earned a BS in Animal Science from West Virginia University in 1979, and the Doctor of Veterinary Medicine in 1982, from Louisiana State University. In 1986, she earned a Master of Science in Veterinary Medicine while completing a small animal internal medicine residency at the CVM. She has served on the faculty since that time. She is board-certified in the specialties of internal medicine and oncology through the American College of Veterinary Internal Medicine.

Since her employment at Texas A&M, Rogers has earned a number of awards and distinctions, including three Texas A&M University Association of Former Students College-Level Distinguished Teaching Awards. In addition to her role as associate dean and educator, she holds memberships in many professional organizations and honor societies and has published greater than 50 peer-reviewed journal articles, 30 book chapters, and has presented approximately 130 continuing education seminars.

"I am thrilled to have this opportunity to help our students and faculty. When it comes right down to it, my current position is all about facilitating quality student education and faculty teaching success. Because of the incredible generosity and foresight of Dr. and Mrs. Bridges, I have another way to help faculty work on new ideas within the curriculum and help our students have even more opportunities to be great."

Roussel appointed ACVIM LAIM specialty president elect

Dr. Allen Roussel, professor and associate department head at the Texas A&M College of Veterinary Medicine & Biomedical Sciences, has been named the next American College of Veterinary Internal Medicine Large Animal Internal Medicine (ACVIM LAIM) Specialty President Elect.

The mission of the ACVIM is to eliminate animal disease by supporting discovery, education, and partnerships throughout the global community of medicine. ACVIM supports the work of scientists that raises awareness for specialty medicine, the need for advanced care, and research for future cures. Dr. Roussel's specialty is with large animal internal medicine.

Roussel begins his leadership role with the ACVIM LAIM at a time when there is a nationwide shortage of large animal veterinarians, and yet they have an important part to play in protecting public health. Large animal veterinarians have had a role in ensuring the safety of the food supply through disease surveillance, improving herd health, and the development of new diagnostic and treatment modalities. ACVIM specialists in private practice provide the highest level care to large animals at referral hospitals throughout the country, while those at university teaching hospitals instruct students and post-graduate trainees in the latest methods of diagnosis and treatment.

"I am honored to have the opportunity to serve as president of the specialty of Large Animal Internal Medicine," said Roussel. "We are faced with challenges in both the private and public sector in this period of economic uncertainty, but our membership has the will and the know-how to meet any challenge head-on and continue to advance the profession."



Dr. Allen Roussel

Roussel will begin his term as the President Elect in June of 2010, and will become the President in June of 2011.



Gastel wins CSE Award for Meritorious Achievement

Dr. Barbara Gastel, professor in the veterinary integrative biosciences department at the Texas A&M University College of Veterinary Medicine & Biomedical Sciences, is this year's recipient of the Council of Science Editors (CSE) Award for Meritorious Achievement. Gastel was presented the award on May 17 at the CSE's annual meeting in Atlanta, Georgia. The award, the council's highest honor, acknowledges achievements that highlight the CSE's goal, which is improving scientific communication by pursuing high standards in all editing-related activities.

"It's wonderful. I'm very touched," said Gastel, in recognition of the award. "It is especially meaningful to me as it is not only an honor given by my peers in the field but also one that has been previously given to some of the people I most admire in the field."

The award is partly in recognition of Gastel's 12-year editorship of *Science Editor*, the CSE journal, and its predecessor *CBE Views*. In addition to being of significant duration, Gastel's editorial term was distinguished by her involvement of student interns in the journal's publication.

"Barbara's work as the editor-inchief since 1998 of *CBE Views* and then *Science Editor* was crucial to the development of CSE and the promotion of good editorial practices," said former CSE President and chair of the CSE's Awards and Honors Committee, Dr. Ana Marusic. "Further, Barbara involved young students in the publishing of the journal, teaching them not only how to prepare excellent articles but also about what it means to be an editor and science communicator."

From degrees in medicine and public health from Johns Hopkins University to international recognition as an authority on science communication, Gastel's career has traced an illustrious trajectory. Gastel's noteworthy achievements extend beyond her service to the CSE, including four books—*Presenting Science to the Public; Teaching Science: A Guide for College and Professional School Instructors; Health Writer's Handbook;* and with Robert A. Day, *How to Write and Publish a Scientific Paper*—and serving



Dr. H. Phil Hobson, BS, DVM, MS, Diplomate ACVS, was recently recognized on the occasion of his retirement after 45 years of service at the **College of Veterinary Medicine** & Biomedical Sciences. On May 21, 2010 approximately 250 people celebrated Dr. Hobson's lifetime of dedication to the college and the Department of Small Animal Clinical Sciences. The evening at the Brazos Valley Expo Center featured slideshows, performances, and speakers arranged by his closest colleagues to honor him and his many accomplishments. Not only will

people remember Hobson for his many publications, awards, and generous gifts, but also by all of the lives that he touched as a teacher and a clinician.

"You could give Dr. Hobson a nose and a tail and he could build a whole dog," said Dr. Hartsfield, professor and head of small animal clinical sciences. "Indeed, he has the ability to assess surgical problems, visualize solutions, and apply corrective techniques. Dr. Hobson has provided instruction to more than 35 residents, numerous interns, and thousands of veterinary students. He will be missed as he leaves the college and enters retirement."



Dr. Barbara Gastel

as the US coordinator for the China Medical Board Program in Biomedical Writing and Editing for the 12 years of its existence. Also, she has begun working with AuthorAID, an international endeavor to help researchers in developing countries publish their research in scientific journals.

The award is also the latest addition to a host of honors Gastel has received during her career, such as the John P. McGovern Science and Society Award, the CSE Distinguished Service Award and the American Medical Writers Association (AMWA) Harold Swanberg Distinguished Service Award. She has also been named Honored Editor in the Life Sciences by the Board of Editors in the Life Sciences.

Gastel stepped down this July after serving a historic four consecutive terms as editor of *Science Editor*.

"A publication benefits from new blood and other people should have this experience," she said, explaining her decision to resign as editor of the journal.

Although Gastel will continue to contribute to *Science Editor*, she aims to devote more time to her other projects. These include preparing the manuscript for the new edition of the book she coauthored with Robert A. Day (a previous recipient of the CSE Award for Meritorious Achievement), working on a CD module on medical terminology for AMWA and continuing to serve as the Knowledge Community Editor for AuthorAID.



Hoffman honored with student-selected teaching award

Dr. Anton G. Hoffman, clinical professor in the Department of Veterinary Integrative Biosciences (VIBS) of the Texas A&M University College of Veterinary Medicine & Biomedical Sciences (CVM), has been honored with a student-selected Teaching Excellence Award.

Initiated by Chancellor Michael D. McKinney in 2008, the Teaching Excellence Awards program honors and financially rewards top teachers throughout the 11 branch campuses of the Texas A&M University System for excellence in classroom teaching. Awards are based solely on rankings from evaluations created and administered by students, with weighting for factors such as class size. All A&M system faculty members who teach at least a three-hour course can participate in this program.

"This program allows students to recognize the many outstanding teachers that we have across the A&M System," said McKinney. "While we are proud to extend our financial appreciation to these faculty members, these awards are about giving credit to those who give their best each day for their students, and ultimately to the state of Texas."

Ranked in the top five percent of the total 207 Texas A&M University System faculty winners, Hoffman will be one of three faculty members to receive a check for \$10,000, the highest amount awarded.

"I am honored and humbled to receive the Chancellor's Teaching Excellence Award," Hoffman said. "I can honestly say that my teaching career has been more challenging, stimulating, and rewarding than I could have ever imagined. It is a joy to watch veterinary students grow and mature during their short time with us, both intellectually and personally. It is incredibly rewarding to me when my students come back to me after the third or fourth year or even post-graduation and say 'thanks,' 'thanks for taking the time to help,' 'thanks for caring about whether I understood the material'."

The award is a noteworthy addition to the string of teaching honors Hoffman has received during his career. These include the John H. Millif Award for Teaching, the Carl J. Norden/ Pfizer Distinguished Teacher Award (which he has won twice), the Association of Former Students Distinguished Achievement Award for teaching (at both the college and university levels) and the university-level Student Led Award for Teaching Excellence.

A 1986 graduate of the CVM, Hoffman joined the department of veterinary anatomy and public health (now VIBS) in 1987 as a veterinary clinical associate. He was promoted to senior lecturer in 1998, clinical associate professor in 2003, and since 2009, he has served in the position of clinical professor.

Hoffman's main responsibilities involve teaching a range of undergraduate and professional anatomy courses offered by the VIBS department. These include a comprehensive small animal gross anatomy course taught in the first semester of the professional program; a special programs course in which biomedical science undergraduate students can work on anatomic projects such as skeletal preparation; and a neuroanatomy and clinical neurology course, which teaches not only anatomy of the gross brain and spinal cord, but also focuses heavily on neurological examination and localization of neurological lesions.

"For most students, the thought of an anatomy course can be quite scary," Hoffman said, explaining his teaching style. "However, it has been my observation that they will usually dive into the material once they [are motivated] and have a clear sense of the usefulness of the material to their future careers. To that end, I try to keep my anatomy courses clinically relevant by emphasizing major points with various 'realworld' clinical examples."

Hoffman also believes in developing innovative methods to cater to different learning styles. He has facilitated student learning by developing computer software programs for teaching anatomy, for example, Canine Radiographic Anatomy (Texas A&M University Press). Also, as director of the department's Plastination Laboratory since 1994, he has developed plastinated models for teaching. Further, as a medical illustrator, he has contributed numerous anatomic illustrations to peer-reviewed manuscripts, books, book chapters and presentations. Hoffman has also prepared anatomical illustrations for the courses he teaches to aid student learning.

"A teacher is one who makes himself progressively unnecessary," is one of Hoffman's favorite teaching quotes and one that defines his teaching philosophy. By not only imparting information but also by teaching his students how to find information, learn on their own and ask questions, Hoffman hopes that ultimately, his students will get along without him, not even noticing if he's not around.



Dr. Anton G. Hoffman with a student, Eliab Chavira, in the anatomy lab at the CVM.



CVM faculty have broad impact on profession

Texas A&M University is known for its exceptional faculty members who excel in both teaching and research. While the faculty at the Texas A&M University College of Veterinary Medicine & Biomedical Sciences (CVM) definitely do excel in these areas within the college, they are also involved and are integral to their professions outside of the college.

By staying involved outside of the classroom and the research lab, CVM faculty members are and will continue to be industry leaders. They will be on top of

industry trends, will be highly informed, and will have the access to collaborate with other industry leaders to advance and strengthen their profession.

As faculty members become more active in the community outside of the CVM, the profession of veterinary medicine also becomes more relevant and active inside the college.

These faculty members, and their dedication and commitment, ensure the long-term success of not only the college, but also the veterinary profession, and it

is important to recognize them for their service.

What follows is a list of the services that our faculty provide. While we know it is not an exhaustive list, we have tried to provide an overview of service that demonstrates the wide and varied impact that our college has outside its walls.

We were not able to include every level of participation, and apologize for any omissions. As we continue to receive information of this sort, we will work to put a more comprehensive and current list on the CVM website.

CVM representative for Texas Academy of Veterinary Practice (TAVP) Advisory council member for the Palo Alto College Vet Tech program Member of the Trichomoniasis Working Group of the Texas Animal Health Commission (TAHC)

Member of the Brucellosis Free Transition Working Group of the TAHC

Dr. James Derr,

Professor One of three faculty representatives for the Federal Demonstration Partnership (FDP) - National Academies. The FDP is a program that works to improve government processes.





Dr. Johnathon Dodd,

Clinical Associate Professor Treasurer for the Veterinary Dental Oversight Group. He was appointed in 2003 and will serve until 2010.

Dr. Virginia Fajt, **Clinical Assistant Professor**

Serving as councilor for the American Academy of Veterinary Pharmacology and Therapeutics (2001-2010) Serving as councilor for the American College of Veterinary Clinical Pharmacology



Vice president and chair of the credentials committee (2007 - 2011)

Vice president and chair of the AABP

Chair for the committee on Pharmaceutical and Biological Agents Member of the Editorial Board for Veterinary Therapeutics (2007-2010) Member of the Editorial Board for the Journal of Veterinary Pharmacology and Therapeutics (2010).



Dr. Sonya Gordon, Clinical Assistant Professor

Chairman of the American College of Veterinary Internal Medicine (ACVIM) Residency Training Committee for the College of Cardiology. She has been on the committee for three years and chairman for the last two vears.

Dr. Eleanor M. Green, Carl B. King Dean of Veterinary Medicine

Board of directors for the NAVME Consortium Diplomate for the American Board of Veterinary Practitioners, Equine Practice

Diplomate for the American College of Veterinary Internal Medicine, Specialty Internal Medicine





Dr. Garry Adams, **Professor and Coordinator, Biodefense** & Emerging Disease Commissioner of the Texas Forensic Science Commission

Ad hoc scientific reviewer of numerous organizations such as the National Institute of Allergy and Infectious Diseases (NIAID) and the International Atomic Energy

Agency

Serves on the National Research Council's Biodefense Standing Committee for the US Department of Defense

Dr. E. Murl Bailey, Jr., Professor

Serving on the AVMA's Council on Biologics and Therapeutic Agents. He was appointed in July of 2007 and will be serving until June of 2015



Dr. Terry Blanchard,

Professor

Board of Directors for the Texas Equine Veterinary Association

Participation in the American Association of Equine Practitioners, Therapeutics/Biologics Committee

Dr. Steven Brinsko.

Associate Professor and Chief of Theriogenology 2010 president-elect of the American College of Theriogenologists (ACT) and will become President in 2011



Dr. Kent Carter, Professor

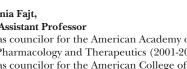
Member of the Texas Racing Commission

Dr. M.A. Crist, **Clinical Assistant Professor** Serves on the Board of Directors for the International Veterinary Academy of Pain Management. She was elected in 2009 and her term will end in 2011.



Dr. John Davidson, **Clinical Assistant Professor**

Serves on the membership committee for American Association of Bovine Practitioners (AABP) Serves on the strategic planning committee for Texas Veterinary Medical Association (TVMA) Serves on the bovine practice committee for TVMA







Dr. Joanne Hardy, **Clinical Associate Professor**

Served as the liaison for American College of Veterinary Surgeons (ACVS)

Served as the liaison for the American Board of Veterinary Specialties (ABVS)

Served as the liaison on the American College of Veterinary Emergency and Critical Care (ACVECC) Residency

Training Committee for the past three years.

Dr. J. Jill Heatley,

Clinical Associate Professor Director of the Governing Board Association of Avian Veterinarians for three years with one year left Treasurer for the Association of Reptile and Amphibian Veterinarians (three-year term with one year left) Liaison between the Association of Avian Veterinarians and American Association of Zoo Veterinarians



President-elect for the Horned Lizard Conservation Society

Dr. James Heird,

Executive Professor and Coordinator, Equine Initiative Chair of the Breed Integrity Task Force for the American Quarter Horse Association (AQHA) Superintendent of the AQHA Ranch Horse Versatility World Championship Show Chair AQHA Show Committee and Show Council

Member of the Colorado Board of Stock Inspection Member of National Western Stock Show, Executive Committee

Chair of the Horse Classification Committee Chair of the Executive Livestock and Horse Committee Chair of the Animal Care and Use Committee Chair of the Colorado Horse Development Authority



Dr. Larry Johnson,

Professor Executive director of the Texas A&M Chapter of Sigma Xi

Started the science promotion of youth committee Served on scientific outreach committee for several vears

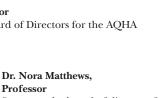
Dr. Ann B. Kier, Professor Diplomate for the American College of Laboratory Animal Medicine (ACLAM). She has served on the publications editorial board from 2005 to the present.

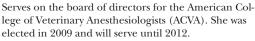


Dr. Blanca Lupiani, Associate Professor Served as an executive committee member for the AICAP since 2007

Dr. Mike Martin, Associate Professor Serves on the Board of Directors for the AQHA

Professor





Dr. William Moyer,

Professor and Head of the Department of Large Animal **Clinical Sciences**

President-elect of the American Association of Equine Practitioners (AAEP). Moyer will serve as AAEP president in 2011.



Dr. Leon Russell,

Elected as past-president of the World Veterinary Association (WVA) to serve a three year term On the WVA Executive Committee, and on the WVA Council from August 1, 2008 until October 31, 2011.

Dr. Stephen Safe,

Professor

Serves as the chair of the Oncology Fellowship Study Section of the National Institute of Health's National Cancer Institute

Serves on the scientific advisory board of the Meharry Medical University-Vanderbilt University The Advanced Research Cooperation in Environmental Health (ARCH) Consortium

Served on the scientific advisory board of the Scientific Prevention and Advisory Council (SPAC) of the Cancer Prevention and Research Institute of Texas.

Associate Professor and Director of the Gastrointestinal Laboratory

Secretary and treasurer of the Comparative Gastroenterology Society (CGS)

Dr. Ian Tizard,

Professor and Director of the Schubot Exotic Bird **Health Center**

Served as Chair for the Morris Animal Foundation from 1986-1987

> Dr. Kevin Washburn, Assistant Professor

Appointed to the Southwest Veterinary Symposium as interactive coordinator and the Continuing Education Committee in 2007.

Dr. Mike Willard,

Professor

Associate editor for the Journal of Veterinary Internal

Medicine Associate editor for the Journal of the ACVIM

TVMA

Dr. Danna Zimmer, Associate Professor Councilor for the Texas A&M Chapter for Neuroscience from 2007 to present

Dr. Deborah Zoran. Assoc. Professor & Chief, **Small Animal Internal Medicine** Chair of the Examination Task Force for the American College of Veterinary Internal Medicine Member of the Brazos Valley Small Animal Response Team (BVSART)

Member of the Texas Small Animal Resource Team Advisory Board of the

Member of the Disaster Preparedness Committee

















Faculty/ Staff Focus

Altering the architecture of malignant cells may slow cancer



Dr. Gonzalo Rivera

Cancer may spread throughout the human body when malignant cells travel in the blood stream. But it may be possible to slow or even stop those cells from spreading by altering their structure, according to a recent investigation led by a Texas A&M University researcher.

The team, lead by Dr. Gonzalo Rivera, an assistant professor in the department of veterinary pathobiology at the Texas A&M University College of Veterinary Medicine & Biomedical Sciences (CVM), and including scientists from The University of Connecticut Health Center and the University of California, San Francisco, published its findings recently in *Molecular Cell*, a peer-reviewed scientific journal.

The spread of cancer is one example of what can happen when things go awry with the cytoskeleton, a meshwork created by the assembly of multiple copies of a cellular protein called actin, Rivera explained.

The actin cytoskeleton determines a cell's shape and its ability to stick to other cells or to tissue. The cytoskeleton is constantly being reshaped in response to external clues sensed by cells. Through a complex process of "signal transduction," cells translate external clues into specific behaviors. They may grow rapidly, alter their functions or may migrate to other parts of the body.

Cells respond to signals from the environment in several ways. Among the most critical are the changes in lipids called phosphoinositides as well as in tyrosine phosphorylation, the addition of a phosphate group to specific cellular proteins. "The long-term goal of our research is to define how signals that alter the cytoskeletal architecture promote cancer initiation and progression, as well as migration of vascular cells," Rivera said.

Using a unique combination of experimental approaches, including molecular genetics, proteomics, and high resolution optical microscopy, Rivera and his co-investigators uncovered a novel molecular mechanism in the regulation of N-WASp, a protein critically involved in rearrangements of the actin cytoskeleton.

N-WASp is a direct cousin of WASp (Wiskott-Aldrich Syndrome protein), a protein named after the physicians that first reported a rare inherited disorder characterized by low level of blood platelets, eczema, recurrent infections, and a high risk of leukemia or lymph node tumors in boys.

The article, "Reciprocal Interdependence between Nck and PI(4,5)P2 Promotes Localized N-WASp-Mediated Actin Polymerization in Living Cells," can be found in the Nov. 13, 2009, issue of *Molecular Cell*.

Murphy wins JoAnn Treat Research Excellence Award

Dr. William J. Murphy, associate professor in the Department of Veterinary Integrative Biosciences at the Texas A&M University College of Veterinary Medicine & Biomedical Sciences, is this year's recipient of the JoAnn Treat Research Excellence Award.

Established by The Board of Trustees of the Texas A&M Research Foundation, the award is open to faculty at any of The Texas A&M University System components. It recognizes exceptional contribution to the faculty member's field of research, administered through the Foundation, during the past five years. The award is named in honor of JoAnn Treat, who served 19 years as president of the Research Foundation before retiring in August 2003.

The Foundation announced the award at their annual councilor/ trustee fall meeting held on December 11, 2009. Murphy received a \$10,000 award and a commemorative plaque. He will also have his name recorded on the JoAnn Treat commemorative glass vase displayed in the Research Foundation lobby.

Murphy's main research interests are feline genomics and mammalian phylogenetics.

"Mapping the feline genome will facilitate the identification of genes involved in feline diseases and should have a major impact on improving feline health," he said. "It will also enable the use of the domestic cat as a model for human disease." Murphy's research also focuses on mammalian phylogenetics and conservation genetics.

Murphy received his PhD in biological sciences in 1997 from Tulsa University. He completed his postdoctoral work at the Laboratory of Genomic Diversity of the National Cancer Institute, and worked as a senior scientist at NIH before joining Texas A&M University in 2004. He has published over seventy articles in peer-reviewed journals, including *Science* and *Nature*. His lab



Dr. William J. Murphy

is funded by the National Science Foundation, USDA, Morris Animal Foundation, AKC-Canine Health Foundation, Winn Feline Foundation, The Snow Leopard Conservancy, and the National Geographic Foundation.



Scroggs named CVM Dean's Chief of Staff



John M. Scroggs and Jaffa

John Scroggs, a long-time staff member at Texas A&M University, has assumed the position of Chief of Staff at the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM).

"I am pleased to announce the appointment of Mr. Scroggs to this

important position on the administrative team," said Dr. Eleanor Green, Carl B. King Dean of Veterinary Medicine. "His reputation for providing strong staff leadership and improving efficiencies will be a valuable asset for our college. We are very excited that John will be joining our team not only for his experience, but also his strong record of excellence in service, knowledge of the university, and his superb interactions with people on multiple levels. I believe John's particular talents will complement our team well. In a complex, active college, his organizational skills will pull together the talents of many to advance our diverse missions to the university, to the people of Texas, and beyond."

Scroggs, who served as the Director and Chief of Staff for the Office of the Dean of Faculties and Associate Provost prior to arriving at the CVM, first joined the staff of Texas A&M University in 1996, as a technical writer.

"Texas A&M University has always been an important place for me," said Scroggs. "I've received two degrees from here, and have had the opportunity to work for very diverse and exciting programs and people. Now I have the chance to bring together the lessons I have learned from so many places and use them to help advance the mission of the CVM."

Since graduating with a degree in English and Philosophy in 1993, Scroggs has been drawn to working with people.

"To work with people on multiple projects and help them to find excitement and meaning in the workplace is important to me," said Scroggs. "As the Chief of Staff, I hope to help the people I serve achieve their goals and provide the support they need."

As the Chief of Staff, Scroggs reports to Dean Eleanor Green, and will develop processes to improve efficiencies, supervise dean's office staff, and serve as an advisor to the dean.

"I love being a problem solver," said Scroggs, "and in doing that, try to do my part in managing obstacles and distractions so that everyone truly performs at their best. I am looking forward to making a positive contribution to the CVM."

CVM communicators shine at Brazos Bravo Awards

Communication professionals from the Texas A&M University College of Veterinary Medicine & Biomedical Sci-

ences (CVM) recently won awards and recognition for their efforts from the local chapter of the International Association of Business Communicators (IABC) at the annual Brazos Bravo awards event.

VeLisa Ward Bayer, a graphic designer in Media Resources, won an Award of Merit in the design category for the Annie's Fund logo she developed.

"I am honored to be an IABC award recipient for the third year in a row," said Bayer. "I love what I

do and winning an award for my work means that it's appreciated. An extra bonus is that I represent the CVM." Also winning an Award of Merit in the student writing category for her story, "Flashes of Color: Research to Save



VeLisa Ward Bayer



Roma Subramanian

Macaws," was Public Relations graduate assistant, Roma Subramanian.

"It feels wonderful to be acknowledged with this award," said Subramanian. "I'm grateful to my editor for encouraging me to pursue this story and to the scientists at the Schubot

> Center for taking the time to explain their research to me."

59 awards were given out this year in multiple categories that were grouped in three divisions including Communication Management, Communication Skills, and Communication Creative.

These entries were judged by professional communicators from IABC chapters in different cities all over the country. In addition to the actual work sample, each entry

was submitted with a work plan that demonstrated the value and purpose of the entry in addition to the planning process involved in its development.

Development News

Scholarships, awards help fund veterinary education

Construction has finally begun on the long awaited Veterinary Imaging and Cancer Treatment Center. As you may know, the center will provide advanced imaging capabilities for small and large animal species with a new CT scanner and an advanced 3 Tesla MRI unit. In addition, state of the art cancer treatment will be available with the new Tomotherapy unit.

Tomotherapy will allow our oncologists to administer radiation therapy directly to the tumor in a concentrated form while minimizing the amount of radiation applied to the surrounding normal tissues. This new process will also allow radiation of multiple tumors in the animal's body with one pass through the unit, and, as is the case with the imaging equipment, treatment can be provided for large and small animal patients.

The College of Veterinary Medicine & Biomedical Sciences (CVM) has been very prudent with our funds. We currently have on hand the funds required to construct the Imaging and Cancer Treatment Center building and to install the basic equipment. We are still in need of funds to procure and install the Tomotherapy unit, however, so if you or someone you know would have an interest in supporting this aspect of the center, please let us know. We would love to visit with you about the opportunities and options available, and we would very much like to attach your name to the center.

We have also been very blessed at the CVM to receive some new awards and scholarships recently. The generosity of our donors is truly remarkable, and it makes it possible for us to accomplish our mission of providing the best education possible to the veterinarians of the future. Veterinary education involves attracting and retaining the finest faculty members to provide the required instruction for our students, but it involves so much more.

Veterinary colleges also depend on having a great team of basic scientists, graduate students, researchers, residents, and interns to allow discovery and development of the latest in our understanding of disease as well as the newest methods of disease treatment and prevention. It is certainly true that there are great costs associated with obtaining a professional veterinary education, but we want to be mindful of the fact that educating graduate students, interns, and residents also has great costs but is just as necessary.

As we consider supporting our veterinary students with scholarships, we want to also consider the fact that scholarships for graduate students, interns, and residents

will be extremely helpful in developing and retaining the next generation of instructors for the veterinarians of the future. Dr. Joe Coulter and his wife, Elaine, have recently made a great commitment to fund the first endowed fellowship for graduate students at the CVM. We are grateful for that first step in what we hope will be a trend to recognize and support graduate education as an integral part of veterinary education.

Speaking of scholarships, the Scholarships and Awards Committee has just completed their work, and they have awarded over \$1,000,000 in scholarships. Every qualified veterinary student will receive one or more scholarships for the 2010-2011 academic year. We are very proud of the fact that we can offer so many scholarships, but admittedly, we would like to be able to offer scholarships of higher value to our students, so there is still a great deal of work to be done.

Please keep in mind that financial support for the CVM can come in many forms. In addition to current cash gifts, contributions can also be made through assets such as stocks, bonds, and real estate, and if these gifts have significantly appreciated in value, the tax consequences of these gains can be avoided by contributing them to the college.

For those of you who are concerned about the minimal returns from fixed



Dr. O.J. "Bubba" Woytek & Dr. Guy A. Sheppard

income investments, the Development Office can show you some attractive interest rates on gift annuities that are currently being offered by the Texas A&M Foundation.

Finally, if any of you would like to learn more about making planned gifts to benefit you and your loved ones after your life, there are some very innovative methods available. We would be happy to show you some of these opportunities, so please let us know if you have an interest in learning more about any of these subjects.

Thank you again for your support. Please come to visit us whenever you get a chance or look for us at alumni receptions at the AVMA meeting, the North American Veterinary Conference, the Western Veterinary Conference, the Southwest Veterinary Symposium, and the AAEP meeting.

Sincerely,

Of Bubba Water

O. J. "Bubba" Woytek, DVM, '65 Assistant Vice President, Development and Alumni Relations

Day G. Shappand

Guy A. Sheppard, DVM, '77 Director, Development and Alumni Relations



Development Council meets, furthers strategic planning

The Development Council of the College of Veterinary Medicine & Biomedical Sciences (CVM) met on May 21st. Council co-chairman, Dr. Fred Palmer, opened the meeting and welcomed everyone.

The Council heard an update from Dr. Sonny Presnal about the Stevenson Center. Dr. Glen Laine, Wiseman-Lewie-Worth Chair holder, discussed the impact of endowed faculty chair positions with the Council. Presentations concerning the costs associated with professional and graduate education were delivered by Dr. Joanna Horany, Pam Ferro, and Dr. Brian Saunders.

Dr Eleanor M. Green, Carl B. King Dean of Veterinary Medicine, showed a PowerPoint presentation to the council regarding priorities for the college and for the Development Council. Dr. Green also announced that although the AVMA Council on Education has recommended full accreditation for the CVM for up to seven years, the AVMA Council did express concerns regarding the continued adequacy of the CVM facilities.

Council members then conducted an exercise to further refine and identify priorities for the college and for the Development Council that were discussed at the November meeting. Council members were asked to denote their top five priority selections. Following the identification exercise, Council members were asked to place their names by the subjects for which they will agree to work and further develop strategies for accomplishment. After making significant progress on the second phase of their strategic planning work, they also considered and approved revisions to their bylaws.

Outgoing co-chairs, Dr. Fred and Vola Palmer were thanked for their service and presented with a commemorative gavel. Incoming co-chairmen, Dennis and Jacqui Johnston were welcomed. After expressing their appreciation and enthusiasm for the Council and its purposes, the Council meeting was adjourned by the chairmen.

Rohacks fund Hoppes Endowment for avian education

Dr. James Rohack, president of the American Medical Association and senior staff cardiologist at Scott & White Clinic, and his wife, Charli, recently donated money to the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM) to start the Dr. Sharman Hoppes Educational Endowment Fund. Hoppes is a clinical assistant professor who has been teaching in the CVM for five years and focuses primarily on avian medicine.

The Rohacks are long-time supporters of Texas A&M, giving back many times to the university. For their most recent endowment efforts, they chose the CVM because Charli Rohack is a licensed rehabilitator, and wildlife recovery, specifically with birds, is a subject that is very close to their hearts.

"The Rohacks have long seen the need to promote avian and wildlife medicine to students and we are so grateful as a department to further our training and research due to their gracious efforts," explains Hoppes.

"When animals from the wild are brought in, they don't have advocates who are passionate about taking care of them after they have healed. Charli Rohack is their advocate."

The main focus of the endowment is to promote education and enthusiasm for veterinary students to pursue avian medicine. Avian medicine is lacking in veterinary practices, and Hoppes and Charli Rohack want to encourage and inspire students to further their education and experience in this area. Charli Rohack's hope is to promote an interest in birds both captive and in the wild.

Other projected uses for the funds are to help train students and interns by offering specialized labs in avian medicine and surgery, assisting students to attend avian meetings, and providing for additional diagnostics that may otherwise be unaffordable to either a client or a wildlife case.

Part of the funding has already been used in Hoppes' service. Surgeries have been done with birds that would have otherwise died due to the cost. These surgeries not only kept the birds alive, but they were teaching tools for the veterinary students and residents.

"I am very proud and humbled to have this endowment as my namesake," said Hoppes. "I am excited that James and Charli Rohack are shedding some light on this topic as we are all so passionate about birds and wildlife."

Although the Rohack's emphasis for the endowment is the birds, she has given Hoppes the opportunity to use the endowment funds for other species as well. The Rohacks are true animal lovers; they have had pet rabbits, rats, rheas, and hoof stock. Charli Rohack has proven herself as an advocate for all of them.



Aumni News

CVM honors 2010 Outstanding Alumni

The College of Veterinary Medicine & Biomedical Sciences (CVM) proudly honored five Outstanding Alumni with a special reception and dinner at Miramont Country Club on Friday evening, April 9. The 2010 Outstanding Alumni are: Dr. Charles Cocanougher, Class of 1955, of Decatur, TX; Dr. John M. Morton, Class of 1969, of Athens, TX; Dr. Kenneth R. Pierce, Class of 1957, of College Station, TX; Dr. William A. Roach, Class of 1957, of Georgetown, TX; and Dr. M. Michael Swindle, Class of 1969, of Mt. Pleasant, SC.

"A college of veterinary medicine is defined by not only the quality of their students, but the success of their alumni," said Dr. Eleanor Green, Carl B. King Dean of Veterinary Medicine. "The commitment to the future of veterinary medicine demonstrated by these outstanding alumni is a source of pride to the college, and as we celebrate their accomplishments, we are honored to recognize them as a part of our Aggie family."

Dr. Charles M. Cocanougher, '55, started his own private practice in Decatur, TX in 1958. By the time he retired from his practice he had established three clinics in Wise County with two partners. He also started a manufactured housing park and self storage business while practicing veterinary medicine and after his retirement, continued to manage these two businesses and is still active in these endeavors at this time. Cocanougher has been and continues to be an ac-



Dr. John M. Morton

tive member of his community and church. He is the past president and rodeo secretary of Wise Co. Sheriff's Posse, served as a city councilman for the City of Decatur, past president and member of the Decatur Chamber of Commerce, awarded Citizen of the Year in Decatur in 1985, past officer and member of Decatur Rotary Club, charter member and past chairman of the Wise Co. American Heart Association chapter, past chairperson for Wise Co. Appraisal District, and served on the Texas Veterinary Medical Association board of directors. Cocanougher has also been generous to fellow A&M veterinary medical students by endowing ten scholarships through the Texas A&M Foundation.

Dr. Charles M. Cocanougher (center) and family at the Outstanding Alumni reception.

Dr. John M. Morton, '69, has served the community of Athens, TX as a large and small animal practitioner since 1972. He is president elect of the Texas Veterinary Medical Association (TVMA), and has also served in a variety of other roles. Some of Morton's accomplishments include being elected chairman of the Board of Directors of the TVMA as well as serving on the board and the executive council. He is a member of the American Veterinary Dental Society and was named a Mark Francis Fellow by the CVM in 2006. His service to his community extends beyond veterinary medicine. He volunteers on the Henderson County Fair Board, serving as both a member and president. He was president of the



Dr. Kenneth R. Pierce

County Extension Service's equine subcommitte and has been a member of the Athens Public School's Renaissance Leadership Committee for the past ten years. Dr. Morton and his wife have been strong supporters of the CVM through their donations to the Gentle Doctor events each year and have helped to provide scholarship funds through their work with the Texas Veterinary Medical Foundation and Texas Group One.

Dr. Kenneth R. Pierce, '57, received his DVM, M.S. and Ph.D. degrees from Texas A&M University and was hired as an instructor of veterinary anatomy upon his graduation from the DVM

46 • CVM Joday • Summer 2010



program in 1957. Pierce took a twoyear break from academia to work in a private practice in San Angelo, TX, but returned to Texas A&M in 1961, and has been an integral part of the veterinary pathobiology department ever since. He has held a variety of teaching positions and even served as head of the department from 1978-1989. During his career at the CVM, Pierce developed numerous new courses and taught a broad array of professional and graduate courses. He was recognized with a variety of teaching awards including the Harold Casey Award for Sustained Excellence in the Teaching of Veterinary Pathobiology, The Gamma Sigma Delta Distinguished Service Award, the Faculty Distinguished Achievement Award for Teaching and the Faculty Appreciation Award by Southwestern Veterinarian Magazine. A devoted researcher, Pierce has an extensive list of publications, reports, papers, and presentations delivered. He has been involved in a number of professional organizations including the American College of Veterinary Pathologists, the American Society of Veterinary Clinical Pathologists, the Charles Louis Davis DVM Foundation for Veterinary Pathology, the U.S./ Canadian Academy of Pathology, the Texas Veterinary Medical Association, and the American Veterinary Medical Association.

Dr. William A. Roach, '57, practiced veterinary medicine in Killeen, TX, from 1957 until his retirement in 1994. He served his community in various positions including Chairman of the

Board of the Greater Killeen Chamber of Commerce in which he was a member for 39 years. He also served as the Vice Chairman of the Central Texas College Foundation, was president of the Killeen Industrial Foundation for two terms, vice president of the Killeen Economic Development Corporation, a member of the Central Texas Council of Governments, president and founder of the Clements Boys & Girls Club, and a board member of Vive Les Artes Society. Roach was so instrumental in his community that September 11, 1997, was proclaimed by the cities of Killeen, Harker Heights, and Nolanville to be "Dr. Bill Roach Day." Other

awards he has received include the Small Business of the Year Award from the Greater Killeen Chamber of Commerce, the 1998 Boy Scouts of America Distinguished Citizen Award, and he was named a Mark Francis Fellow by the CVM. He continues to be involved in veterinary medicine and Texas A&M through organizations such as the American Veterinary Medical Association, the Texas Veterinary Medical Association and the Texas A&M Association of Former Students.

Dr. M. Michael Swindle, '69, is currently the director of the divi-



Dr. Eleanor M. Green, Carl B. King Dean of Veterinary Medicine, and Dr. Michael Swindle enjoy the cocktail reception on the terrace at Miramont Country Club.



Dr. Eleanor M. Green, Carl B. King Dean of Veterinary Medicine, presents the Outstanding Alumni plaque to Dr. William A. Roach.

sion of laboratory animal resources and professor and chairman in the department of comparative medicine at the Medical University of South Carolina. In a research career that has spanned 30 years, Swindle is recognized internationally as one of the preeminent authorities for the use of swine as a human surgical model. He consults globally with medical universities on swine surgical procedures, and on the construction and operation of surgical facilities for Departments of Comparative Medicine. He is active in many professional associations including the American College of Laboratory Animal Medicine, the American Association for the Accreditation of Laboratory Animal Care, the Academy for Surgical Research, and the European College of Laboratory Animal Medicine. His professional awards include the Smithy Research Award, the Von Recum Award, the Markowitz Award, the Brewer Scientific Achievement Award, the ASCLAP Research Award, and the Comparative Medicine Scientist Award. He has been primary or co-investigator on millions of dollars in grant funding and has published over 300 research abstracts, journal articles, books and book chapters. He has also been recognized by Rotary International, Knights of Columbus, and the American Heart Association for his many community service activities. 🔅

Aumni News

Palmer named one of A&M's 2010 Distinguished Alumni

Texas A&M University and The Association of Former Students announced the recipients of the 2010 Distinguished Alumnus Award at a banquet held in April. Among the recipients was long time supporter and alumni of the College of Veterinary Medicine & Biomedical Sciences, Dr. Fred Palmer.

Palmer, Class of 1959, graduated from Texas A&M University with a Bachelor of Science degree in wildlife science. As a student, he participated in the Corps of Cadets and was vice president of the Tyler/Smith County Hometown Club.

Palmer began his career as a wildlife biologist and assistant project leader for the Texas Parks and Wildlife Department. After serving on active duty with the U.S. Army, he returned to Texas A&M, where he completed a Bachelor of Science degree in veterinary science in 1968 and a Doctor of Veterinary Medicine degree in 1969. After practicing veterinary medicine for more than 25 years, Palmer sold his small-animal clinic in Bedford, Texas, in 1994.

Palmer has expressed his generosity to Texas A&M by endowing several scholarships, including the Dr. Fred A. '59 and Vola N. Palmer Endowed Scholarship in the Department of Wildlife and Fisheries Sciences, and by establishing the Dr. Fred A. and Vola N. Palmer Chair in Comparative Oncology at the College of Veterinary Medicine & Biomedical Sciences.

Palmer was named an Outstanding Alumnus by the College of Veterinary Medicine in 2008 and has been actively involved with Texas A&M. He is a past chair of The Association of Former Students and is an Endowed Century Club member. He has also served as president of the Fort Worth/Tarrant County A&M Club and is currently a member of the 12th Man Foundation Athletic Ambassadors Council.

Established in 1962, the Distinguished Alumnus Award is the highest honor bestowed upon a former student of Texas A&M University. Since its inception, 197 individuals have been recognized for their significant contributions to their professions, Texas A&M University and their local communities.

"This tremendous class of Distinguish Alumni exemplifies what is possible with a degree from Texas A&M University," said Texas A&M University President, Dr. R. Bowen Loftin, Class of 1971. "Even more impressive than their individual accomplishments, however, is that they have based their lives on the core values that are interwoven into each and every Aggie. These former students are true exemplars of the Aggie Spirit across our state and country, as well as around the world."

The recipients learned of their honor when surprised in their places of business and other locations by a group of University and Association representatives, including Loftin; The Association of Former Students' 2010 Chair of the Board of Directors S. Shariq Yosufzai, Class of 1974; Association President and CEO Porter S. Garner III, Class of 1979; Association Vice President Marty Holmes, Class of 1987; a Ross Volunteer; along with Reveille and her handler, Ben Coffman, Class of 2012.

"Each of our 2010 Distinguished Alumni are exemplary role models and truly deserving of the highest honor bestowed upon a former student of Texas A&M University," Yosufzai said. "They serve as outstanding examples of the impact that Aggies can have on their alma mater, their communities, and the overall betterment of mankind."

Garner echoed the sentiments of Loftin and Yosufzai and offered his congratulations on behalf of the Aggie Network.

"Our 2010 Distinguished Alumni represent a cross-section of life experi-

> ences and achievements as diverse and inspiring as our worldwide Aggie Network," Garner said. "They all, however, share the same profound commitment to Texas A&M and epitomize our core values as well as our unique and unrivaled Aggie Spirit."

> The Association of Former Students will further honor Texas A&M University's 2010 Distinguished Alumni in formal events and ceremonies throughout the year. The Association will honor all recipients of this award during its annual Distinguished Alumni Gala on Oct. 15, 2010. In addition, the 2010 recipients will be hosted for dinner by Loftin and recognized during the Texas A&M football game against Missouri on Oct. 16.

~ Excerpted from a press release by Scot Walker, The Association of Former Students.



2008 Distinguished Alumni, Neal Adams, '68 (left), and Dr. R. Bowen Loftin, '71, President of Texas A&M University (right), notify Dr. Fred A. Palmer, '59 (center), that he has been chosen as a 2010 Distinguished Alumni. (Photo courtesy of The Association of Former Students.)



Thomasson: A Lifetime in Veterinary Medicine



Dr. George R. Thomasson

A 1949 graduate of the Texas A&M College of Veterinary Medicine & Biomedical Sciences (CVM), Dr. George R. Thomasson has been a practicing veterinarian for 60 years.

"A love for people and veterinary medicine [have] kept bringing him back into practice," said Dr. Clifford Jessen, owner of the Apple Valley Animal Hospital in California, where Thomasson began working in 1995 at the age of 71.

It is this dedication to his work, particularly his skill as a surgeon, that Jessen and the staff at Apple Valley have had the privilege of witnessing every day for the past 15 years.

"Dr. Thomasson is not afraid to tackle almost any surgery," said Jessen. "He is not afraid to open a text book and learn new things and implement them as he goes along. If he has a case that concerns him, you can bet that he'll be calling or stopping by to check on it."

Thomasson makes light of this praise and is instead grateful for having had a chance to work at a profession that he loves, a profession that has grown and evolved during the course of his lifetime.

Born in Knox City, Texas, in 1924, Thomasson's tryst with veterinary medicine began when at John Tarleton Agricultural College, then a junior college annexed to the Texas A&M University system, a teacher piqued his interest in the subject. Before following up this interest at the CVM, Thomasson enlisted for two and a half years in the Navy's V5 program, a basic flight training program. After graduating from the CVM, he moved to California, accepting an opportunity to work with another Aggie at the Los Felis Small Animal Hospital. A partnership in a small animal hospital in North Hollywood followed after almost six years at Los Felis, and finally in 1969, Thomasson established his own practice in Van Nuys, California, from which he retired in 1993.

However, it proved to be a short retirement.

"I was getting bored and was playing too much golf," Thomasson said with his characteristic humor. "So, I started to work part-time for Dr. Cliff Jessen at Apple Valley in 1995, and I've been there ever since."

Asked what he has enjoyed most about his long career, Thomasson commented on the "phenomenal" advances in veterinary medicine, offering some examples.

"When I first went to work, I used to do spaying and neutering. We would use Nembutal in the peritoneum to anesthetize dogs. We would then sew up the incision with nylon sutures, hospitalize the dogs for five days [and then follow up with them to remove the sutures.] Today, we use [absorbable buried] PDS sutures, which allows us to discharge neutered dogs on the same day of the surgery and eliminates the need for follow-up. Also back then, we only had penicillin and sulfa drugs to treat infections, [which is nothing compared to the range of] antibiotics that we have today. So, it's all been a great change."

He also expressed amazement at how specialized veterinary medicine has become and believes that the specialization has made veterinary care better. He looks forward to seeing this trend continue.

"I think if I had my career to do over again, I would specialize in orthopedics," he said.

After 15 years at Apple Valley, Thomasson is planning his second retirement.

His colleagues will miss this surgeon whose photographic memory and encyclopedic knowledge of veterinary medicine they have come to rely on as a valuable resource.

But more importantly, Jessen says, they will miss "a wonderful person"

who has endeared himself to the hospital staff through his kindness, concern and genuine affection.

"Dr. Thomasson will always look for a way to make folks laugh by telling jokes, whether he has a frustrating situation or busy, busy day," says Jessen.

Jessen believes that even after retirement, Thomasson will continue to be an inspiration to all those around him.



Aumni News

Weicht wins Morris Animal Foundation Award

Dr. Kirk Weicht, a 1983 graduate of the Texas A&M University College of Veterinary Medicine & Biomedical Sciences, has been chosen from more than 370 nominees as this year's national and southwest regional winner of the "Thank your vet for a healthy pet" contest. The contest is con-

ducted by Morris Animal Foundation, a nonprofit organization dedicated to funding research studies to protect, treat and cure both companion animals and wildlife. It is also sponsored by Hill's Pet Nutrition and BowTie Inc.

Winners are nominated by their clients for their dedication to veterinary medicine demonstrated through outstanding care and treatment, commitment to promoting the human-animal bond, and community service.

Weicht received the award at the North American Veterinary Conference in Orlando, Florida, in January.

"It feels very nice to be recognized by the people you serve," said Weicht, who has been associated with Brown Trail Animal Hospital in Bedford, Texas, since 1977.

Excellence, compassion, and devotion to his profession have earned Weicht a reputation of being an exceptional veterinarian among his clients, staff, and community. It was

"Dr. Weicht is an amazing person to work for" and "he's always there for his staff," said Gina DeGennaro, a long-time employee, who also nominated Weicht for the award.

> these qualities that Diana Beck, one of Weicht's clients, wanted to honor him by nominating him for the award.

"He's just relentless in his quest for the right diagnosis," said Beck, who



Dr. Kirk Weicht has been associated with Brown Trail Animal Hospital, in Bedford, TX, since 1977.

has consulted Weicht for treatment for her pets for more than 20 years. "He doesn't stop when he runs up against a brick wall. The health and well-being of the animals in his care are always his first priority. Without his intervention, our dogs would not be alive today."

For Gina DeGennaro, Weicht's long-

standing employee, the award is fitting recognition for a veterinarian whose skill at his work is surpassed only by his kindness to his staff.

"Dr. Weicht is an amazing person to work for," DeGennaro said, who also nominated Weicht for the award. "He's always there for his staff, whether it's encouraging them to pursue continuing education courses or comforting them when a pet has to be put down."

Beck and DeGennaro have also been moved by

Weicht's willingness to set aside time for charitable causes. For example, Weicht has helped raise funds for food and treatment for Weimaraner Rescue of North Texas, Inc. Also, on learning from the Meals on Wheels charity that elderly pet owners were splitting their food with their pets, Weight got together with his staff, clients and pet food companies and donated several hundred pounds of pet food to the charity.

Whether it's offering free first-time examinations for pets from rescues or holding weekly meetings to evaluate and improve the clinic's services, Weicht's devotion to his work is evident.

In the future, Weicht aims to continue to sets high goals for his practice, one of which is to offer new diagnostic modalities.

"Updating diagnostic services makes the practice interesting and helps you to not stay in a rut," Weicht said.

For Weicht, who has been involved in veterinary medicine in one way or another since he was 14, being a veterinarian is a job he can't believe he gets paid for.

"I love walking into the clinic every morning," Weicht said. "As long as I stay healthy and do a good job, I will continue to work as a veterinarian."





Dr. George Shelton

Dr. George Shelton Former Dean, College of Veterinary Medicine, Texas A&M University

On Saturday, April 10, 2010, the Texas A&M College of Veterinary Medicine & Biomedical Sciences lost a family member, and an American hero, with the passing of Dr. George Shehon. A native of Stephenville, Texas, Shelton graduated from Tarleton State University before serving in the U.S Army Air Corps during World War II. He was a combat airman in the South Pacific, where he flew many missions in the B-25 Mitchell aircraft and received a Purple Heart. Following the war, Shelton went back to Texas A&M and received his Doctor of Veterinary Medicine degree in 1948. After his marriage to Quata Joy Stephens, he moved to Missouri to practice veterinary medicine. He completed his master's degree at Auburn University, and his PhD from the University of Minnesota. He returned to Texas A&M in 1973 as Dean of the College of Veterinary Medicine & Biomedical Sciences, retiring in 1989. Dr. Shelton is survived by his two children, eight grandchildren, and three great-grandchildren. *Gifts may be made to the George C. and Joy Shelton Veterinary Medicine Scholarship, 109 Reynolds Alumni Center, Columbia, MO 65211.*

Members of the CVM Family

Former faculty member, Dr. Gordon Greeley, a professor in Large Animal Veterinary Anatomy for 15 years, died during the first week of December, 2009. Dr. Greeley was in private practice upon leaving Texas A&M, and co-authored a textbook.

Faculty member, Dr. Don Hong, assistant professor in Pathobiology, passed away peacefully on December 24, 2009. Dr. Hong was a family member of the College of Veterinary Medicine & Biomedical Sciences, a beloved professor, and friend to many.

Graduate student, Daniel Resnick, who was in the process of applying to veterinary school at Texas A&M. Resnick was engaged to Sarah Kline, a second year veterinary student. He died unexpectedly during the second week of December 2009.

College Alumni

Class of 1937

Frank W. Brundrett, 96, of Dallas, TX, died Nov. 22, 2009

Class of 1940 Bernard Glenn Bryson, Jr., 92, of Irving, TX, died Apr. 13, 2010

Class of 1941 Albert J. Gutknecht, 93, of Menlo Park, CA, died Feb. 14, 2010

Class of 1942 Robert F. Locke, of Westchester, IL

Class of 1944 Robert Weinberger, 87, of Dallas, TX, died Dec. 28, 2009

Class of 1945 Guy G. Moran, 88, of Lake Corpus Christi, TX, died Apr. 3, 2010

Class of 1946 Jack B. Ross, 86, of Columbus, GA, died Dec. 28, 2009 George Gray, 86, of Sulphur Springs, TX, died Mar. 3, 2010 Thayer D. Hendrickson, 96, of Greenbrier, AK, died Apr. 5, 2010 Tony Barcelona, Jr., 84, of Bryan, TX, died May 11, 2010

Class of 1947

Scott Haggard, 84, of Denton, TX, died Mar. 18, 2010

Class of 1949

John E. Wilkins, Jr., 95, of Greenville, TX, died Dec. 19, 2009 *Class of 1951*

Floyd Blackburn, 81, of Weatherford, TX, died Jun. 1, 2010

Class of 1952

Joe B. Tillery, Jr., 83, of Greenville, TN, died Apr. 6, 2010 Maynard C. Franklin, of Bay City, TX, died Apr. 29, 2010

Class of 1953 Howard J. Allen, 78, of Waco, TX, died Mar. 26, 2010

Class of 1954

Lewis N. Springer, 81, of Warrenton, VA, died Feb. 5, 2010

Class of 1958

Reuben Loggins, 76, of West Columbia, TX, died Mar. 12, 2010 Class of 1959

Ross Robert Williamson, 74, of Palestine, TX, died Jan. 29, 2010 Charles H. Garrett, 76, of Jonesboro, LA, died May 1, 2010

Class of 1962

Henry O. Mohr, 82, of Andrews, TX, died Mar. 20, 2010 Howard J. Allen, 78, of Rosenthal, TX, died Mar. 26, 2010

Class of 1963

Martin G. Reynolds, Jr., 72, of Little Rock, AR, died Mar. 25, 2010 David Cle Coleman, 71, of Hunt, TX, died Jan. 22, 2010

Class of 1967

J.P. Dodgen, 65, of Llano, TX, died Oct. 13, 2009

Class of 1968 Roland M. Roudon, 65, of Fort Worth, TX, died Feb. 15, 2010

Class of 1969 Albert Paul Bilger, Jr., 64, of Dallas, TX, died Apr. 3, 2010 John Graham Golden, 63, of San Antonio, TX, died Jun. 26, 2010

Class of 1973 Curtis Lynn Kidd, 59, of Lampasas, TX, died Feb. 2, 2010

Class of 1975 James D. Neighbors, 66, of Denton, TX, died May 19, 2010

Class of 1984 Arnold Llyod Legg, 53, of Henderson, TX, died Jun. 12, 2010

Class of 1990 Thomas Charleton Mason, 53, of Abilene, TX, died Jan. 20, 2010 Class of 1992

Cynthia Jo Trawick, 59, of Haiku, HI, died Nov. 17, 2009 *Class of 2001*

Kathryn D. Gilpatric, 37, of Knoxville, TN, died Apr. 16, 2010



TEXAS A&M VETERINARY MEDICINE & BIOMEDICAL SCIENCES

MIX

SC* C000000

CVM Today

Public Relations Office, Office of the Dean College of Veterinary Medicine & Biomedical Sciences Texas A&M University, 4461 TAMU College Station, TX 77843-4461



CHANGE SERVICE REQUESTED





Pricilla Martinez, a veterinary medical student, feeds a three-month old dromedary camel, Earleen. The camel was a patient of Dr. Jenifer Gold at the Veterinary Medical Teaching Hospital.