



CVM Today

News from the Texas A&M University College of Veterinary Medicine & Biomedical Sciences

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Back to the Future



Winter 2006

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We welcome your suggestions, comments and contributions to content.

On the cover Sissy owed by Deborah Dooley

Back to the Future

A Look Ahead at the Future of the Texas Veterinary Medical Center

As our 90th anniversary draws to a close, we pause to reflect on what has been accomplished across the past decades, and yet we continue to focus on the future. And the future of the College of Veterinary Medicine & Biomedical Sciences at Texas A&M couldn't be brighter.

To best serve our students, our clients, and the veterinary profession, we will continue to strategically focus our resources on programs and partnerships that will put us at the forefront of veterinary medicine. These signature programs reflect a commitment to education, public health, animal health, research and leadership.

With 37 new faculty members arriving as part of the university's faculty re-investment initiative, we will be able to enhance the learning experience of our undergraduate, graduate and professional students. Our first priority will be to complete classroom renovations so our faculty and students will have a new and improved environment in which to teach and learn.

A new and exciting program that arrived recently at the college is the Center for Executive Leadership in Veterinary Medicine. Leadership principles, practice and experience will be integrated throughout the DVM curriculum. We will graduate not just practitioners working throughout the many facets of our profession, but visionary leaders as well. Led by our own Dr. E. Dean Gage, the center has received overwhelming support from corporations that represent leaders in the animal health industry. This will truly be a first of its kind program that will ensure that our DVM graduates are the best prepared clinically and professionally upon graduation.

One of our strongest clinical areas has been in equine studies. Our facilities, which include the large animal hospital, are unequalled in the country and perhaps the world. The research conducted and care provided by our faculty repeatedly positions us at the top of the list in equine medicine. Within our equine program, we will work to integrate a number of signature disciplines (reproductive biology, toxicology, neurosciences, infectious diseases and molecular genetics) to take an already outstanding program to the next level.

In the area of Small Animal Medicine & Surgery, Phase I & II renovations of the small animal hospital have been completed. Improvements in ICU, anesthesia, endoscopy, cardiology, surgery, physical therapy and chemotherapy will help us deliver a level of care that exceeds the expectations of our clients and referring veterinarians.

Similar to a major medical center for humans, the College of Veterinary Medicine has always been home to groundbreaking research that impacts human and animal health on a global scale. The achievements we have realized in our research have led to an \$18 million research wing

expansion currently underway, and created excitement in the private sector. The confidence we have created has led to funding of new interdisciplinary institutes and facilities that will involve the College of Veterinary Medicine in central roles.

The first of these was the DeBakey Institutes for Comparative Cardiovascular Science and Biomedical Devices, a federally funded program conceived by our own Dr. Terry Fossum and now co-directed by Dr. Glen Laine. This special program includes basic and clinical research dedicated to the reduction of death and disability from cardiovascular disease in humans and animals.

Arriving soon will be a \$10 million transgenic mouse house, located near the large animal hospital but available to all TAMU researchers. This facility will be the foundation of a private sector partnership with Lexicon named the Texas Institute for Genomic Medicine (TIGM). This interdisciplinary program will be the first of its kind to study molecular, genomic, and nano therapeutics.

Also under construction is the \$40 million Texas Institute for Preclinical Studies (TIPS), another unique institute conceived by Dr. Fossum. Featuring Good Laboratory Practices to standardize research using dogs to livestock, this program is anticipated to bring magnetic resonance imaging (MRI), positron emission tomography (PET), and computerized tomography (CT) to our Teaching Hospital and research programs alike. In turn, our students are exposed to diagnostic tools usually seen only in major metropolitan hospitals.

The future for the College of Veterinary Medicine & Biomedical Sciences is bright and full of promise. We're excited about where we are going and know it's not without the support of our fellow veterinarians and many other supporters. I hope you enjoy reading more about the wonderful things happening here inside this edition of CVM Today. The Texas Veterinary Medical Center is investing in the future, in our students, and in the veterinary profession – building the best to educate the brightest.



Dean H. Richard Adams

H. Richard Adams

H. RICHARD ADAMS

CARL B. KING DEAN OF VETERINARY MEDICINE

Youth in Agriculture

Caring and a Commitment to Excellence

Caring

Nearly 340 miles northwest of College Station lies the small town of Vernon. Nestled near the folds of the Red River with a population of about 11,000, this city may be just a drop in the feed bucket, but it is here that faculty members from the Texas A&M University College of Veterinary Medicine & Biomedical Sciences are making a big impact.

Last fall, members of the Buffalo Soldiers Riding Club of Vernon contacted the college with a plea for help. The group, which participates in exhibitions of the role of African-American soldiers in late 19th century, supports the local community through youth agriculture programs. In the past, the group sponsored one or two students per year, but they decided to expand the program to include more students. They received a grant from the Agriculture Learning Foundation Inc., of Dallas, to purchase livestock projects for 20 students, but as November rolled around, it was apparent that feed and supplies would not last until February when the students would exhibit their projects at the Wilbarger County Livestock Show.

It was then that the college stepped in and donated \$3,000 for the purchase of feed at a local feed supply store. In addition, Dr. Neil Hooper purchased feed buckets for the students. Dr. Kevin Washburn and Dr. Jason Osterstock made a personal visit to Vernon in January to bring their donation of showing supplies, such as clippers, show sticks and a “show box” they built in which students could keep the supplies. They also offered



Vernon youth proudly display the new show box and equipment donated by faculty of the TAMU College of Veterinary Medicine

continuing education to the young 4-Hers in preparation for the upcoming show. Osterstock knew he wanted to participate from the beginning.

“I grew up showing livestock, and I knew I had supplies,” he said.

“In our practice here in the clinic we see a lot of 4-H projects, so we try to be active in youth agriculture. As a food animal practitioner, youth livestock is a part of your practice—it goes along with the job.”

Because most of the students participating in the program come from single parent homes with an annual household income of less than \$10,000, Osterstock was especially eager to help.

“The group of students that participate in this program come from households that typically wouldn’t be able to financially

support their children being involved in agriculture,” he said.

Of the 20 students who began the program, 17 finished and exhibited their projects. Eleven of those animals went on to earn a total of nearly \$9,000 at the sale following the show.

After the success of last year’s show, both the Buffalo Soldiers and the college are looking to take the next step.

“What we’re looking for is funding opportunities through the USDA that are designed to either support youth agricultural education or support minority involvement in agricultural programs,” Osterstock said.

Their goal is to create a self-sustaining program.

“Hopefully, what we could do is subsidize enough of their cost so that they can use the earnings they get from the sale and put it into a fund,” Osterstock said.

Budget for Vernon Youth Agriculture Program

		Quantity	Total Cost
Equipment^a	Blowers	2	\$600.00
	Hog Feeders	3	\$525.00
	Drenching Gun	1	\$150.00
	Facilities		\$2,500.00
	Subtotal		\$3,775.00
Animals	Sheep/Goats	12	\$2,400.00
	Hogs	8	\$1,600.00
Feed			\$2,000.00
Veterinary Supplies			\$200.00
Show Supplies			\$250.00
Transportation	General	3 months	\$300.00
	Major Shows	4 students & 4 adults	\$2,500.00
			Total Expenses
			\$16,800.00
			Total Revenues^b
			\$8,000.00
			Net Expenses
			\$8,800.00

^a Necessary to establish and build program; not an annual expense

^b Designated for investment over the first 3-5 years of the program

Caring
 “Instead of the parent writing the check, there is a fund in place that they can use to pay for everything.”

The college will continue working with the Buffalo Soldiers organization as well as Billy Zanolini, the Wilbarger County Youth Programs extension agent to explore options for continued funding.

Osterstock also adds that the youth of Vernon may not be the only ones to benefit from this program.

“In the long term, it would be nice to apply this program to another area of the state, using this program as a template.”



PHOTO COURTESY OF THE VERNON RECORD

Three girls practice showing the sheep provided for them through the Vernon Youth Agriculture Program and the Buffalo Soldiers Riding Club of Vernon.

Leaders of the Pack

Saving Lives with Behavior Therapy.

The first time Katie Springs and her dog Jake crossed paths, she did not even see him. He was 10 months old and huddled in the back of a cage at the Houston Humane Society with four other dogs that dwarfed him.

When a worker pointed him out, Springs knew she had found her new companion, but what she didn't know was that the puppy cowering in the back of the cage would have a complete personality change when she got him home.

"The very first day, he jumped on my bed, and as I would approach the bed, he would growl," Springs said.

This was the first of many problems to follow, including baring his teeth, snarling and growling at other dogs and the occasional human. This behavior escalated, and they were eventually unable to visit the local dog park altogether. Jake also continued to be territorial of the bedroom and demanded attention from his owner, which she would later learn was a dominance issue. Despite Jake's aggression, Springs said they coexisted for the next three years.

"The deceitful thing in all of this is that Jake actually is a very good house dog; he never chewed on things or used the bathroom in the house," said Springs.

"Had he also been destructive, I think I would have sought help much sooner, but because he was good in the house, I justified the outside

issues—until he bit me."

The last straw came in January. During one of their routine walks, a cat distracted Jake, and Springs held him back when he tried to chase it. He then turned around and bit her leg, leaving a gash that required stitches.

Springs immediately took Jake to their family veterinarian, who recommended she see Dr.

"He owned me, rather than me owning him. At the end of the day that was the problem."

—Katie Springs

Jake bit her twice more, one requiring stitches and the other bleeding profusely.

"By the time we got to Dr. Haug, I was ready to drop him off and send him away for a little while,"

Lore Haug, a veterinarian and certified behaviorist at Texas A&M University's College of Veterinary Medicine & Biomedical Sciences. Springs, Class of '90, made the appointment, but before this Aggie returned to College Station,

Springs said.

But a vacation from her pugnacious pooch was not what was in store for Springs. Haug recommended a training program that would make Springs the benevolent leader at her house.

"He owned me, rather than me owning him," said Springs. "At the end of the day, that was the problem."

Haug gave her a series of steps and changes that needed to be made in order to change Jake's behavior, which Springs followed closely.

"It was a lot of work—kind of like potty training a toddler," said Springs, "but the reward for the consistency we now practice is incredible."

Seven months after Jake's first visit to Aggeland, he seemed like a



Katie Springs was at wit's end with her dog Jake. Then she met Lore Haug.

different dog.

“People who knew Jake before are amazed at his progress,” said Springs.

“My neighbors, who keep Jake on Thursdays, were impressed even within the first month.”

Now, when she receives a compliment on Jake’s behavior, she takes it as a personal pat on the back for doing a great job, but she doesn’t take all the credit.

“My family veterinarian, Dr. Mark Peterson, was key in all of this because he took the time to specifically recommend somebody when he knew Jake’s problem was serious,” Springs said.

She also lauds the expertise and patience of Dr. Haug.

“One of the reasons this has worked is because Dr. Haug has been incredibly responsive and supportive,” said Springs.

“If I didn’t have support from her, this training wouldn’t have been as progressive.”

All in a Day’s Work

Cases such as these keep Haug and Dr. Bonnie Beaver, two of only 39 certified veterinary behaviorists in the world recognized by the American Veterinary Medical Association, busy at the animal hospitals at Texas A&M.

“My goal is to address the animal issue enough that it stays in its home, that the bond with the family and the animal is maintained, and that the animal isn’t posing a public safety risk,” Haug said.

She did just that in the case of Katie Springs and Jake. Unfortunately, many pet owners do not have the means or willingness to address the behavioral problem before getting rid of the animal.

“I wish people would give their animal the benefit of the doubt more often,” said Haug.

“Animals don’t do things intentionally to make us mad—that’s a waste of their energy.”

As a result of people not giving



Behaviorist Lore Haug is one of only 39 certified veterinary behaviorists in the world, and one of two at Texas A&M.



Katie and Jake have a much more positive relationship after behavior therapy.

their animal the benefit of the doubt, hundreds of animals are put in shelters each year.

“In the United States, half of the animals that are euthanized in shelters each year are put there because of behavioral problems,” Beaver said.

“We lose more animals from behavior problems than we do from all infectious diseases combined.”

This makes a successful case all the more rewarding for a behaviorist.

“The most rewarding thing is when an owner calls or emails me back and says, ‘My dog is doing great

and you saved his life,’” Haug said.

But dogs are not the only clients that Haug and Beaver see. Haug emphasizes that they also work with cats, exotics and equine. Their work with clients such as Springs and Jake has helped make the teaching hospitals a great resource for other veterinarians, and the college is fortunate that both behaviorists call Texas home.

How Goes the Mouth

Dental Services Expand

As the Texas A&M University College of Veterinary Medicine & Biomedical Sciences grows to accommodate an ever-progressing field, programs are created in response to developments in technology and to increased knowledge. One of the most recent additions to the veterinary teaching hospital is a course veterinary students can really sink their teeth into.

“Dentistry has the same importance in pets as it does humans,” said Dr. J.R. “Bert” Dodd, a faculty member in the small animal department.

“How goes the mouth, so goes the health is what I teach the students because if you don’t take care of the oral health, distant infections will result in our pets.”

Dodd noted it has been shown that cardiac, renal, hepatic, pulmonary and joint infections can be related to poor oral hygiene and that periodontal disease of some stage is present in 85 percent of pets by the time they are three years of age.

“That is a tremendous disease load that we have been neglecting for many years,” he said.

Dodd hopes to put a dent in these numbers by training young veterinarians to recognize and treat the common oral problems afflicting pets.

Under the guidance of Dr. Dodd, the college is implementing a dentistry program to train veterinary students in caring for the oral health of their clients.

In 2002, Dodd joined the staff as an adjunct assistant professor and came to the campus on his day off from his own community practice in Austin to perform dental surgeries and assist with the dental elective. In March, Dodd



Veterinary dentistry is very important to a pet’s overall health. J.R. “Bert” Dodd has helped stress this in his teaching at the CVM

joined the faculty as a full-time clinical associate professor and began building the foundation for a full-blown dentistry program.

“My goal is to teach the students how to take care of the pets under their care in private practice,” said Dodd.

“I want to teach them how to prevent periodontal disease and how to treat it when present, and I want them to be able to recognize oral pathology and how

“Dentistry has the same importance in pets as it does in humans.”

– Dr. J.R. “Bert” Dodd

to manage it instead of ignoring it for lack of therapeutic skills.”

For now, the program rotates between the community practice, anesthesia and surgery areas of the small animal hospital, making

use of the equipment that was donated specifically to the dental program. In the future, directors of the program hope to add a camera and monitor to the list of equipment.

“A camera and monitor would enhance clinical teaching during dental procedures because they would make it easier for several students to see simultaneously the procedures and techniques being used on a particular patient,” said Dr. Sandee Hartsfield, head of small animal clinical sciences.

Currently, the dentistry program offers several services, including routine cleanings, oral surgery, periodontal evaluation and treatment, orthodontics, endodontic therapy, restorations, oral evaluations and digital radiology. Dodd would eventually like to add continuing education for the graduate veterinarian to the list.

“It will take a period of time,

however, to get everything in motion before anything else can be added,” he said.

Hartsfield said they are also searching for external support to fund a permanent endowment for a Chair in Veterinary Dentistry faculty position so that this program can continue to grow and train veterinarians to meet every need of today’s pets.



Dental Services are expanding at the CVM, and patients such as this bear will benefit.

Preparing Pets for Disaster

Better planning aids the smallest evacuee

Sometimes the best plans are created after it becomes apparent that they are needed. When hurricanes Katrina and Rita hit the Gulf Coast, they left more than a path of destruction in their wake; they left the knowledge that we should be better prepared for a state of disaster. This truth was made clear to the faculty of the Texas A&M University Small Animal Hospital and local animal organizations when evacuees began arriving with their pets in tow.

“When Rita happened, we had all of the evacuees and their animals, and it became apparent that we needed to do a better job of planning for this kind of event,” said Dr. Deb Zoran, chief of medicine at the small animal hospital.

In response to this experience, Dr. Sandee Hartsfield, small animal department head, came to Zoran in January, asking her to spearhead a committee that would develop an emergency plan in case College Station ever felt the waves of another disaster.

She attended both local and major summits on disaster planning to get a better idea of everything the plan should entail. In March 2006, Zoran began to put a committee together with representatives from the college, the community and the local animal shelter. By May, the team was meeting weekly, and by early August, they had a framework and an organizational structure for their emergency plan.

“We know who is getting supplies, who is getting cages, who is getting volunteers together, and it is all connected to the local emergency operations center,” Zoran said.

Finding volunteers has not been difficult, Zoran



Evacuees from Hurricane Rita showed up at the CVM often with their pets.

added, because everyone was interested after seeing the effects of Katrina and Rita, but the planning has not been without challenges.

“The harder job was trying to get all of the different groups in the local community together, but once we got the groups together and everyone started talking, we realized we all had the same goal,” Zoran said.

That goal was the same one held by Congress when representatives passed legislation in September that required provisions to be included in federal, state and local emergency and disaster preparedness plans for the care and shelter of animals.

In response to both the hurricanes and this legislation, Texas created a state animal response team (TXSART) that responds to disasters on a state-wide level. Dr. Murl Bailey is Texas A&M University's representative for the team, of which Zoran is also a member. In addition to her membership in TXSART and heading up the local response team, Zoran is also helping to put together a Brazos County animal response team with Michele Meade at the Brazos County Emergency Operations Center. This team will eventually work with the state team, forming a hierarchy of response.

"We are still in the planning stages," Zoran said.

"We are waiting on TXSART to make the connection to us, so we can go to them for resources if we need outside help in the case that Brazos County is hit by disaster."

Zoran said one of the best examples of an animal response team that Texas can emulate has been established for many years at the University of Florida's College of Veterinary Medicine. They have developed a complete infrastructure, starting with a designated emergency response coordinator in the dean's office that is connected to both state and local agencies.

"His entire job is not only to develop teams within the hospital for medical care needs, but also to coordinate teams that go out and rescue animals in the field," Zoran said.

Texas A&M currently does not have a group that is sent out during a disaster, but Zoran said they are trying to



Some pets were unable to be reunited with their owners and were adopted out.

draw from Florida's experience to develop an effective plan that may eventually include these groups.

Zoran, Bailey and many others have put countless hours into planning, but she acknowledges that the true test will come when the plan must be put into action.

"I hope we don't get to test it for some time, but how well we've done remains to be seen," said Zoran.

"Obviously, when rubber hits the road—if we actually have the real thing—then we'll find out."



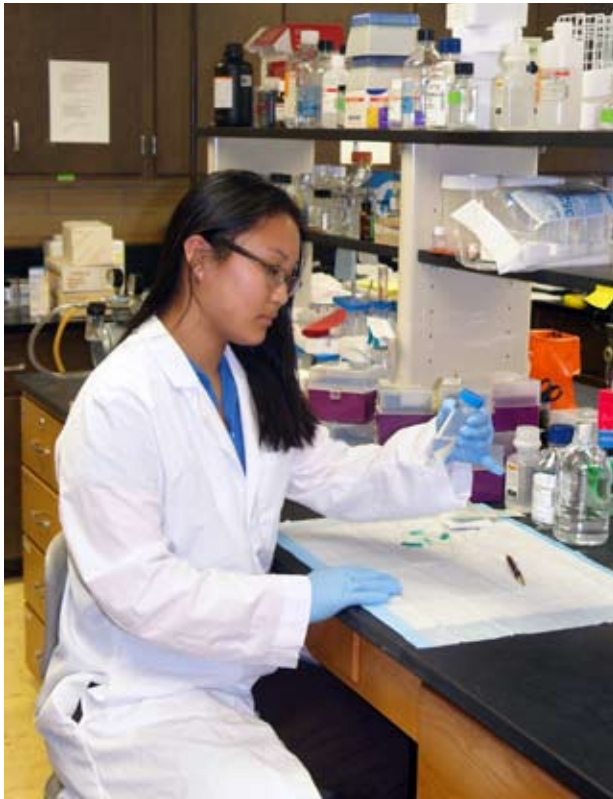
As the Large Animal Hospital became a surge facility for human patients in response to Hurricane Rita, it was all hands on deck

Spotlight on Biomedical Sciences

Psychology of Pandemic

Weilan Zuo is no stranger to hard work. In May of 2007, she will graduate with a double major in biomedical science (BIMS) and psychology and the University Honors distinction. To earn this distinction, she must complete 36 hours of honors course work, and it was for this reason that she found herself in the office of Dr. Gale Wagner last fall.

Zuo had enrolled in Wagner's immunology class for the spring, but because she



Weilan Zuo will graduate with a BIMS/Psychology double major in May '07

"I believe that doctors should not only treat their individual patients, but should also be aware of community health risks, and avian flu is a huge risk, not only for a doctor's community but potentially the entire world"

-Weilan Zuo

needed the course to count towards honors credit, she approached her professor with the request for extra requirements.

Wagner was intrigued by the combination of Zuo's two majors, and he sought to tie them both into a research paper that she would

complete on top of the other course assignments.

"The topic of avian flu was really getting a lot of attention then, and he thought I should do something on the immunology and psychology of avian flu," Zuo said.

She was excited about the topic and dove into research, and in her enthusiasm, what was supposed to be only a two to three page paper turned into 15 pages.

"I'm the kind of person who, if I'm going to do something, I'm going to cover all the bases," she said.

Zuo, who plans on beginning medical school next fall, learned several things while covering all these bases that she believes will benefit her in the future.

"I believe that doctors should not only treat their individual patients, but should also be aware of community health risks," said Zuo, "and avian flu is a huge risk, not only for a doctor's community, but potentially the entire world."

Avian Flu Facts

- Flu pandemics occurred in 1918, 1957 and 1968.
- The first known case of avian flu in a human was in 1997.
- Of the three types of influenza (A, B and C), type A is the one that is most often responsible for pandemics.
- Live poultry markets, commonplace in China and other countries, create optimal conditions for avian flu.
- *Antigenic drift* occurs when the virus accumulates enough mutations to make it sufficiently different from the virus that caused the previous infection so that a person is no longer immune.
- *Antigenic shift* occurs when two types of influenza viruses mix in an animal and recombine to create a new virus.

Avian flu in its current form, H5N1, is not a pandemic threat, she adds, but the danger is in the possibility of the virus recombining in an antigenic shift that would produce an infectious agent that few would have immunity to. According to Zuo's research, should a pandemic occur, there will be several psychological consequences.

"In the event of a pandemic, there are some ethical considerations that come into play," she said. "How do we decide who gets the vaccine in the almost certain event of vaccine shortage?"

Zuo also adds that in past pandemics individuals faced the difficult decision of taking care of a loved one and contracting a deadly illness or leaving the loved one to die. This decision brings with it a wealth of psychological issues that are usually not addressed in conjunction with avian flu.

"The BIMS program is well designed, rigorous and rewarding. I love being in this program because I like the level of intensity and high expectations"

-Weilan Zuo

For this reason, she believes that doctors should be educated in mental health and epidemiology because a person's health includes both mental and physical aspects that are not isolated from the health of others.

She also thinks doctors should keep up with the latest research on immunology and epidemiology, which involves critically reading research articles—a skill she honed while writing her paper.

Zuo knows that this skill, among many others she has gained through the BIMS program, will be beneficial to her future, and she is thankful for the education she has received.

"The BIMS program is well-designed, rigorous and rewarding,"



Zuo has worked hard in the lab to understand avian influenza and the risk of pandemic

said Zuo, "and I love being in this program because I like the level of intensity and high expectations."

She feels that the BIMS program has given her an advantage by exposing her to many topics that she will see in the first few years of medical school.

Although she does not know where medical school will lead her, she is leaning towards the field of psychiatry.

"I would like to help youths from my own personal experience," she said.

"I've realized how much mental health can affect the quality of life, and even if I become another type of

doctor, I will take that attention to mental health with me."

Regardless of where her career may take her, Zuo intends to continue to keep up with research and stay educated on community and mental health. And of course, she plans to keep the same work ethic that she has had while earning her undergraduate degrees.

"I have been busy," she said, "but I really wouldn't have it any other way."

To see the paper in its entirety, contact Dr. Gale Wagner at gwagner@cvm.tamu.edu.

Signature of Excellence

Interdisciplinary. Collaboration. Teamwork. Progressive. Leading.

These very words form the framework of excellent programs. They also define the future of the College of Veterinary Medicine & Biomedical Sciences (CVM) at Texas A&M University. As the CVM administration, faculty, and staff respond to the changing environment of animal health and positions the college at the leading edge of clinical service and biomedical research, it becomes increasingly important to build upon the firm foundation of the mission so we can continue to propel forward into what is shaping up to be a very bright future.

“Because of the extraordinarily wide breadth of veterinary medicine today, we simply cannot be all things to all people all the time,” said Dr. H. Richard Adams, Carl B. King Dean of the College of Veterinary Medicine. “To live our mission of graduating the very best entry-level veterinarian, the college decided several years ago to strategically allocate our resources to key programs that best reflect our teaching, clinical, and research areas of strength and expertise.”

Opportunities for collaboration and strategic partnerships within these “signature programs” have already begun to define the strategic path for the CVM, with the emphasized programs providing unique learning laboratories for CVM students.

“The college commitment to nurture a diverse learning environment that prepares our students for any number of career opportunities is evident in our Signature Program strategy,” added Adams. By bringing together the most knowledgeable faculty and the latest technology, we are well on our way toward building programs that place our students at a distinct advantage when they graduate. In addition, we are also able to create confidence in the private sector with our research capabilities which generate partnership opportunities and funding sources that enable us to grow while sustaining our high level of academic excellence.”

As the CVM expands and resources become increasing valuable, it is important to focus efforts on programs and partnerships that have the most impact

on students, on the veterinary medical profession, and on the future of animal and human health care. Recent strategic planning efforts by the CVM team have identified key areas that best represent the strengths of the college, and that create the best opportunities for interdisciplinary collaboration and advancement. These signature programs are: emerging infectious diseases and homeland security, genomic medicine, neurosciences, cardiovascular medicine, executive leadership, toxicology and environmental medicine, and reproductive biology.

“While most of these programs are straight forward, homeland security and cardiovascular medicine are examples where we are able to create interconnects between clinical practice and research, and integrate the broad base of knowledge that exists within the CVM to the benefit of animal and human health,” said Adams. “Being able to combine the leading edge expertise we have on the faculty in the areas of environmental medicine, toxicology, neuroscience, and reproductive biology with the quality caregivers on the clinical side is helping to make us the definitive referral resource, not just for veterinarians in private practice who we serve, but also those that serve in government and in the pharmaceutical/animal nutrition industry as well.”

Building on the past, impacting the present, and focusing on the future. By investing in the signature program concept, the CVM has expanded its teaching hospital caseload, thereby increasing learning opportunities for DVM students. As new facilities and new faces expand campus, the Texas Veterinary Medical Center will strengthen its mission to graduate the highest quality veterinary medical professional through rigorous academics and best-in-class programming that enhances the learning experience like no other institution, and will provide unequaled resources to the veterinary medical profession and for animal health.

What follows is a programmatic look at how the Signature Program strategy is being applied at the CVM.

More than a Horse

One of the largest interdisciplinary collaborations among signature programs within the College of Veterinary Medicine & Biomedical Science is not only measured by the size of its clientele, but also by the depth of expertise on staff as well as global reach.

“Our equine studies program is unlike any other in the nation,” said Dr. William Moyer, department head for Large Animal Clinical Sciences. “We have assembled a team of world class people who not only have research and teaching obligations, but also have significant patient care responsibilities. With this mix of duties, the clinicians are able to stay abreast of ongoing concerns in the horse industry, and are able to utilize the scientific and research resources here at the CVM to develop new diagnostic and therapeutic strategies to apply to real-world problems.”

The unique team of specialists assembled at Texas A&M is repeatedly recognized around the world for their experience and expertise in the areas such as equine reproduction, lameness, foal pneumonia, equine surgery, emergency/critical care, and diagnostic imaging – all which build upon the signature programs of reproductive biology, genomics, and neuroscience.

“The horse industry is continually bombarded with reproductive problems,” said Dr. Dickson Varner, section chief for equine reproduction. “The myriad needs of the industry range from propagating the bloodlines of valuable stallions to improving the foaling rate in horse breeding operations, to preserving semen for global distribution. In this light, we continue to develop the technology and the expertise to assist with such a diverse array of reproductive issues.”

With the research conducted in cloning and the advanced technology at the CVM, the equine section staff successfully created five clones of a prized cutting horse stallion, Smart Little Lena. These clones will not likely be used for performance, but may be used to provide the valuable genetics of this stallion for another generation of mares.

“We are a readily accessible resource for referring veterinarians in the field,” added Varner. “When they encounter problems that need more in-depth analysis, we are able to provide the staff and the state-of-the-art equipment to take fertility diagnostics and treatment to the next level. We have also been successful in developing multiple forms of sperm preservation to add to our array of services that are available to clients – both horse owners and referring veterinarians.”

The CVM is also a leading program in equine lameness. Just like the professional athlete, horse owners need their animals to recover quickly and “get back in the game” as soon as is safely possible – whether that’s on the track, in the show ring, or in the pasture. It is the task of the lameness team to discover the root of the problem and develop a treatment plan that facilitates a speedy recovery.

“We are one of few veterinary medical schools that has dedicated lameness service,” said Moyer. “Ours features two full-time faculty with 100% of their time directed toward lameness problems. We also have faculty and staff that specialize in soft tissue surgery and others that focus on orthopedic surgery.

When you add state-of-the-art diagnostic equipment like our scintigraphy unit and our digital imaging PACS system, you really have a program that can make a difference.”

In addition to making a difference with the services that the equine staff provides, students benefit from the integration of research to reality. Combining expertise from genomics and epidemiology, for example, students have the opportunity to learn the latest information and then apply it in a real-world clinical setting.

“We regularly collaborate with researchers in the CVM genomics laboratory” said Varner. “As the equine genome has been recently sequenced, we are directing efforts to identify biomarkers in seminal plasma and blood as indicators of subfertility and infertility in stallions. The students are also able to more fully appreciate the applications of basic scientific discoveries to a clinical setting.”

Epidemiology is an emerging field and a very powerful tool that is having a sizable impact in the animal health industry. Foal pneumonia and abortion storms are two areas where epidemiology is helping veterinarians and scientists identify risk factors and prevention opportunities that will have immediate applications to horse populations

“Our staff is indisputably world class,” said Moyer. “They continue to receive accolades and recognition from around the world for their efforts. The expertise and technology

here at the CVM is unequaled when you look at it as a total package. I’m proud that we are able to provide such advanced evidence-based information and superior clinical services to our referring veterinarians and patients while preparing students for practice and other career endeavors. We are here as a resource for them, providing that extra level of diagnostics and treatment that may not be found elsewhere.”



The scintigraphy unit helps to diagnose systemic problems.



The CVM is recognized world wide for its efforts in equine reproductive technology

Genomics: Leading Medicine

In 2001, an exciting benchmark in science was reached. The complete sequence of the human genome was deciphered. The impact of the efforts behind this achievement and other projects like it is already creating ripples in how scientists approach both human and animal health alike.

Genomic medicine takes its roots from genomics, and is becoming an increasingly important field as it provides novel avenues for the diagnosis, prevention and treatment of disease. More importantly, it represents a discipline that will impact multiple programs at the CVM.

“Genomics represents acquisition and analysis of genetic information regarding an individual and translating it in a way that eventually it sheds light on the biology of the individual and could also be used for disease diagnostics and prevention, as well as for the development of new therapeutics,” said Dr. Bhanu Chowdhary, professor in Veterinary Integrative Biosciences. “As genetic material regulates our body functions by governing the function of cells, genomics allows us to study those functions and relationships on a molecular level. This in turn can lead to the discovery of the cause and mechanisms behind various diseases and even customizable medications and therapies.”

Dr. Chowdhary has been involved in genetic research for more than 25 years, with over 16 of those years spent specializing at the chromosome and molecular level. As part of the genomics program at the CVM, Chowdhary has been working on mapping the equine genome and has previously worked with analyzing the cattle and the pig genomes. “This is truly no easy task when one is starting from scratch especially on an un-chartered terrain like that of the horse” says Chowdhary about the study of the equine genome. Horses possess 64 chromosomes compared



Dr. Bhanu Chowdhary is a member of the world renowned genomics team. He has been working on mapping the equine genome.

to the 46 found in humans.

The investment the CVM has made in faculty and facilities during recent years is beginning to pay off as the best minds in the animal genomics arena have gathered at Texas A&M. “No other institution in the world is academically and scientifically as strong as we are here at A&M”, said Chowdhary. “We have a combination of expertise found nowhere else. We have an internationally reputed group of researchers on genomics in cattle, dogs, cats, horses, wildlife, and marsupials. Additionally, we have two important service labs: a chromosome analysis laboratory and a parentage and genetic testing laboratory that cater to the needs of not only North America, but the whole world. Overall, the leadership and vision each research group provides to the program is phenomenal and fosters collaboration.”

“We are gearing up to use the genome information from individual species to identify genes associated with immunity and disease resistance. The knowledge gained can lead us to improved therapies not only in animals, but also for humans” added

Chowdhary. “As we gain a better understanding of the complete architecture of the livestock and pet animal genomes, we will be able to comprehend how individual genes affect cellular functioning, growth, reproduction, fertility, coat color, disease manifestation, and other traits that are of vital significance to animal industries.

Another strength of the genomics program is the comparative and evolutionary genomic studies. While some researchers examine the evolution of genetic material in order to search for common ancestry for all species, others study how genetic code is broken down differently in different species and how that translates into cellular function.

It is the in-depth knowledge of gene expression and cellular function that brings the genomics field to the forefront of the biodefense industry.

“When we talk about infectious disease and resistance to disease, particularly those agents that can be delivered in a way that poses a threat to our food supply or to our communities,” said Chowdhary, “we want to have comprehensive information on how these agents act at the cellular level. As we are able to identify animal genes that show resistance to those agents, we will be better equipped to provide improved and targeted prevention and therapeutics as a part of the defense response.”

Within the next year, genomics researchers will receive a major boost to their efforts. A new facility will be added to the CVM campus which will include a \$10 million Transgenic Mouse House. While an enhancement to the genomics program, the facility and technology will be available to all researchers throughout the university. In addition, there will be an \$18 million expansion to the current veterinary research building to help with lab and office space for new faculty.

“Our genomics team is a very diverse yet closely knit group that has many individual strengths,” said Chowdhary. “The new facilities in conjunction with the transgenic mouse program will serve to increase collaboration and promote cutting-edge research.”

New Frontiers in Cardiovascular and Clinical Research

At the crossroads of the classroom and the real world lies research. Texas A&M University has been recognized as a leader in this area, and a new building, funded by both the public and private sector, is proof of the confidence in the university's research. The new facility will house a preclinical studies program that helps design, develop and test new healthcare devices and drugs before they go to the market, which will put veterinary medicine at the forefront of technology.



The new catheterization lab is a part of the DeBakey Institute and represents the foundation of the coming preclinical studies program.

"We are working to bring new developments to veterinary medicine and this is one of the ways we are doing it," said Dr. Terry Fossum, director of the preclinical studies program.

"We will get to make use of new technology when it comes out, rather than 15 or 20 years later."

The vision of the program is to provide a competitive and globally respected facility to foster collaboration among academia and the biotech industry and to educate a scientific workforce by teaching students across multiple disciplines about the quality standards and the FDA approval process.

The program will operate under Good Laboratory Practice (GLP) standards, which are mandated by the FDA. Once a project is submitted for approval, the FDA may come in and rigorously inspect the site where the project was done. During the FDA inspection, they review records and facilities, and if the research is not done to their specifications, they may not approve the product.

Dr. Fossum and her team have been working for nearly two years to prepare the program to meet these standards, which will add even more credentials to the research done within the College of Veterinary Medicine & Biomedical Sciences.

"It is unique in that we are doing GLP work within an academic institution with a large veterinary school because you typically don't find that," said Fossum.

"Most of the places that do GLP work are contract research organizations."

The building, scheduled to be finished by mid 2008,

will be located on the west side of campus, near the corner of Discovery Drive. With 105,000 square feet of space, it will house a hospital, incubator, housing for 250 large animals, and an imaging center.

The imaging center is a particularly welcomed addition because a current hot topic in medicine is using imaging to personalize medicine.

"Instead of someone with cancer being administered a particular type of chemotherapy without knowing whether it is effective or not, there are now ways, using advanced imaging, to see if that specific treatment will work in that particular individual," Fossum said.

Humans, however, will not be the only ones to benefit from the new research facility. Fossum said that her team will work with animals they see in the veterinary clinic that already have many of the diseases to help make advancements in treatment.

In addition to improving healthcare for both humans and animals, the new facility will bring expertise from many fields of academia together.

"Everybody talks about interdisciplinary work, and the reality of it is that it is very difficult to do," said Fossum.

"This is the type of facility that will help make it a reality; it will foster collaboration between a large group of people—veterinary clinicians, physicians, engineers, and other people in the healthcare community."

Not only will the building bring different disciplines together under one roof, it will open the doors of opportunity for Texas A&M students.

"Students in our science and technology programs need to understand what it takes to get a product to the marketplace," Fossum said.

The preclinical studies program will allow students to see the practical application of their classroom knowledge in action, which Fossum said will put the students six months or more ahead of their peers when they enter the workplace.

When the new facility is completed, students will open its doors to find a world of opportunity, and the medical community will find a world of possibility. It will be a crossroads, no doubt, but it is one that leads to a brighter future for both humans and animals.

The Michael E. DeBakey Institute for Comparative Cardiovascular Sciences and Biomedical Devices is the precursor to the new preclinical studies program.

- Implanted and tested the DeBakey left ventricular assist device which is now in clinical use in humans
- Developed surgical techniques for decompression of the thoracic duct through direct cannulation in surgical intensive care patients, thus reducing pulmonary and cardiac edema and shortening hospital stays
- Implemented cannulation of the gastrointestinal lymphatics in overly fluid resuscitated trauma patients to decrease intestinal edema (and abdominal compartment syndrome)

A multitude of well funded research prospects continue to be carried out in the Michael E. DeBakey Institute. Projects ranging from the study of molecular biology of vascular endothelial and smooth muscle cells to the development of stents and other cardiac devices which will have a significant impact on both human and animal heart health.

Excelling in Leadership

No longer is providing quality veterinary medical care the only skill a veterinarian needs to be successful. A strong foundation in ethical decision making, the ability to see the “big picture”, and the talent to use that vision to motivate teams of people are the hallmark of the future of veterinary medical practice.

“We do a phenomenal job of graduating highly skilled caregivers,” said Dr. E. Dean Gage, Executive Director, Center for Executive Leadership in Veterinary Medicine. “The demands and expectations of this profession dictate that we must do more to prepare these graduates to be wise decision makers, strong communicators, focused visionaries and leaders in the profession and communities in which they live.”

During the past four years, Dr. Gage and the administrative team of the College of Veterinary Medicine & Biomedical Science (CVM) have been building a program to meet these future needs of the veterinary medical profession. The Association of American Veterinary Medical Colleges (AAVMC) released the Top 12 Skill Sets desired by veterinary employers at its 15th Annual Education Symposium (See inset).

“Leadership is not an easy subject you can just teach out of a book,” said Gage, “yet it’s vitally important to share it with our students. Putting this newly acquired knowledge into practice through multiple experiential opportunities is even more important to the leadership development and success of our students.”

Leadership concepts are integrated into the curriculum wherever possible, but there has also been a surge in leadership opportunities, particularly with the newly created DVM/MBA program.

“This program began four years ago, and is a partnership between the CVM and the Mays School of Business,” explained Gage. “Current DVM students take a brief hiatus from the veterinary coursework to complete requirements for the MBA in only one year. They then return to the CVM to finish out the professional program. A second alternative schedule is to begin the MBA immediately after completing the DVM degree. While the students are in the MBA program they complete a business consulting project designed to address issues impacting the business of the veterinary profession.”

One of the first projects researched and reported on the economic impact of veterinary medicine on the State of Texas. Another project evaluated and documented referral patterns in Texas between private veterinary practitioners, the Veterinary Medical Teaching Hospital, and private specialty veterinarians.

“The ability to work on real-world problems and answer real-world questions provides our students a strong edge when competing for jobs after graduation,” said Gage. “The leaders in the animal health industry are taking notice of our graduates and our programs as well.”

On October 5, nearly 20 top executives from the animal health and veterinary medical industry arrived at Texas A&M University as members of the External Advisory Board for the Leadership Center. Those in attendance represented veterinary medical practice, pharmaceutical and pet nutrition companies and veterinary associations. The overwhelming support for this

program was not only the caliber of those in attendance, but also in the financial support from these companies for scholarships, internships/externships, faculty development and other important CVM programs.

“The bottom line is that as the profession changes, we must educate, train and provide graduates that are better prepared to meet the challenges of that changing future,” stated Gage. “Employers want our graduates, and we want them to be successful. This is absolutely a win-win for everyone – for the employers, the students and the CVM.”



Dean H. Richard Adams addresses the newly formed advisory council for the Leadership Center

Skills Desired by Veterinary Employers

1. Communication Skills
2. Team Building and Teamwork Skills
3. Problem Solving
4. Information Management
5. Leadership Skills
6. Emotional Stability
7. Intellectual and Cultural Sensitivity
8. Willingness to Work Hard
9. Life-Long Commitment to Learn
10. Business and Management Skills
11. Technical Veterinary Skills with Additional Species Skills
12. Income Generation Capability

The common denominator is:

Communicate! Communicate! Communicate!

Homeland Security

Global conflict has been a part of the lives of Americans since the American Revolution, but no other incident has impacted the American way of life more than September 11, 2001. Bringing conflict to American soil in the form of a terrorist attack shook the United States all the way to its midsection. More importantly, it revealed how very vulnerable Americans are to threats both foreign and domestic. The response to 9/11 has been swift and broad-sweeping, and the College of Veterinary Medicine & Biomedical Science at Texas A&M is playing a significant role in homeland security and how Americans will protect themselves, their economy, and their food supply from biological threats now and in the future.

“Through strategic partnerships with private and government-sponsored agencies,” said Dr. L. Garry Adams, Associate Dean for Research, “we can examine emerging diseases, and how these can be transmitted between humans and animals. By combining the disciplines of toxicology, pathobiology, virology, microbiology and epidemiology, we can work to create better defenses for potential attacks on people, as well as our food supply.”

Because of the effects that biological weapons could have on the human population as well as the food animal industry, the CVM has relationships with the College of Medicine at Texas A&M, as well as a number of institutions from coast to coast. These relationships create a collaborative network allowing any number of scientists to contribute to the growing knowledge base of emerging diseases.

“We are very enthusiastic about our developing role we play in this network,” added Adams. “The long-term vision will be to create a corridor of bio-technological development in Texas that would reach from the University of Texas Medical Branch in Galveston, to Houston, to Bryan/College Station, to Austin and then to San Antonio.”

One such network is the National Center for Foreign and Zoonotic Diseases based at TAMU. According to the FAZD website, “the FAZD

Center enhances linkages between the academic community and related activities in the national laboratories and government institutions, resulting in products that meet the needs of a wide range of customers with an interest in biosecurity for the United States.”

In addition to providing training programs for first responders to potential outbreaks, the FAZD also develops models to plan for and react to disease outbreaks, creates models for analyzing vulnerability and detecting emerging outbreaks, and researches potential vaccines.

“Another partnership that we are very excited about participating in is the National Institutes of Health, Western Regional Center of Excellence for Biodefense and Emerging Infectious Diseases,” added Adams. “This large consortium of scientists is able to study human and animal related pathogens that can potentially devastate the agricultural industry. Again, by preparing for and understanding the potential for an outbreak, we can best work to prevent it.”

One example would be foot-and-mouth disease in cattle. Texas is a national and world leader in the number of head of cattle raised. According to Adams, should animals infected with foot-and-mouth disease virus come across the border undetected, the impact could be economically devastating as state veterinarians began to order depopulation of herds in areas that have been infected.

“Through our research,” said Adams, “we are able to be the watchful eye for the farmers and ranchers in our nation, as well as for our communities. We are also able to be a resource and support system for our veterinarians in the field by providing them current, evidence-based information for disease and illness that may not be commonly seen. If there were an outbreak, or a bioterroristic attack on our food supply via the animal industry, veterinarians will be the front line of defense. They will be the first to spot and recognize the symptoms of an emerging problem. As such, we have a responsibility to arm them with the latest research and information so that we can have a more effective and coordinated response.”

“...by preparing and understanding the potential for an outbreak, we can best work to prevent it.”

**– L. Garry Adams
Associate Dean for Research**

Class of 2010 Profile

Class size: 132

Total applicants: 446

103 of the 132 students are women

Average Age: 23 (range 19 to 39 years)

Average cumulative GPA: 3.67

Science GPA: 3.63

States of Residence

California	2
Colorado	1
Illinois	2
Maryland	1
N. Carolina	1
Nebraska	1
Texas	124

Class of 2006 Placement

Class size: 125 (118 respondents)

Number expecting to practice in Texas: 81

Number selecting small animal practice (exclusive) 43

Number selecting small animal predominant 10

Number selecting mixed practice 18

Number selecting large animal predominant 5

Number selecting large animal exclusive 1

Number entering equine practice 4

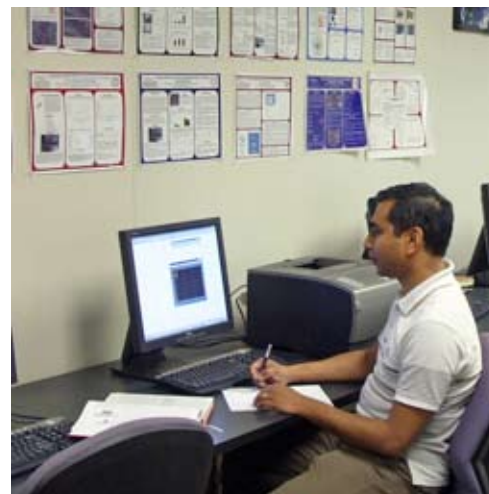
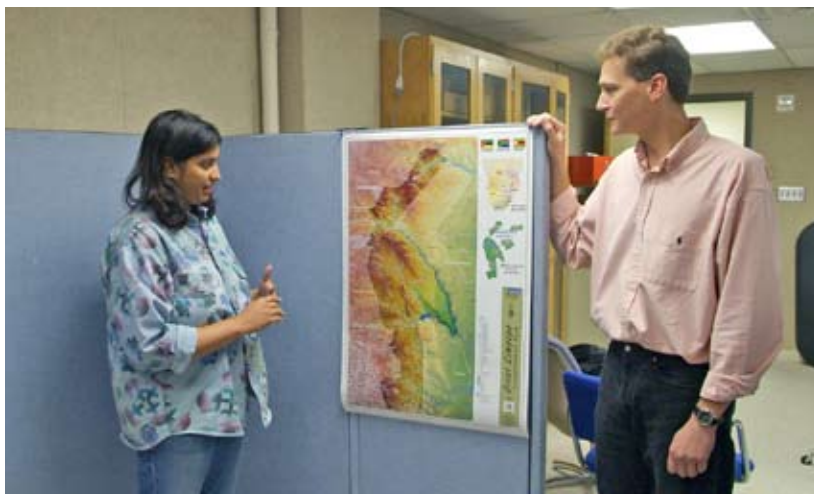
Number entering civil service 1

Number expecting to seek internship/residency 24

Number pursuing advanced study 8

Estimated average starting salary \$56,518.57

Going Global: International Students Make an Impact Around the World



When the International Scholarship Committee announced its recipients last Spring, four veterinary students were among the winners. Dipa Brahmbhatt and Waqar Mohiuddin were two of the four students honored for their academic accomplishments and contributions to Texas A&M University and the surrounding community.

Research means change. Research changes what we know, research changes the way we see things, and most importantly, research changes lives.

Two international graduate students from the College of Veterinary Medicine & Biomedical Sciences are doing just that, and they are making an impact far beyond the borders of the United States.

Buffaloes and the Big Picture

Dipa Brahmbhatt, Class of '08, was born and raised in South Africa, where she witnessed that animals were

a vital part of the economy.

"Livestock is so important, especially in rural communities," said Brahmbhatt.

"Animals are a part of their daily life, whether they are draft power, food or any other aspect of their life."

This experience fostered her interest in animals, especially livestock in developing countries, and she took this interest with her when she left for the United States at the age of 16 to pursue her education.

It was while she was completing her master's of public health at Iowa State University that she became interested in

"Our problems are not only ours. I think September 11th really brought that forward."

– Dipa Brahmbhatt '08

epidemiology. Her advisor suggested she apply for a diversity fellowship at Texas A&M University, which she did, and she became the only person in her department to receive one.

"Texas A&M has a very good reputation, and it is one of the top 10 vet schools," said Brahmhatt.

"Based on its reputation, I was very happy to be accepted."

Now at Texas A&M, Brahmhatt's childhood experience with animals has come full circle; she is using her education to benefit communities in Africa whose lives depend on livestock. For her Ph.D. project, she is modeling the movement of foot and mouth disease from wildlife to livestock, which is economically devastating for South Africa.

"The disease is not in the United States, and we don't want it to be here," said Brahmhatt.

"But it is exciting because it gives us the opportunity to learn and work in places where they have to deal with it everyday, and they have been since the 1800s."

The reservoir for the disease is the African buffalo in the Kruger National Park near South Africa, where she will spend three to six months studying the movement of the buffalo and their interaction with local livestock. This information will be placed on a computer-generated map and color coded to show the level of buffalo-livestock interaction.

"Geographical information systems and spatial epidemiology is becoming so important in our field because it is a big picture. You can locate hot zones, places where there is a lot of interaction, and allocate your resources accordingly," she said.

Brahmbhatt hopes that her research benefits South Africa, and in turn, the world because no country is isolated when it comes to disease.

"Our problems are not only ours," she said.

"I think September 11th really brought that forward."

For this reason, after obtaining her degree, she wants to work in an academic position at any university that emphasizes international issues. She believes that research and a global view must go hand in hand to benefit society to the fullest extent.

New Technology: A Heartbeat Away

Waqar Mohiuddin, Class of '07, is from a different corner of the world, but his work puts him right in the heart of new medical research. He earned his undergraduate degree in mechanical engineering in his home country of Bangladesh and came to Texas A&M University to complete a master's degree in the same field.

"Our department back in Bangladesh had a very good tie with A&M, and I had friends here that convinced me to come," he said.

Mohiuddin also credits Texas A&M's high ranking as another reason he decided to move to the

"I want to help humankind through a different way, which is why I switched to the medical side."

— Waqar Mohiuddin '07

United States.

While working towards his master's degree, he collaborated with NASA and the U.S. Navy on sophisticated mechanical device design, but after obtaining his degree, he decided the engineering alone was not enough.

"I want to help humankind through a different way, which is why I switched to the medical side," Mohiuddin said.

Now at the College of Veterinary Medicine & Biomedical Sciences

pursuing his doctorate in biomedical sciences, he is doing research with the cardiovascular system, combining the expertise of engineering with physiology which he termed 'physio-neering'. Mohiuddin deals with the heart and the large vessels that conduct blood, experimenting with the ways these vessels interact with the heart and the small blood vessels in the muscles. His focus is on how hypertension and age affect the blood flow and compliance adaptation of the large arteries.

"I look at how parts of the cardiovascular system adapt with different disease conditions," he said.

Mohiuddin has a mathematical computational model of the heart and 128 major arteries, which he uses to simulate different stresses on the cardiovascular system, such as a clogged artery or high blood pressure. He can also use the model to measure how cardiovascular devices affect the heart and blood flow.

With the education he has received at the college of veterinary medicine, Mohiuddin now feels ready to put his knowledge to work in the cardiovascular device design industry.

"I have the device experience, and now I have the physiological perspective," he says, "so I hope to do more than if I was just an engineer."

After graduation, Mohiuddin does not know whether he will stay in the United States or return to his home country to continue his goal of helping mankind, but one thing is for sure—hearts will be beating stronger because of his research.



Landis Named New Assistant Dean



Dr. Skip Landis

Dr. F. H. “Skip” Landis, Director of Biomedical Science at Texas A&M University, has been named the new assistant dean for biomedical sciences in the College of Veterinary Medicine and Biomedical Sciences.

The responsibilities of the assistant dean for biomedical sciences begin with facilitating the academic opportunities for nearly 2000 undergraduate students and 150 graduate students.

Landis and his staff help students register, advise the students on courses, and oversee that students are meeting degree requirements and are prepared for graduation.

“I appreciate the confidence Dean Adams has placed in me,” Landis said. “I look forward to working with our students to grow our program over the next several years. It will be my challenge to position our undergraduate program as the premier feeder program to all of the medical arts programs in the state, and to ensure that our graduate program is the recognized leader in the area of biomedical sciences in the years to come.”

Landis, returned to Aggieland seven years ago to assume the role as director of the biomedical science program after serving as a financial advisor at Tarleton State University. Prior to his time in Stephenville, Landis served as a financial aid advisor and assistant area coordinator for the Corps of Cadets at Texas A&M.

Rogers named New Associate Dean



Dr. Kenita Rogers

Dr. Kenita Rogers, a professor in the College of Veterinary Medicine & Biomedical Sciences at Texas A&M University, has been named the college’s new associate dean for professional programs.

The responsibilities of the associate dean for professional programs are extensive and involve everything related to the professional veterinary student from admission to graduation, said Rogers.

Dr. Deborah Kochevar formerly held the position, but was recently named dean of the Cummings School of Veterinary Medicine at Tufts University.

“Dr. Kochevar left behind a great legacy of advocacy for both faculty and students, and I hope to continue that tradition in a very active way. This is a fantastic opportunity at an exciting time, and I look forward to working with the outstanding students, staff and faculty of this college,” Rogers said.

Rogers has served the college for 23 years in various positions, including her most recent responsibilities as associate department head and co-chief of the Medicine Section in the Department of Small Animal Clinical Sciences.

Prior to joining the faculty at Texas A&M, Rogers received her bachelor’s degree from West Virginia University in Animal Science in 1979, her DVM degree from Louisiana State University in 1982 and her master’s degree in Veterinary Medicine from Texas A&M University in 1986.

In addition to receiving numerous teaching awards and publishing several articles throughout her career, she holds dual board certification in Oncology and Internal Medicine and is a member of the American Veterinary Medical Association, the Texas Veterinary Medical Association and the Veterinary Cancer Society.

“The associate dean for professional programs is a critically important role for the entire college. We express our sincere appreciation to Dr. Rogers for accepting this key post and its important set of responsibilities,” said H. Richard Adams, dean of the College of Veterinary Medicine & Biomedical Sciences.

A Fort Worth native and graduate of Southwest High School, Landis received his bachelor’s in wildlife and fisheries science from Texas A&M in 1982. He also received his master’s in education (1984) and doctorate in education administration (1992) from Texas A&M.

“The assistant dean of biomedical sciences will be an important role as we commit the college to educating the brightest students,” said H. Richard Adams, dean of the College of Veterinary

Medicine & Biomedical Sciences. “We appreciate the direction that Skip has taken biomedical sciences, and we expect great things to come from a great program.”

Swindle Receives Excellence in Research Award

Dr. Michael Swindle, Class of 1969, received the American Society of Laboratory Animal Practitioners Excellence in Research Award from the American Veterinary Medical Association in July.

The award is presented to AVMA members who have made significant and repeated scientific contributions to the field of laboratory animal medicine. He was presented with the award in recognition of his work in developing swine as preclinical animal models of human disease.

"I was very happy to receive this award since it was presented at the AVMA, which is the first time I have received an award from my core veterinary group instead of a biomedical research organization," says Swindle.

Swindle is currently the director of the Division of Laboratory Animal Resources and Professor & Chairman in the Department of Comparative Medicine at the Medical University of South Carolina, where he has been employed for the past 21 years.

In addition to serving in leadership for numerous professional organizations, Swindle has authored several publications and given hundreds of presentations in the areas of experimental surgery, anesthesia and swine as animal models.

Despite his accomplishments, Swindle says: "I am still proudest of my veterinary degree from Texas A&M University."



Dr. Michael Swindle

Pathologist Presented Bone and Joint Disease Workshop in Italy



Dr. Roy Pool

Dr. Roy R. Pool, a professor in the Department of Veterinary Pathobiology at Texas A&M University's College of Veterinary Medicine & Biomedical Sciences, presented a workshop to veterinary medicine faculty at both the University of Padova and University of Perugia in Italy on "Comparative Pathology and Clinical Correlation of the Most Common Bone and Joint Diseases of Domestic Animals."

Pool has more than 35 years experience in diagnostic pathology. He specializes in the diagnosis and experimental investigations of the causes of spontaneous and experimentally induced musculoskeletal disease of small animals and athletic horses. Pool's research on spontaneous bone and joint tumors in more than 5,000 small animals allowed him to develop a bone tumor classification scheme that is the basis for the *Histological Classification of Bone and Joint Tumors of Domestic Animals* sponsored by the World Health Organization.

Since joining the Department of Veterinary Pathobiology, Pool has established an Osteopathology Specialty Service. It is the only specialty service of its type in the country associated with a veterinary college. The laboratory specializes in second opinion diagnoses and serves veterinary orthopedic surgeons, radiologists, oncologists and clinicians in both private and academic practice in the United States, as well as pathologists in private and state diagnostic laboratories.

Pool has presented more than 250 invited lectures on his specialty at state, national and international veterinary and scientific meetings, and has received national and international recognition for his research on pathogenic mechanisms responsible for lameness in athletic horses.

Beth Johnson Returns to the CVM

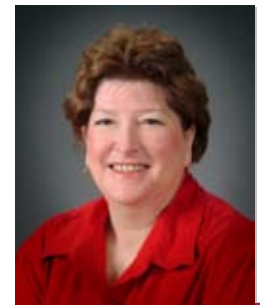
Beth Johnson returns to the CVM after a two and a half year stint with the Texas Veterinary Medical Diagnostic Lab, and assumed the helm as Coordinator of Continuing Education for the College of Veterinary Medicine & Biomedical Sciences.

"It was a smooth transition because I was already familiar with what we do," Johnson said.

Johnson oversees the daily operations of the office, and along with the staff, makes sure that continuing education conferences run smoothly.

"She has already overseen one CE program with great success, and I know there are many more to come," said Dean Richard Adams, dean.

Johnson's goal as coordinator is



Beth Johnson

to continue to provide quality continuing education for veterinarians, who are required to receive 17 hours of CE per year.

Johnson is excited about the spring schedule of conferences and hopes veterinarians will take advantage of the opportunity to receive continuing education at the CVM.

AFS Teaching Award



Dr. James Herman



Dr. Newell McArthur

Each year, The Association of Former Students presents College-Level Teaching Awards in every college. The Association has done this for the past 23 years to recognize faculty excellence in training students for their futures.

This year's recipients from the College of Veterinary Medicine & Biomedical Sciences are Dr. James Herman and Dr. Newell McArthur, and they were presented their awards at a college-wide ceremony.

Dr. Glen Laine, head of physiology and pharmacology, introduced Herman as a valuable asset to the college.

"Anyone who knows Jim knows the quality of the program he puts on and the high standards he sets," Laine said.

Laine also recognized Herman for volunteering to teach extra classes when the college was in need.

"It's exciting to see people who will step forward when they already have a tremendous load," Laine said.

Herman then took the podium and accepted the award with a smile.

"I appreciate this college and this program tremendously, and it is a lot of fun to interact with these students," he said.

"Thank you for letting me do what I enjoy."

Because he was unavailable, McArthur was unable to receive his award in person, but Dr. Evelyn Tiffany-Castiglioni, head of integrative biosciences, honored McArthur as the linchpin of the department.

"Dr. McArthur has trained excellent researchers and excellent veterinarians," she said, "and not only does he teach, he mentors young teachers."

Clendenin named Public Relations Director



Angela Clendenin

Angela Clendenin has been named the college's new Director of Communications and Public Relations.

This position has recently been redesigned in order to better serve the overall communications needs of the administration, faculty, staff and students in the college. In addition to writing about the many programs in the CVM for various internal and external publications, the director is also responsible for integrating public relations within the college with the overall efforts of Texas A&M University.

Clendenin joins the CVM team after working at St. Joseph Regional Health Center in Bryan, TX for more than 12 years. While at St. Joseph, she developed marketing and communications plans for major service lines and also collaborated on many publications.

"The CVM is committed to strategically looking to the future and building programs of excellence," said Clendenin. "These are exciting times for the administration, faculty, staff and students, and I'm honored to be able to share their stories with everyone."

No stranger to Texas A&M University, Clendenin received her bachelor's degree in Journalism from TAMU in 1991. She then received her master's in Strategic Communication and Leadership from Seton Hall University in 2005.

"We are integrating our communications efforts to create a more unified and purposeful approach," said H. Richard Adams, dean of the College of Veterinary Medicine and Biomedical Sciences, "And we will be looking to Angela to define a path that will meet the communications needs of the college as we continue to grow in a dynamic environment."

Texas A&M and Paris Jr. College Sign Agreement

Texas A&M University College of Veterinary Medicine & Biomedical Sciences and Paris Junior College signed a 2+2 Articulation Agreement to facilitate the admission and academic transfer of students from Paris Junior College into the Biomedical Sciences (BIMS) program at Texas A&M. Paris Junior College is the eleventh community college to enter into such an agreement with the university.

As Paris Junior College students progress successfully toward the completion of their Associate degree, this agreement will ensure seamless transition into the BIMS program, according to the provisions and conditions of the agreement.

Paris Junior College students must maintain a cumulative 3.6 GPA, or above, in their community college courses, must not have any grade below a B in all of their "Common Body of Knowledge" science and math course work, and must be eligible for graduation from the community college. Students who meet these requirements and complete the approved degree plan as full-time students will be admitted to the BIMS program.

Biomedical Sciences, the largest major on the Texas A&M campus, enrolls approximately 2,000 students and



Back Row (L-R): Mr. Scott McDonald, director of Admissions Texas A&M University; Dr. Skip Landis, director of Biomedical Sciences, Texas A&M University; Jack Brown, professor, Paris Junior College; Dr. Evelyn Tiffany-Castiglioni, associate dean for undergraduate education, Texas A&M University; Dr. Dwight Chaney, dean of Academic Studies, Paris Junior College
Front Row: H. Richard Adams, dean, Texas A&M University College of Veterinary Medicine & Biomedical Sciences; Dr. Pamela Anglin, president, Paris Junior College

prepares them for careers in the allied health field, which includes such professions as medicine, optometry, veterinary medicine, nursing, ophthalmology and dentistry.

"Partnerships in education are one key to providing opportunities for our high achieving students," said Dr. H. Richard Adams, dean of the College of Veterinary Medicine & Biomedical Sciences at Texas A&M University. "The

College of Veterinary Medicine is pleased to join Paris Junior College in offering this opportunity to students in the Paris area."

President of Paris Junior College, Dr. Pamela Anglin, noted, "We are so pleased. This is a huge opportunity for our students of Northeast Texas. This agreement will help students achieve their dreams."

DEVELOPMENT NEWS

Over the Top

We have exceeded our new goal!!! As of September 30th, we have surpassed \$77 million with three months to go to the end of the OneSpiritOneVision Capital Campaign. We have passed our new goal of \$75 million. This exceeded our original goal of \$60 million by 25 percent and we still have some major gifts that may come in before the end of the year.

To date, \$46,747,983 of gifts received are planned gifts, such as wills and trusts, and \$15,662,512 were gifts of cash. The remaining \$14,738,484 came from private grants for research. As the planned gifts mature, the college's endowment will increase dramatically. With hard work and careful planning, hopefully the College will reach a total endowment of \$100 million by its 100th anniversary in 2016.

Congratulations and many thanks to all of our friends of the College and our alumni who have worked so

diligently over the past seven years to make this second capital campaign a huge success. For those who still want to participate, please contact our college development office at 979 845-

ONE SPIRIT
A&M
ONE VISION

THE TEXAS A&M CAMPAIGN

9043 and we can help you direct your support to your area of interest here at the College.

I particularly would like to thank Dr. Sonny Presnal, Director of

the Stevenson Companion Animal Life-Care Center for his help and support during this campaign. Also, Dr. Dean Gage, Executive Director and Bridges Chair and Ms. Noell Vance, Development Relations Coordinator for a job well done.

We are especially thankful this Holiday Season for everyone's tremendous support of our College of Veterinary Medicine, its students and programs. All of us here in the Office of Development wish you a very blessed Holiday Season and a Prosperous New Year.

– Dr. O.J. "Bubba" Woytek,
Senior Development Officer
DVM '65



Dr. O.J. "Bubba" Woytek

CE by the Sea

Congratulations and thanks to Drs. Scott Vaughan '91 and Pancho Hubert, '88 of Corpus Christi who had a vision to provide continuing education for the Coastal Bend Veterinary Association members in a family atmosphere at the beautiful Port Royal Resort in Port Aransas. "CE By the Sea" started with 45 participants in 2000, and this year, 265 veterinarians were in attendance. As a result of the overwhelming success of this seminar, profits generated were put back into the Coastal Bend area in the form of a \$25,000 endowed scholarship at the Texas A&M College of Veterinary Medicine & Biomedical Sciences.

This first scholarship was named after the late Dr. Pat Prouty to memorialize his many years of service as a practitioner and for the many positions he held to promote the profession he loved so dearly. During his career, Dr. Prouty served as president of the Texas Veterinary Medical Association and the President of the American Heartworm Association. Dr. Prouty is survived by his loving wife Bonnie Prouty.

This year's recipient is a south Texas native, Ricki Christensen. She is a graduate of Riviera Kaufer High School and is now a third year student at the College of Veterinary Medicine & Biomedical Sciences. After graduation, she plans to pursue a career in equine medicine.



Pictured - from left to right:
Dr. Scott Vaughan, Dr. Bubba Woytek, Ms. Bonnie Prouty, wife of Dr. Pat Prouty
David Prouty, son of Dr. Pat Prouty, Dr. Pancho Hubert

IN MEMORIAM

1934

William Burke, 96, of New Braunfels, TX, died Apr. 14, 2006.

1938

Willis W. "Bill" Armistead, 89, of Knoxville, TN, died Apr. 18, 2006.

1942

George P. Bertetta, 90, of San Francisco, CA, died Aug. 30, 2006.

1943

William J. Kelber, 84, of Salem, OR, died Apr. 10, 2006.

1952

Dennis R. Hranitzky of Grapevine, TX, died Sept. 3, 2006

1954

E. Bruce Aman, 80, of Tampa, FL, died Aug. 4, 2006.

1956

David G. Black, 75, of Dallas, TX, died July 8, 2006.

Russell C. "Doc" Thomas, 78, of Fredericksburg, TX, died Aug. 22, 2006.

1967

Roy Belvin England, 81, of Bryan, TX, died October 11, 2006.

Joseph Clay Brown, 63, of San Antonio, TX, died October 25, 2006.

Memorial contributions may be made to the A&M Foundation and mailed to the College of Veterinary Medicine, Office of the Dean, Attn: Noell Vance, 4461 TAMU, College Station, TX 77843-4461.

1971

Tom Gerald III, 59, of Amarillo, TX, died Jul. 5, 2006.

1973

Charles Clinton Burgoon, 56, of Waco, TX, died October 11, 2006.

1997

Gordon Gregory "Corky" Goff, 42, of Austin, TX, died Aug. 30, 2006.

Faculty

Dr. Michael Szabuniewicz, 96, of Bryan, TX, died August 16, 2006.

Friends of the CVM

Mrs. Joy Shelton, 90, of Columbia, MO, died Nov 16, 2006.

Dr. Shelton was a faculty member and administrator in the MU College of Veterinary Medicine for 24 years. he was then Dean of the College of Veterinary Medicine at Texas A&M University from 1973 to his retirement in 1988. Throughout Dean Shelton's career, Joy was a constant support and companion, raising two children, mentoring faculty wives, raising money for student loans, managing veterinary wives auxiliary programs, and making friends of everyone she met.

To submit In Memoriam notices to CVM Today, please mail materials to 4461 TAMU, Office of Continuing Education and Public Relations, College Station, TX 77843-4461 or email us at cvmtoday@cvm.tamu.edu.

MARK FRANCIS FELLOWS

The Mark Francis Fellows recognizes donors who have given \$1,000 or more to the College of Veterinary Medicine & Biomedical Sciences. The following donors were honored at the annual Mark Francis Appreciation Luncheon held on September 29, 2006.

NEW MEMBERS:

Burton M. Barkin
Schertz, TX

Mary C. Broussard
Houston, TX

Mr. and Mrs. Gregory E. Cater
Magnolia, TX

Dr. and Mrs. Beryl Cline
Alvin, TX

Nancy Sue Darsey
Houston, TX

G. David Dealy
Ridgway, CO

Mr. and Mrs. Harvey R. Farish
Kempner, TX

Dr. and Mrs. John Fields
Sonora, TX

Jan Grice
N. Somerset, United Kingdom

Ruben Johnson
Austin, TX

Susan H. Mancuso
Metairie, LA

Betty Massey
Dallas, TX

Mike McCoy
Dallas, TX

Mr. and Mrs. Kenneth R. McGee
Athens, TX

Mr. and Mrs. Gregory L. Meier
Wylie, TX

Sergeant Morgan Miller
Victoria, TX

Dr. and Mrs. Royston W. Moore, Jr.
Corpus Christi, TX

Leslie A. Ohr
Missouri City, TX

Mr. and Mrs. Mark D. Quick
Dallas, TX

Catherine M. Saunders-Watson
Reading, PA

Dr. and Mrs. John L. Scott
League City, TX

Mr. and Mrs. Charles Sheets
Paradise Valley, AZ

Nancy L. Simpson
La Conner, WA

Mable Gates Smith
Duncan, OK

Mr. and Mrs. Charles J. Travella
Huntersville, NC

Dr. Craig C. Williams
Waco, TX

MEMBERS ADVANCING TO A HIGHER LEVEL OF GIVING:

Dr. Louise C. Abbott
Bryan, TX

Mr. and Mrs. William R. Barnes
Dallas, TX

Dr. and Mrs. Neal Chastain
Baytown, TX

Dr. LuAnn G. Ervin
Waco, TX

Mr. and Mrs. Ted W. Eubank
Lantana, TX

Mr. and Mrs. Jack Fields
Humble, TX

Maj. and Mrs. Richard W. Hammaker
Burke, VA

Dr. H. Philip Hobson
College Station, TX

Donna Keeling
Elgin, TX

Melodie H. Landry
The Colony, TX

Dr. and Mrs. Tabor Meyers
Morgan Mill, TX

Dr. and Mrs. Franklin S. Moffett
Dilley, TX

Dr. and Mrs. John M. Morton
Athens, TX

Dr. James R. Prine
Slayton, OR

Dr. and Mrs. J. James Rohack
Bryan, TX

Dr. Stephen A. Shores
Gainesville, FL

Dr. Doyle Starnes
Tyler, TX

Mr. and Mrs. Martin E. Walker
Springboro, OH

Meeting the Challenge

As friends of the Texas A&M University College of Veterinary Medicine, your help is needed. For the college to meet our challenge, it will require support from all of our friends and graduates. Enclosed is a reply card with a sign-up form. We hope each of you will register your interests in those college programs where you are willing to contribute your time and resources.

Every person who owns a pet, rides a horse, or understands the importance of animal agriculture is a potential prospect. Although exceedingly loyal to their alma mater, the alumni base from this college is one of the smallest at Texas A&M. We have approximately 6,000 graduates compared, for example, to Engineering and Agriculture which each have over 60,000 alumni.

We all treasure the value of our veterinary medical education, and our goal for the future is to ensure that the value of the Texas A&M DVM degree grows in perpetuity.

Please fill out the enclosed postcard and return it to us, so we can list you as a supporter of this important challenge for our college. I know you want to see the Texas A&M College of Veterinary Medicine become the best that it can be, which would make it truly the best in the world!

CVM Today is published to keep you informed about Texas A&M University College of Veterinary Medicine. If you have a comment, question or information to share, please take a moment to fill out this form and return it to us at the college. Thank you.

First name Last name

Street address

City State Zip

Home phone number

Daytime phone number

E-mail address

Check here if: ☐ New home address
☐ New business address

I have a comment/question/information:

Yes, I want to help.

☐ Here is my donation to Texas A&M University College of Veterinary Medicine.

(Make checks payable to the Texas A&M Foundation)

☐ Please contact me about making a gift to Texas A&M University College of Veterinary Medicine.

☐ I'd like to know more about making an estate gift (trusts, life insurance, bequests).

I'd like to know more about giving opportunities in the following area(s):

- ☐ Research
- ☐ Small Animal Medicine & Surgery
- ☐ Large Animal Medicine & Surgery
- ☐ Capper & Chris Save-the-Animals Fund
- ☐ Veterinary Medical Teaching Hospital
- ☐ Stevenson Life-Care Center
- ☐ Scholarships
- Other: _____

You can contact
Texas A&M University
College of Veterinary
Medicine
at the following address:

College of Veterinary
Medicine
Texas A&M University
College Station, TX
77843-4461

979-845-5051
fax: 979-845-5088

Upcoming Continuing Education Opportunities & Special Events

14th Annual Veterinary Technicians Conference

Kathy Glaze, Co-chair
Candise McKay, Co-chair
February 2-4, 2007

Fish Diagnosticians Conference

Dr. Patricia Varner, Chair
February 10-11, 2007

Annual Feline Symposium

Dr. John August, Chair
April 27-29, 2007

Gentle Doctor Benefit Auction

979-845-5051 for info
March 24, 2007

Annual Food Animal Conference

Dr. Jason Osterstock, Chair
June 1-3, 2007

OFFICE OF VETERINARY CONTINUING EDUCATION
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