125 Years & Dedication

The Latest Addition to the College of Veterinary Medicine

INSIDE

Triple Crown • Simply the Best • Carbon Copy
Birds of a Feather: Schubot Center • A World of Opportunity
Features

125 Years and Dedication ...........................................2
Equine Pavilion Dedication

Triple Crown .................................................................3
Teaching, Research and Service in Equine Medicine

Simply the Best .......................................................... 4-5
The Selection Process for New Professional Students

Carbon Copy ...............................................................5
First Companion Animal Cloned

Birds of a Feather: Schubot Center ....................6
Research Update

A World of Opportunity ................................................7
Veterinary Medicine in Public Health

Departments

College News ............................................................14-16
In Memoriam ............................................................17
Development News ....................................................18
Etcetera .................................................................19

Contributors

Editor: Diane Oswald Layout: Arthur Oakley IV Photography: Larry Wadsworth
Contributors: Angela Salinas, Marilyn Snell, Keith Randall and Camille Goodman
Advisory Board: John August, DVM; E. Dean Gage, DVM; Keith Randall; Henry Reinhard, Jr.; Charles Vrooman; and O.J. “Bubba” Woytek, DVM

CVM Today is published by the Texas A&M University College of Veterinary Medicine
Direct inquiries to Public Relations Office, College of Veterinary Medicine, TAMU, College Station, TX 77843-4470 – (979) 845-9102
College of Veterinary Medicine: Update

A lot of exciting happenings have occurred at Texas A&M University and the college since I last visited with you. Allow me to provide an update on your College of Veterinary Medicine.

AVMA ACCREDITATION
The Council on Education (COE) of the American Veterinary Medical Association concluded its seven-year accreditation evaluation and visit of the college’s DVM program. Accreditation is awarded only if an educational program meets or exceeds certain standards of excellence pertaining to curriculum, teaching hospital, organization, faculty, patient case-load, students, and many other facets.

After a comprehensive review by the COE of all college elements that pertain to the professional curriculum, I am pleased to announce that the college’s status of full accreditation has been reinstated for yet another seven years. What a great testament to the exceptional quality and hard work of our students, staff, and faculty. And what a great honor for me to be associated with the world’s premier veterinary medical college. Not that we are biased, of course!

GRADUATION 2002
Speaking of exciting events, the DVM Class of 2002 completed their degree requirements and received their diplomas on May 10, 2002, beginning a new phase of their life-long education in veterinary medicine and surgery. Over 1,200 people attended this year’s ceremony and participated in the celebration.

Counting the first class I helped graduate four days after I returned to my home state of Texas in 1998, I have now over-seen the graduation of five separate classes of outstanding new veterinarians since I became your dean. Time really does fly when you are having fun!

NEW A&M PRESIDENT
After eight years of dedicated service, President Ray M. Bowen will be stepping down as the President of Texas A&M University in July 2002. President Bowen and his staff have been extraordinarily supportive of veterinary medicine and our various new educational and clinical service initiatives.

When you see “Past President” Bowen or Executive Vice President and Provost Ron Douglas, be sure and let them know how much we appreciate their support of our college and profession. The Texas A&M University System Board of Regents has designated one finalist to replace Dr. Bowen, and that is former Director of the Central Intelligence Agency, Dr. Robert M. Gates.

President-designate Gates spent two years on campus as Acting Dean of the George Bush School of Government and Public Service. During that time, he gained an understanding of this university and its culture, including veterinary medical education. Dr. Gates appreciates and respects the treasured traditions of this university, and he is committed to helping us advance and provide even better educational services to the daughters and sons of the Great State of Texas. Unless something unexpected happens, Dr. Bob Gates will be the new president of Texas A&M University by the time you read this letter. Please join the College of Veterinary Medicine in extending to him an enthusiastic “howdy” handshake and warm welcome to Aggieland.

EQUINE PAVILION
After several years of watching our equine program grow in size and stature, it was obvious that increased clinical facilities were needed to better serve the horse-owning public of Texas (and to help our faculty, staff and students!). We dedicated the opening of this new 30-stall hospital wing on April 5, 2002. It is a great addition to the college, the Large Animal Department, the Veterinary Medical Teaching Hospital and the horse-owning public of Texas.

FACULTY FELLOWS
Speaking of our equine program, congratulations to Large Animal Associate Professor Dr. Noah Cohen, who was recently selected through a campus-wide competition as a “faculty fellow.” This distinctive award recognizes chosen faculty for their accomplishments as mid-career academicians who have shown exceptional productivity and contributions to college missions. Dr. Cohen.

...continued on page 2
Update

...continued from page 1

is the first “clinician scientist” to receive this award, which provides $100,000 over the next five years to further build his academic programs. This award not only honors Dr. Cohen, but it also brings accolades to his home department and the college. Dr. Cohen joins our previously selected faculty fellows, Dr. Mark Westhusin from Veterinary Physiology and Pharmacology and Dr. Jorge Piedrahita from Veterinary Anatomy and Public Health.

INTENSIVE CARE UNIT

The small animal hospital is in the process of renovating over 4,000 square feet to accommodate a new state-of-the-art ICU and emergency medical center. We are exceptionally proud of this next step in enhancing our educational and clinical service programs, which will also include new anesthesiology teaching facilities and a clinical gastrointestinal endoscopy laboratory. More good news for our college, our referral capabilities, and our students.

This issue of CVM Today wears a new format and exemplifies our commitment to always move ahead. I look forward to visiting with many of you during this fall’s Alumni Weekend. We have a great time at this event, and we hope you will join us. In the meantime, please feel free to drop by your college and see first hand all the exciting things going on. And remember, the coffee is always hot and my door always open!

Sincerely,

[Signature]

H. RICHARD ADAMS
DEAN

125 Years and Dedication

Texas A&M University’s College of Veterinary Medicine dedicated its recently completed Equine Pavilion, one of the largest and most advanced facilities of its type in the world, during ceremonies Friday, April 5, as part of Texas A&M University’s 125th Anniversary Celebration.

The new facility, located adjacent to the Large Animal Hospital, has more than 19,000 sq. ft. of treatment rooms and breeding areas and will increase stall capacity for equine patients by about 70 percent.

“These much-needed stalls and treatment areas will enable the College of Veterinary Medicine to provide continued excellent service to Texas veterinarians and horse owners, both of whom are important parts of an industry that contributes billions to our economy,” said H. Richard Adams, Dean of the College of Veterinary Medicine.

“This is truly a world-class facility,” Adams added. “It will also enhance the learning experience of future generations of Texas veterinarians who will be assuming key roles in the medical and surgical care of horses well into the 21st century.”

Funding for the Equine Pavilion included gifts from the Patsy Link Estate and the Fondren Foundation.

Two crucial areas of the pavilion are the breeding areas and the equine reproduction laboratories. Both will further the understanding of equine reproduction and maximize reproduction efficiency. With a focus on the diagnosis and treatment of reproduction disorders, semen collection and preservation, oocyte transfer and evaluation services, the new facility will strengthen Texas A&M University’s equine program, one known internationally for its overall excellence.

To commemorate Texas A&M University’s 125th Anniversary, the dedication included a glimpse into the past with a farrier demonstration, a chuck wagon with a cowboy cook and an historical photo display highlighting the development of Texas A&M University’s College of Veterinary Medicine.
Horses are an integral part of Texas’ culture and economy, and with more horses than any other state, Texas accounts for roughly one-fifth of the nation’s total horse population. Fortunately, the College of Veterinary Medicine’s state-of-the-art equine program meets the needs of this dynamic and evolving industry, which includes service, sport and recreation animals.

“The equine program at the College of Veterinary Medicine has probably the largest faculty involvement of any in the nation,” said Dr. Bill Moyer, professor and head of Large Animal Medicine and Surgery. “In addition to the equine specialists who represent every major equine specialty, there is a network of faculty from animal science, pathobiology, genetics, reproductive physiology and other disciplines that contribute a great deal to the work taking place here.

“We have faculty who are recognized experts in internal medicine, neonatology, reproduction, orthopedic and soft tissue surgery, emergency services, lameness, dentistry, and ophthalmology. Among these are some of the most widely respected and sought-after experts in the world. In addition to teaching, they are in demand as speakers and consultants outside these walls,” said Moyer. “There is an amazing amount of productivity here.”

That productivity translates to approximately 10,000 equine cases treated either at the facility or in the field each year or an average of 27 horses each day. Believed to be the largest and most comprehensive Large Animal Clinic in the world, the facility is comprised of approximately 79,000 square feet of state-of-the-art treatment stalls, breeding rooms, lab space, and other specialized areas. The recent addition of the college’s Equine Pavilion added 19,000 square feet to the complex and increased the capacity of the existing facility by about seventy percent.

Research conducted at the facility currently includes projects in reproduction, genetics, infectious diseases (foal pneumonia), gastrointestinal diseases (colic), and epidemiology with goals ranging from improved breeding efficiency and fertility to controlling foal pneumonia and mapping the horse gene.

“The research here leads the industry,” said Moyer. “In almost every aspect of equine medicine, our faculty is investigating new and better ways to improve and preserve the health and productivity of horses.”

Moyer, who joined the department in 1993, says the most rewarding part of the last nine years is seeing the program’s faculty become globally recognized as the best in equine medicine. The strength of the teaching, research, and service of the college’s equine medicine program has earned it recognition as “the world’s finest.”
Simply the Best

It has been said that if you’re not moving forward, you might as well be going backward. The College of Veterinary Medicine is moving forward to implement some very positive changes to the professional DVM program to ensure that the best qualified applicants are offered admission.

These changes are aimed at enhancing the value of an already academically rigorous veterinary medical education for enrolled students. The college has adopted a new selection process with a more objective approach to evaluating criteria in granting admissions to the veterinary program, while protecting the important subjective criteria for suitability of the applicant to become a veterinarian.

The new selection process is designed to streamline and improve the application procedure for prospective veterinary students. The college began using the Texas Medical and Dental Schools Application Service (TMDSAS), which is the model program in the nation for application to medical and dental schools, for 2002 admissions. The result of the inaugural application processing round through TMDSAS was impressive and greatly appreciated by the applicants to the College of Veterinary Medicine.

The TMDSAS is a total online service and includes electronic application download, all GPA calculations, transcript verifications, course and residency rulings, ethnicity classification and a host of additional administrative information. However, the benefits of utilizing this service exceed the administrative savings to the College of Veterinary Medicine. A low-priced application fee for students, a modest institutional fee, the opportunity to develop relationships with other health professionals and health advisors in the state, membership in the Texas Association of Advanced Health Professionals, and TMDSAS representation with the Coordinating Board and State Legislature are added values.

Applications for admission in 2003 were available on May 1, 2002 through the College of Veterinary Medicine Web Site (http://www.cvm.tamu.edu) and the application deadline is September 1, 2002.

New selection criteria designed to objectively answer three important questions were adopted for the Class of 2006 admission process. These questions are:

1. Can the applicant successfully matriculate the professional curriculum?
2. Does the applicant have the personal qualities to be a veterinarian?
3. How can the selection process fairly and best reward the applicant’s academic and professional preparation in pursuit of a career in veterinary medicine?

A number of academic and non-academic criteria were evaluated for each candidate and a numerical score was assigned. The slate of prospective students was ranked based on their overall scores and admission offers were made to the top 128 applicants. This approach ensures that all applicants are fairly evaluated on criteria that have proved to be strong indications of potential success in and commitment to the veterinary profession.

For enrolled students, the most significant changes in the professional program are those that will strengthen personal and student leadership development including the introduction of a new leadership course, professional student seminars, and a leadership seminar for elected student leaders. The college takes its responsibility for character and ethical development very seriously. Through the new course and seminars we hope
to foster a sense of professionalism and commitment in our students both to the veterinary profession and to the community.

Two annual activities that provide students with an opportunity to exercise their leadership skills while giving something back are Parents Weekend and Open House. This year, the College of Veterinary Medicine’s Open House was coordinated in conjunction with the College of Medicine’s Open House. This unique opportunity provided veterinary students a chance to work closely with other medical professional students.

In order to support learning through extracurricular activities, three new student organizations including Ethics, Practice Management, and Pathology are being evaluated. And, students are discussing ways to “raise the bar” on the student publication, Vet Rap, by increasing editorial standards, including more information on veterinary student activities, and by putting a professional polish on the publication’s layout. A student group is also working on revisions to strengthen the College of Veterinary Medicine Student Honor Code. We are proud to report that the catalyst for these positive changes came from the students themselves.

The College of Veterinary Medicine will continue to evaluate the admissions process and criteria, curriculum, and opportunities to encourage and support student leadership development. The college remains dedicated to producing the finest entry-level veterinarian to serve the State of Texas, the nation, and the world, and to ensure a bright future for our ever-changing profession.

Carbon Copy

In what is believed to be the first success of its kind, researchers at the College of Veterinary Medicine at Texas A&M University have cloned a cat. A kitten, named “cc,” which stands for “Carbon Copy,” was born to “Allie,” a surrogate mother, as part of the Missyplicity Project in December 2001.

The kitten is believed to be the first successfully cloned companion animal, making Texas A&M University the first academic institution in the world to have cloned four different species. Previously, researchers at the College of Veterinary Medicine have cloned cattle, goats and pigs.

cc and “Rainbow,” her genetic donor, are both female calico domestic shorthair cats. The announcement of the successful cat cloning was delayed until the animal had completed its vaccination series and its immune system was fully developed.

“cc is healthy and growing quickly,” said Dr. Mark Westhusin, who holds a joint appointment with the Colleges of Veterinary Medicine and Agriculture and Life Sciences and is the principal investigator on the project.

The clone was produced using nuclear transfer, or cloning technology, and delivered by caesarian section without complications. cc is under the medical care of Drs. Jim Ruglia and Lisa Howe, both veterinarians at the College of Veterinary Medicine’s Veterinary Medical Teaching Hospital at Texas A&M University.

“cc is developing normally for a kitten its age and she is healthy,” said Westhusin.

“cc is an identical genetic copy of Rainbow,” said Westhusin. Future scientific advances resulting from the successful cloning of the cat are expected.

“Our ability to clone cats will help increase cloning efficiency and help us better understand their reproductive peculiarities,” said Westhusin. “With each new species cloned, we learn more about how this technology might be applied to improving the health of animals and humans.”

The Missyplicity Project, a $3.7 million effort to clone a specific mixed-breed dog named Missy, funded by Genetic Savings & Clone, Inc., has fueled the progress of Texas A&M University’s cloning research program.
Birds of a Feather: Schubot Center

The mission of the Schubot Exotic Bird Health Center at the College of Veterinary Medicine is to improve the health of birds through research into the causes, diagnosis and prevention of their diseases. This mission is reflected in a number of avian conservation projects supported by Schubot Center grants.

**RED SISKIN RECOVERY**

As a participant in the American Federation of Aviculture’s Red Siskin Recovery Project (AFA-RSRP), the center’s mission is to help save the small, canary-like bird from extinction. This once-abundant native of South America is officially listed as endangered by the International Union for the Conservation of Nature and by the Convention on International Trade in Endangered Species due to decades of habitat loss and poaching. Researchers at the Schubot Center, under the direction of Drs. David Phalen and Darryl Styles, are trying to protect Red Siskins from another threat: avian tuberculosis.

“While the Red Siskin is easily bred in captivity, it is highly susceptible to avian tuberculosis, a disease that causes losses in zoo collections, avaries, wild bird populations, and private ownership,” said Styles. “The lack of reliable diagnostic tests in the live bird has created a problem for veterinarians and aviculturists trying to prevent the entry of avian TB into their flocks. Our goal is to develop tests that will more accurately detect the disease earlier than conventional methods, eventually allowing for the reintroduction of disease-free Red Siskins into their natural habitat.”

**CHONDRODYSTROPHY IN CALIFORNIA CONDORS**

The California Condor, with a worldwide population total of only 183, is threatened by chondrodystrophy, a disease for which there is no cure. With the help of funding from the Schubot Exotic Bird Health Center and in conjunction with the San Diego Zoo, Dr. Bhanu Chowdhary, a geneticist at the college, is using comparative genomics to pave the way for a cure that may save the California Condor from this terminal disease.

By comparing the genetic architecture, or genome, of chickens and California Condors, researchers can compare the chromosomes responsible for similar diseases in chickens in hope of isolating the chromosomes in condors that cause chondrodystrophy. The ultimate goal is to develop a screening test that will allow conservationists to breed condors free of the genetic mutation that causes chondrodystrophy.

**PACHECO’S DISEASE IN PARROTS**

Affecting a wide variety of wild and domestic parrot species is a deadly and elusive herpes virus called Pacheco’s Disease (PD). The Patagonian Conure is the primary carrier of Pacheco’s Disease, causing the most devastating outbreaks, followed by other South American Conure species, Macaws, African Grey Parrots and Cockatoos. The disease is difficult to detect in the asymptomatic bird, and it is not known whether the current vaccine is truly protective.

“Our goals are to better understand the disease and to create a test that can screen birds for the disease before symptoms surface,” said Dr. David Phalen, the project’s lead researcher. “We are investigating how the disease is spread, what the risk factors are for contracting the disease and whether or not the current vaccine can protect birds exposed to the disease.”

The project has yielded some helpful information on PD. Research indicates the herpes viruses that cause PD can be reliably detected in live birds by combining blood tests with mucosal swabs. The findings also suggest that birds shed the virus for extended periods of time, and perhaps for the life of the bird. In addition, the project has resulted in the creation of a genetic library that contains vital information about the virus’ genetic makeup.
A World of Opportunity

The global economy brings an increased need for veterinarians specializing in food safety and foreign animal diseases. Preparing veterinary students to meet the demands of a global economy requires an innovative approach.

Dr. Jeffrey M. B. Musser, assistant professor and veterinarian at the College of Veterinary Medicine, is the director of “Global Veterinary Medicine and Foreign Animal Diseases: Trade, Control, Careers,” a new three-year project at the College of Veterinary Medicine, Texas A&M University. It is supported through a Cooperative State Research, Education and Extension Service (CSREES) Challenge grant awarded by the U.S. Department of Agriculture.

“Through this grant, the College of Veterinary Medicine is offering an elective course for third year veterinary students interested in global veterinary medicine and the associated opportunities,” said Musser. “The course (VTPB 948) teaches students about foreign animal diseases, organizations and agencies that research and manage foreign animal diseases and career opportunities.”

Experts in the field of foreign animal diseases speak about the career opportunities available to students of global veterinary medicine. The course includes guest speakers from the U.S. Department of Agriculture (USDA), the Animal and Plant Health Inspection Services (APHIS)/Veterinary Services, USDA APHIS/International Services, the Texas Animal Health Commission, the Federation of American Scientists, the University of Georgia and the U.S. Agency for International Development.

Students may participate in one-week externships at the USDA in Washington, D.C. with field trips to the World Wildlife Federation, U.S. Agency for International Development, and other agencies to learn about the important role governmental agencies, professional organizations, the U.S. military, and non-governmental organizations (NGOs) play in global veterinary medicine.

Alternative externships abroad are also offered to provide students with an international experience. The program’s first externship to Washington, D.C. was held March 15 through March 20, 2002 with five student participants.

“Before this trip, I had assumed that my education would end with a DVM, but now I am considering doing a MPH or MPVM, in order to be better prepared for development work,” said Sharon Waters, a third-year veterinary student upon returning from Washington, D.C. “I now have more confidence that I can do things beyond my immediate training.”

“The overall goal of the project is to help veterinary students develop an appreciation of veterinary medicine as a global discipline,” said Musser. “The course is designed to make students aware of international veterinary medical issues and the exciting careers that are possible.”
Semper Fidelis

After 32 years with the College of Veterinary Medicine, Associate Director of Biomedical Science, Mr. Lyndon Kurtz, was honored by friends and colleagues at a retirement reception held at the college on February 5, 2002.

After serving as a Corporal in the United States Marine Corps, Kurtz came to work at the College of Veterinary Medicine. Kurtz served as an administrative assistant in the dean’s office from 1969 to 1979 and then as Assistant to the Dean until 1990.

During the last eleven years as Associate Director of Biomedical Science, Kurtz has played a key role in recruiting students from a wide range of backgrounds into the College of Veterinary Medicine; promoting the college to prospective students, counselors and employers; counseling students and parents in areas of vocational and career interests; providing orientation for incoming undergraduate students in the Department of Biomedical Science; and supervising Veterinary Enrichment Camps. During this time, Kurtz has seen enrollment in the Biomedical Science Program grow from 700 to 2100 students.

In addition, during Kurtz’s employment, the Biomedical Science Program (BIMS) was awarded the Diversity Award (April 2000) and a four-year Health Career Opportunity Program grant (1985-1988) designed to attract and retain veterinary students, as well as veterinary assistants. However, students graduating from the BIMS program were increasingly admitted to veterinary schools, medical schools and other professional programs that required the solid science foundation that BIMS provides.

Kurtz has worked hard to help mold the curriculum and build the BIMS program and he has found many rewards.

“The curriculum is never the same two years in a row. And the reason is because it is designed to continually reflect the changing needs of the citizens of Texas,” said Kurtz. “In 1970, the BIMS curriculum was designed to train students as veterinary assistants. However, students graduating from the BIMS program were increasingly admitted to veterinary schools, medical schools and other professional programs that required the solid science foundation that BIMS provides.”

Kurtz has worked hard to help mold the curriculum and build the BIMS program and he has found many rewards.

Perhaps the most enjoyable time that I’ve spent here has been at commencement. In the 32 years I’ve worked at the college, I’ve only missed one veterinary commencement ceremony. It just happened that both commencement and the birth of my first grandchild happened on May 10, 2001.”

Reflecting on his time at the college, Kurtz said, “I’ve looked forward to coming to work every day. The veterinary college has given me 32 years of opportunity to help young people reach the next level.” Kurtz’s contribution has not gone unnoticed.

“Mr. Kurtz has made an indelible mark on the lives of so many students at the College of Veterinary Medicine,” said Dean H. Richard Adams. “He has contributed greatly to the college’s student recruiting success.”

Kurtz officially retired from the College of Veterinary Medicine on February 28, 2002. However, as of April 1, 2002, he continues to work part time as needed in the Biomedical Science Program. Through his service to the college and the veterinary profession, Kurtz has demonstrated the true meaning of the Marine Corps motto “Semper Fidelis” – always faithful.
Partnerships in Education

The Biomedical Science Program (BIMS), the undergraduate program at the College of Veterinary Medicine, has initiated two new programs that promise to strengthen the program’s appeal to future Aggies.

The 2+2 program offers qualified students from participating junior and community colleges guaranteed acceptance into the BIMS program. Participating students combine two years of program-specific, junior/community college-level coursework with two years of upper-level coursework in BIMS toward the completion of the Bachelor of Science in Biomedical Science. Currently, there are six participating schools: Palo Alto College in San Antonio, Austin Community College, Tyler Junior College, Weatherford College, Cisco Junior College and Northeast Texas Community College in Mt. Pleasant.

Also new to BIMS is the Aggie Program of Accelerated Certification for Teaching (Aggie PACT), an alternative to traditional teacher certification available to BIMS and Wildlife & Fisheries Science majors. Aggie PACT is designed to address the shortage of science teachers in Texas by streamlining traditional certification and providing quick classroom placement.

“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. “The College of Veterinary Medicine is pleased to offer these new and valuable opportunities to deserving students.”

Above and Beyond

Father and son take to the skies in support of the Partnership for Environmental Education and Rural Health (PEER II) program. Dr. Jon Hunter, a professor in the Department of Veterinary Physiology and Pharmacology, and his son Adam Hunter, a Technician I in the Department of Veterinary Anatomy and Public Health, travel across the State of Texas to teach rural middle school children the importance of environmental and water safety.

Using a small, single-engine aircraft, Hunter and his son assist the PEER II program in carrying out its mission to encourage the integration of environmental health science into science and non-science courses in rural middle schools. They make presentations at schools that are remotely located and generally inaccessible to scientists with limited time.

“Flying turns a two day road trip into a five hour flight,” Hunter said. “This provides greater flexibility.” Since he began his flights to rural middle schools, Hunter has visited Westhoff, Poteet, San Saba, Coleman, Meyersville, Rockport, and Rocksprings. He engages students in experiential learning as they participate in two, 45-minute activities: Water – Our Most Precious Resource and The Jade Dragon.

In the first activity, Hunter sets up a ceramic city to simulate a real city featuring real-time experimentation. Students use an Audio Response System to predict the effects of various environmental problems. In the second activity, students answer questions relating to one of 18 stories written for the PEER II Project.

“We want to show students that it is fun to learn about science and to get them excited about going to college and pursuing a career in a scientific field,” said Hunter.

The PEER program works in collaboration with the College of Veterinary Medicine, the College of Education, the Center for Environmental and Rural Health, and the Texas Rural Systemic Initiative.
Feed of Clay

Molds and their chemical products can be beneficial as well as harmful to humans and animals alike. The Chinese wrote about the effects of poisons from molds almost five thousand years ago; yet, scientists are still seeking practical ways to deal with and reduce our foodborne exposure to these elusive chemicals.

Dr. Timothy D. Phillips, a professor at the College of Veterinary Medicine who holds a joint appointment with the Institute of Food Science and Engineering at Texas A&M University, has developed a novel intervention strategy using a clay mineral in the diet to reduce aflatoxin exposure from moldy food and feed. Dr. Phillips’ main focus is detecting and detoxifying hazardous food-borne and environmental chemicals.

Molds have been used since ancient times in the production of food and antibiotics. However, potent mold-derived chemicals known as “mycotoxins” are much too toxic to be of therapeutic value. Though invisible to the naked eye, these chemicals can be found in nearly all mold-contaminated food sources and may be harmful if ingested in high enough quantities, or over a long enough period of time.

Of the mold-derived chemicals frequently found as contaminants of food, those known as aflatoxins can be acutely toxic, suppress the immune system and have been shown to cause cancer based on evidence from both laboratory and epidemiological studies.

Exposure to aflatoxin in less than lethal doses may cause vaccinations in farm animals to fail, potentially resulting in greater incidence of infectious diseases and slower growth. The scope of the aflatoxin problem is global, but the aflatoxins especially threaten over populated developing countries with either limited food-safety resources or high rates of infectious disease and a frequent consumption of highly contaminated food.

To combat mold growth and aflatoxins in animal feed, Phillips is investigating a clay product called NovaSil. Added to the diets of farm animals in the United States, Latin America, Asia, Africa, and Europe, NovaSil is an anticaking additive.

Phillips suggests that NovaSil has an “added value” in animal feeds in that it tightly binds aflatoxins in the digestive tract, thereby preventing their uptake by the blood and target organs and preventing their toxicity and cancer-causing effects.

“The use of NovaSil clay in animal feed has led the way for the prevention of aflatoxicosis in animals.”

“The use of NovaSil clay in animal feed has led the way for the prevention of aflatoxicosis in animals.”

State Representative Myra Crownover addressed the 82nd graduating class of the College of Veterinary Medicine.

Graduation 2002

Commencement ceremonies for the College of Veterinary Medicine’s class of 2002 were held May 10, at Rudder Auditorium. This 82nd class of the College of Veterinary Medicine graduated 124 veterinarians.

State Representative Myra Crownover, whose late husband, Ronny Crownover ’80 was a veterinarian, urged graduates to keep a sense of humor.

“I still remember the stories my husband would tell, such as the time the clinic cat ate a friend’s prized parrot and the time a dog named ‘Newton’ was accidentally neutered because his name looked a lot like “neuter” on the chart,” she recalled.

“You will probably cringe each time you hear, ‘If it costs more than 50 bucks, put him to sleep.’ The reverse is when a guy drives up in a beat up ’74 Chevelle, has no shirt or shoes, he’s carrying a squashed dog and he says, ‘Doc, you’ve got to fix ole Buster, and I don’t care how much it costs!’”

Additionally, a posthumous veterinary degree was awarded to the late Heidi Hopps, who was tragically killed in a traffic accident in June 2001. Heidi’s husband, James Hopps, accepted her DVM degree.

Of the mold-derived chemicals frequently found as contaminants of food, those known as aflatoxins can be acutely toxic, suppress the immune system and have been shown to cause cancer based on evidence from both laboratory and epidemiological studies.

Exposure to aflatoxin in less than lethal doses may cause vac-
Breathing Easier

Sixty percent or more of high-risk stock-feeder calves may develop bovine respiratory disease complex (BRDC) during the transition from ranch to feedlot. It is one of the most economically important infectious diseases affecting U.S. beef cattle, costing the industry as much as $1 billion annually. Recent studies conducted by Dr. Raymond Loan, a pathobiologist at the College of Veterinary Medicine, shows that one effective method for controlling this costly disease is “dual prophylaxis.”

“When small groups of stocker-feeder calves are moved from farms and co-mingled at salebarns, backgrounding operations or other facilities, cross-exposure to diverse viruses and bacteria may occur,” said Loan. Most calves have low immunity time and various stressors may reduce the calves’ natural resistance to disease. These calves have a higher risk of developing BRDC.

Over the next several days, the calves are typically sold, assembled into uniform groups and shipped. After arriving at the intended destination, these high-risk calves are frequently given antibiotic treatment en mass to treat or prevent BRDC. “This practice is called metaphylaxis and has been proven beneficial during the early stages of infection.” However, it can be difficult to determine the infection status of each calf and the timeliness of the metaphylactic treatment.

“Dual prophylaxis was designed to overcome this problem.” In the experiments, Loan combined 1) metaphylaxis using the antibiotic tilmicosin (mycotil), and 2) vaccination using Mannheimia (Pasteurella) haemolytica-multocida bacterin-toxoid (Pulmo-guard PHM-1); both given at the first point of assembly at the order buyer barn (dual prophylaxis). At preshipment, metaphylaxis would treat and temporarily prevent early BRDC while the vaccination would prevent later BRDC once the protective effects of metaphylaxis had disappeared.

These experiments tested the hypothesis that dual prophylaxis at first point of assembly of calves, before BRDC developed, would reduce the incidence of disease compared to metaphylaxis alone. Three years of experimentation confirmed Loan’s hypothesis. “In severe outbreaks of BRDC with metaphylaxis alone, 33 percent of the calves remained healthy; with dual prophylaxis 56 percent remained healthy. Equally impressive, of those calves given metaphylaxis alone, 47 percent developed recurrent BRDC. Recurrent BRDC in those calves receiving dual prophylaxis was only 23 percent.”

This study was supported in part by the Texas Advanced Technology Program and the Texas Agricultural Experiment Station.

Genomics Revolution

The last decade has brought about revolutionary advances in understanding the human genome. With those advances, come a world of uncharted ethical, moral and legal questions, said Dr. James E. Womack in a presentation titled “The Genomics Revolution: Marching into the Millennium with the Secrets of Life,” as part of Texas A&M University’s 2001-2002 Distinguished Lecture Series.

Womack, a geneticist and Distinguished Professor of Veterinary Pathobiology at the College of Veterinary Medicine, compared the significance of sequencing of the human genome to the landing of a man on the moon. Such a landmark discovery raises questions among scientists and laypersons as to what comes next in the pursuit of genetic understanding. Womack was a 2001 co-recipient of the Wolf Prize in Agriculture for his pioneering research in the cattle genome.

Dr. James Womack demonstrates the complexity of the human genome by comparing a cell’s DNA structures to the stuffing in a basketball.
Two New College Chairs and Professorship Announced

Dr. E. Dean Gage was appointed to the Charles H. and Mildred Kruse Bridges Chair in Veterinary Medical Education. The chair is believed to be the first chair in North America specifically devoted to advancing the future of veterinary medical education.

Throughout his career, Gage's extensive leadership experience has included positions as Executive Vice President and Provost and Interim President of Texas A&M University, as well as numerous other professional, academic and civic leadership roles.

“I have had the fortunate opportunity to work in all aspects of the educational process, including undergraduate, graduate and professional programs. This opportunity will allow the College of Veterinary Medicine to examine all we do – from student selection, content of the curriculum, methodologies, technologies, classroom, laboratory and clinical experiences – and enhance our program to produce the very best graduates in the veterinary medical profession,” said Gage.

Gage earned a Bachelor of Science in 1965 and a Doctor of Veterinary Medicine in 1966, both from Texas A&M University. He obtained a Master of Science and Residency in Neurosurgery and Neurophysiology in 1968 from Auburn University. He is a Diplomate of the American College of Veterinary Surgeons, was named National Veterinarian of the Year in 1983 by the American Animal Hospital Association, and holds membership in many professional organizations and honor societies. Gage has held numerous leadership roles in some of America's leading universities and in the community.

“I would like to express deep appreciation to the college for the trust and confidence they've placed in me in this appointment, and much gratitude to Charles H. and Mildred Kruse Bridges for funding this endowed chair and for their vision to see what a chair in veterinary medical education can do for this college and the profession,” said Gage. “We owe them a great debt of thanks.”

The College of Veterinary Medicine is pleased to announce the appointment of Dr. Glen A. Laine as the first Wiseman – Lewie – Worth Chair in Cardiology.

Laine holds professorships at both the College of Veterinary Medicine and the University of Texas Medical School at Houston. He has a unique combination of animal and human medical and academic leadership experience. Laine also serves as Director of the Michael E. DeBakey Institute for Comparative Cardiovascular Science and Biomedical Devices at Texas A&M University.

“I am honored to have been given the opportunity to utilize my research experience and extensive time working with clinicians to help further the college's program in cardiology,” said Laine. “This generous endowment will add significantly to the advancement of cardiovascular research and medical treatment, benefiting both veterinary and human medicine.”

Laine came to the College of Veterinary Medicine from the Texas Medical Center in 1990 and serves as Professor and Head of Veterinary Physiology and Pharmacology. He completed undergraduate and graduate degrees in microbiology and physics before earning a Doctor of Philosophy in Physiology and Biophysics with a minor in Biomedical Engineering at the College of Medicine, Texas A&M University, in 1980. Laine is a Fellow in the Cardiovascular Section of the American Physiological Society and an Established Investigator of the American Heart Association. He is a recipient of the Upjohn Young Cardiovascular Investigator Award from the International Society for Heart Research, and the Distinguished Achievement Award in Research from the Texas A&M University Association of Former Students.

Dr. Kenneth Ramos was recently appointed to the Chester Reed Professorship in Veterinary Medicine. Ramos holds a joint professorship with the College of Veterinary Medicine and College of Medicine, Texas A&M University System Health Science Center. Other academic affiliations include the Texas A&M University System Health Science Center's Cardiovascular Research Institute and Institute of Biosciences and Technology, Center for Animal Genomics and Biotechnology.

“This professorship promises to benefit the College of Veterinary Medicine by further establishing it as one of the best toxicology programs in the nation,” said Ramos. “It is very rewarding to know that others value and recognize the profound importance of the field.”

Ramos earned a Bachelor of Pharmaceutical Sciences at the University of Puerto Rico Medical Sciences Campus, graduating with highest honors in 1978. He earned a Doctor of Philosophy in Pharmacology and Toxicology from the University of Texas in 1983 and completed a postdoctoral fellowship with the University of Nevada School of Medicine in 1984. Ramos came to the College of Veterinary Medicine in 1989 as an associate professor for the Department of Veterinary Physiology and Pharmacology.

Ramos is a member of the American Society for Pharmacology and Experimental Therapeutics and the American Society for Cell Biology. He has served on numerous grant review, advisory and editorial boards and his research is well published.

Ramos serves as Director for the National Institute of Environmental Health Sciences Center for Environmental and Rural Health and as Deputy Director of the NIEHS Toxicology Training Program, Texas A&M University.
Welcome!

The College of Veterinary Medicine has appointed Drs. Robert Bergman, Sharon Kerwin and Daniel Mertens to the Small Animal Clinical staff.

Robert Bergman is a Clinical Assistant Professor of Neurology/Neurosurgery in the Department of Small Animal Medicine and Surgery and is a 1997 DVM graduate of the University of Georgia, College of Veterinary Medicine. He received his Master of Science degree in 2001 from Virginia-Maryland Regional College of Veterinary Medicine and is a diplomate of the American College of Veterinary Internal Medicine Specialty of Neurology.

Sharon Kerwin is an Associate Professor of Orthopedic Surgery in the Department of Small Animal Medicine and Surgery and is a 1988 DVM graduate of the College of Veterinary Medicine, Texas A&M University. She received her master’s degree in Veterinary Physiology in 1993 from Louisiana State University and is a diplomate of the American College of Veterinary Surgeons.

Daniel Mertens currently has a clinical orthopedic teaching and research appointment in the Department of Small Animal Medicine and Surgery and joined the college shortly after completing his surgical residency at Cornell University. He is a 1997 University of Wisconsin graduate.

Visiting Professor

Dr. Elaine A. Ostrander, a Burroughs Wellcome Fund Visiting Professor, recently gave two lectures at the College of Veterinary Medicine, Texas A&M University.

Ostrander is with the Fred Hutchinson Cancer Research Center and presented “The Canine Genome Project: Progress and Promise” on April 15, and “Genetic Mapping and Analysis of Human Cancer Susceptibility Genes” on April 17. Hosted by the Department of Veterinary Pathobiology, a reception in her honor was held on April 15, 2002. Ostrander is a member of the Divisions of Human Biology and Clinical Biology and Head of the Program in Genetics at the Fred Hutchinson Cancer Research Center in Seattle, Washington. Burroughs Wellcome presented Ostrander with a plaque and an honorarium during the reception.
TVMDL Update

Dr. Lelve G. Gayle has been appointed to executive director of the Texas Veterinary Medical Diagnostic Laboratory (TVMDL).

Gayle began full-time service in February and succeeds retired TVMDL executive director, Dr. Konrad Eugster. Gayle earned both his DVM (1964) and Master’s of Veterinary Science in Veterinary Toxicology (1980) from the College of Veterinary Medicine, Texas A&M University.

“Dr. Gayle has provided support and guidance to TVMDL for over 25 years and is an excellent choice for the agency’s directorship. Under his leadership, the agency will continue to be at the forefront of protecting our vital animal and agricultural economies, in Texas and beyond,” said Texas A&M System Chancellor Howard D. Graves.

The Texas Veterinary Medical Diagnostic Laboratory has become one of the largest and busiest veterinary diagnostic laboratories in the world, receiving more than 16,000 requests per year from the Texas animal industries for assistance in diagnosing animal diseases. In addition, the TVMDL has been recognized by the World Association of Veterinary Diagnosticians.

Heart to Heart

In October 2001, Dr. Theresa W. Fossum, Professor of Surgery and Tom and Joan Read Chair in Veterinary Surgery, and Dr. David Nelson, Clinical Assistant Professor from the College of Veterinary Medicine, together with Dr. Mark Felger, a cardiovascular surgeon with Cardiothoracic and Vascular Associates of Austin, and their surgical team, performed the college’s first successful heart bypass surgery on Luke, a two-and-a-half-year-old Golden Retriever from Houston, Texas.

“Luke had a condition known as sub-aortic stenosis (SAS), which is one of the most common congenital heart defects found in dogs,” said Dr. Sonya Gordon, a veterinary cardiologist at the college who has overseen Luke’s treatment since he was a puppy.

Although this is not the first heart bypass performed on a dog, it was the most aggressive and, arguably, the most successful of its kind. Due to the location and severity of Luke’s condition, traditional methods would have been inadequate. Borrowing from similar cases in human medicine, a different approach was taken.

“We removed a large window of the septum relieving some of the pressure and providing access into the left ventricle for removal of the scar tissue,” said Nelson. “A thin patch of Luke’s own tissue was used to replace the missing window from the septum.”

Luke recovered well and in April 2002 celebrated his third birthday.

Reaching Out

Dr. Darryl Styles of the Schubot Exotic Bird Health Center recently visited the Universidad Nacional Costa Rica Esquela de Medicina Veterinaria, Costa Rica’s only veterinary college. Dr. Styles had the opportunity to teach while assisting students and clinicians in conservation efforts to preserve Central American Scarlet Macaws and South American Great Green Macaws.

Dr. Styles is working with Dr. Janice Boyd, an aviculturist from Louisiana with an interest in conservation, and the Amigos de las Aves, a private Costa Rican conservation society, which is rearing the macaws. Dr. Styles lectured to veterinary students and faculty on avian medicine relevant to Costa Rican avifauna, repaired a peafowl’s fractured leg with students and clinicians, and visited sites where birds bred in captivity have been released into the wild with Dr. Mauricio Jimenez of the UNA Veterinary School.

“Sharing what we know of avian medicine and helping our colleagues raise their level of practice is both a privilege and a responsibility,” said Styles. “Doing so helps clinicians and biologists understand wildlife population management better and also benefits the animals they serve.”
Dr. Evelyn Tiffany-Castiglioni

Tiffany-Castiglioni Receives Distinguished Alumna Award

Dr. Evelyn Tiffany-Castiglioni received the 2002 Distinguished Alumna award from the Graduate School of Biomedical Sciences of the University of Texas Medical Branch at Galveston. She received the award during Graduate School commencement ceremonies Saturday, May 11, 2002, on the UTMB campus.

In a letter to Tiffany-Castiglioni, it was noted that “This is the highest award presented to a graduate and one that recognizes your superior achievement and dedication as a research scientist, teacher and administrator.”

Tiffany-Castiglioni is Professor and Head of the Department of Veterinary Anatomy and Public Health and professor of toxicology. She is also associate dean for undergraduate education in the College of Veterinary Medicine.

Professional Honor

Dr. M. Michael Swindle ’69 was inducted into the European College of Laboratory Animal Medicine (ECLAM) as a de facto specialist for his research and teaching collaborations with European institutions. He is the first North American to be honored with this status.

Swindle is a Diplomate of the American College of Laboratory Animal Medicine and Professor and Chairman of the Department of Comparative Medicine at the Medical University of South Carolina, Charleston.

ECLAM was started by the European Society of Laboratory Animal Veterinarians in order to complement postgraduate training and provide certification for veterinarians in laboratory animal medicine in Europe and is overseen by the European Board of Veterinary Specialization.

Class Year

1938
Carl Fink
Fink, of Fredericksburg, died September 19, 2001
1941
Hilton A. Schmidt, Jr.
Schmidt, of Seguin, died January 23, 2002
1943
Max E. Maier, Jr.
Maier, of Orange, died February 9, 2002
James B. Young, Col. U.S. Army, Ret.
Young, of Austin, died May 28, 2002
1945
Thelston B. Carroll
Carroll, of Bremond, died October 31, 2001
1946
George Strickhausen III
Strickhausen, of Aransas Pass, died November 20, 2001
1947
Joseph Beninson
Beninson, of Rochester Hills, died February 23, 2001
Adrian S. Eder
Eder, of Cranbury, NJ, died January 7, 1997
Jerry Lee Mitchell
Mitchell, of Aledo, died June 20, 2001
1948
Merle Stanley Weedon
Weedon, of Waxahachie, died March 4, 2002
1949
Henry C. Waring
Waring, of Houston, died November 24, 2001
Byron D. Harris
Harris, of El Paso, died December 20, 2001
1951
Ernest L. Bryant
Bryant, of Angleton, died July 28, 2001
Tom Scott McMurry
McMurry, of Victoria, died February 6, 2002
1954
Ronald D. Cress
Cress, of LaMarque, died September 6, 2001
1956
Ralph Hayes Brock
Brock, of Hearne, died February 23, 2002
Robert T. DuBose
DuBose, of Flint, died November 19, 2001
1957
Thomas J. Galvin
Galvin, of Paris, died August 21, 2001
1961
Richard D. Autry
Autry, of Highmore, SD, died April 20, 2001
Richard W. Hargroder
Hargroder, of Opelousas, LA, died January 9, 2002
1962
Thomas Everett Howard
Howard, of Amarillo, died August 27, 2001
1964
Durward R. Avery Jr.
Avery, of Calhoun, LA, died May 4, 2002
Ronald L. Mull
Mull, of DeLeon, died March 5, 2002
1968
John T. Gesin
Gesin, of Austin, died January 13, 2002
1970
Bobby N. Lawdermilk
Lawdermilk, of Big Spring, died October 30, 2001
1976
Douglas M. Cromeens
Cromeens, of Houston, died April 6, 2002
1977
William A. Averhoff
Averhoff, of Fort Worth, died April 5, 2002
1983
Kathryn L. Banner
Banner, of Merkel, died March 28, 2002
1989
Norma Porres Mauk
Mauk, of Bryan, died February 2, 2002
Sue Stansberry Mitchell
Mitchell, of Houston, died April 27, 2002
VETERINARY CLASS SCHOLARSHIP DRIVE OFF TO A GREAT START!

Thanks to 137 of our alumni, we have raised over $100,000 for class scholarships since the last edition of CVM Today! Approximately $50,000 in cash, and an additional $20,000 in pledges has been received.

We also received a $25,000 endowed scholarship from Lu Ann Ervin ‘84. Lu Ann previously gave a President’s Endowed Scholarship to the university as well. I asked her what motivated her generosity, and she spoke of the comments of Randy Matson ’67 when he spoke at her graduation. He reminded everyone that one of the responsibilities of a former student is to help those who would be following in their footsteps. Apparently, she took that remark very seriously.

In the next issue of CVM Today we plan to list the classes with their total scholarship amounts, so everyone can see how the classes stack up with each other. This is a five-year initiative and the need to reach our goal of 50 Class Scholarships is critical, especially since the university has approved a $30/hour increase in tuition. This seriously affects our students, given that they average close to 20 hours each semester, which will increase the cost of tuition by approximately $5,000 over the four-year professional curriculum.

Construction has just begun on the new entryway to the administration building and the remodeling of the Small Animal Clinic to create a new ICU and emergency medical facility. Your help is needed to identify individuals, corporations and/or foundations you know who might be interested in helping support these important projects. Please give our office a call and we will be happy to visit with you.

As a final note, everyone is invited to our “2002 CVM Homecoming,” August 30 thru September 1. Get your reservations in as soon as possible because room reservation blocks expire in July.

– Dr. O. J. “Bubba” Woytek, DVM ’65

A PERFECT FIT

The Class of 2005 marked the beginning of their careers in the veterinary medical profession at the second annual White Coat Ceremony on January 25, 2002. The ceremony recognizes students by presenting each with a white medical laboratory coat.

“The white coat reception is clearly significant in making the first and very large step in obtaining a DVM degree,” said Dr. H. Richard Adams, Dean of the College of Veterinary Medicine. “The coat may be a little roomy when they first receive it, but it is designed so each student can grow intellectually.”

Funding for the white coats was provided by Dr. M. Jeanne Fairweather, retired Senior Staff Internist and the first woman to become Chief of the General Medical Clinic at Brooke Army Medical Center (BAMC) in San Antonio. Fairweather’s love of animals, especially her Boxers, Gregory and Diane, and the important role animals play in human lives has led her to contribute to the education of veterinarians.

“Animals are important in our daily lives. Pets are brought to cancer, stroke and other lonely patients. The joy seen in the eyes of sick children and adults shows how important animals are to them,” Fairweather said. “Putting on the white coat today should remind students of the honor and privilege they have to become part of the veterinary profession and part of the Texas A&M University College of Veterinary Medicine legacy,” said Fairweather.
Lost & Found

Few days are as exciting as the day Aggies receive their Aggie Rings. For Aggie veterinarian, Dr. Joseph C. Brown '65 (DVM '67), January 7, 2002 may run a close second.

After losing his Aggie Ring in a boating accident, the improbable happened – the Ring was returned thirty-two years later. Two years ago, on the shores of Calaveras Lake, a San Antonio fifth grader, Mario Cervantes, found Brown’s Ring. After learning that Mario still had the Ring, Kristi Sorenson, Mario’s teacher, asked if she could help him locate the owner. Sorenson contacted the Association of Former Students and Brown was located at his veterinary practice, O’Connor Road Animal Hospital in San Antonio.

Mario presented the Ring to Brown personally with classmates, local officials and members of the media looking on. If Mario ever earns his own Aggie Ring, Brown promised to pay for it.

When asked why Brown had not ordered a replacement, he said it was because the only diamond his grandmother had ever owned was set in the Ring to commemorate the completion of his DVM. The family heirloom and his Ring were irreplaceable.

It was through Brown that CVM Today learned of another veterinarian’s lost-and-found story. Soon after Brown’s story appeared in the Houston Chronicle, he received a phone call from Dr. James Bray ’65 (DVM ’66) with a story of his own to tell.

During his last year as a veterinary student, Bray and a few of his classmates were flown to a cattle ranch in west Texas to palpate cows for pregnancy. By midday, he noticed that his prized Aggie Ring was missing. Although they looked everywhere, the ring was nowhere to be found.

Believing that the Aggie Ring was lost forever, he decided to order a replacement. Bray never imagined that the Ring would be found some ten years later. A thoughtful ranch hand working on the ranch that Bray had visited as a student sent his original Ring back to him in 1975.

While the exact location where Bray first lost his Aggie Ring in 1965 remains a mystery, the story still stirs the imagination. And, even though he owns two Aggie Rings, Bray prefers to wear the original.

Open House 2002

The College of Veterinary Medicine's annual, student-run “Open House” attracts thousands of visitors from around the state.
Dr. Robert Moore, assisted by technician, Nini Binkley Hodges, spayed a 13-year-old tortoise January 16, 2002. The tortoise was experiencing difficulty laying her eggs and was spayed at the owner's request to prevent her from becoming “egg bound,” a life threatening condition for tortoises.

Moore began by scrubbing the plastron (lower shell) of the tortoise and then made three deep cuts to create a “door” into the shell. He removed the ovaries, oviduct, six well-developed eggs and over 50 ova from the tortoise. Then, the shell's “door” was replaced and secured with a polypropylene mesh covered in an acrylic epoxy. Moore expects that the shell will grow back together within two years.

College Highlight Calendar

**Fall Semester 2002**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 26</td>
<td>First day of Fall Semester Classes</td>
</tr>
<tr>
<td>August 30-31</td>
<td>Homecoming 2002</td>
</tr>
<tr>
<td>Nov. 18–Dec. 14</td>
<td>Examination Period for North American Veterinary Licensing Exam (NAVLE)</td>
</tr>
<tr>
<td>December 6</td>
<td>Last day of Fall Semester Classes for 1VM, 2VM and 3VM</td>
</tr>
<tr>
<td>December 13</td>
<td>Last day of finals</td>
</tr>
</tbody>
</table>

Continuing Education Calendar

**Upcoming Events for 2002–2003**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>November 1–3, 2002</td>
<td>Annual Equine Conference – Ophthalmology</td>
</tr>
<tr>
<td>November 22–23, 2002</td>
<td>Emergency Medicine for Small Animals</td>
</tr>
<tr>
<td>December 7, 2002</td>
<td>Annual Exotic Pets Conference</td>
</tr>
<tr>
<td>Feb. 28–Mar. 2, 2003</td>
<td>TVMA Mid-Winter Meeting (College Station)</td>
</tr>
<tr>
<td>April 5–6, 2003</td>
<td>Annual Feline Symposium</td>
</tr>
<tr>
<td>April 25–27, 2003</td>
<td>10th Annual Veterinary Technician Seminar</td>
</tr>
</tbody>
</table>