Making Brain Tumors Glow

A New System Identifies Cancer More Precisely

Story on page 8

Also Inside...

• A Pair of Mules Go To College
• Puppy Love Is Good For Depression
• Streamlining Information Through UVIS
• Do Horse Drugs Work?
• A Helping Hand From Dr. G
• Middlebush Farm’s Third Life
Inside this Issue
Autumn/Winter 2004
Volume 20, Number 1

Serving the Community
A Pair of Mules Go To College 20
Practical Research at Middlebush 24

Teaching
Making Brain Tumors Glow 8
Puppy Love Is Good Medicine 11
The Paperless Clinic 12
Do Performance Enhancing Drugs Really Work? 19

Discovering

Veterinary People
A Helping Hand From Dr. G 14
More Than A Motto 18
Catching Up With... Al Corley 28

Departments
Message from the Dean 3
Around the College 4
Veterinary Heritage 16
Alumni at Large 26
Class Notes 29
Flashback! 30

MU does not discriminate on the basis of race, color, religion, national origin, ancestry, sex, age, disability, or status as a disabled veteran of the Vietnam era. For more information, call Human Resource Services at (573) 882-4256 or the US Department of Education, Office of Civil Rights.
Message from Dean Kornegay

Our Alumni Make Us Proud

Hardly a day goes by when I’m not reminded of the outstanding contributions that our alumni make to society. This issue of Veterinary Medical Review drives that point home. One can’t help but be impressed by the generosity of alumni such as Dr. Melvin Gerstner, MU DVM ’66 and James Sparks, MU DVM ’90. Each day, we hear about the challenges facing inner-city youth. Well, Dr. Gerstner has done something about it with his support of Hillsides in Los Angeles, and “gone the extra mile” (literally) to further help his fellow man through participation in World Concern. The story on the support that Dr. Sparks and employees of Eagle Animal Hospital provided to the Hakes family is another example of MU graduates giving back in a powerful way. Needless to say, our service men and women face tremendous challenges in their postings overseas. The last thing they need to worry about is providing for their love ones back home. Jim Sparks instinctively recognized this need and provided tangible support.

Since our first class of 1950 was sent into the world with President Harry S. Truman’s commencement speech still ringing in their ears, MU’s College of Veterinary Medicine has graduated over 2,500 veterinarians. Each graduate has made his or her mark on the profession and society. You name it...whether it’s clinical service, research, organized veterinary medicine, or involvement in public affairs...MU alumni are making a difference. Amazingly, three of our graduates, Drs. Gerald Johnson, MU DVM ’56, Leon Russell, MU DVM ’56, and Jim Nave, MU DVM ’68, served as President of the American Veterinary Medical Association (AVMA) over the 10 year period extending from 1991 to 2001. Today, MU graduates Drs. Robert (Bud) Hertzog (another member of that famous Class of 1956) and Ron Cott, MU DVM ’73 continue this tradition of national service, with Bud representing District VII on the AVMA’s Executive Board and Ron representing Missouri in the House of Delegates. The Alumni at Large section of this issue of Veterinary Medical Review emphasizes the scope of our graduates’ contributions. We’re so proud of 1972 classmates Drs. Bill Gengler, Ralph Henderson, and Cecil Moore (what a class!); Michael Lairmore, MU DVM ’81; James Crooke, MU DVM ’80; and, again, Ron Cott.

In talking with alumni during trips around Missouri or as we hold receptions at national meetings, I’m always struck by the pride our graduates have in ole Mizzou. Alumni have provided much needed support and advice over the years and continue to be a source of inspiration to the College’s faculty, staff, and students. Indeed, your ideas and energy have played a key role in much of what we have and will continue to accomplish. Please stay connected to College. We are made stronger through your involvement.
College Recruitment Director Recognized by Educators Group

Barbra Horrell, recruitment and retention director at the MU College of Veterinary Medicine, was recognized for her Outstanding Contributions to Medical Education by the National Association of Medical Minority Educators (NAMME).

Her award cited her dedication to assisting MU students to seek careers in the health sciences, especially in the medical and veterinary medical fields. Her work to retain students was also acknowledged. Former students cited her willingness to aggressively work to keep them in school and her advocacy for them to the administration.

NAMME was established in 1975 by a group of educators concerned about the shortage of minority health care providers and the need for an organization to address issues impacting minority students, faculty, and administrators.

Ms. Horrell has been a MU employee since 1961. She has previously held appointments as the National Director of Student Affairs and Regional Director of Minority Affairs at the American Association of Medical Colleges. Ms. Horrell was also a member of the Missouri Governor’s Minority Health Task Force.

Tony Mann Elected President Of Critical Care Association

Dr. Tony Mann, associate professor and director of small animal emergency and critical care for the MU Veterinary Medical Teaching Hospital, was voted president-elect of the American College of Veterinary Emergency and Critical Care (ACVECC). ACVECC is an international organization that promotes advancement of the relatively new field of veterinary emergency and critical care and certifies veterinarians to specialize in this discipline.

As president-elect, Dr. Mann will serve as a liaison to the examination committee and will be a voting member on the Board of Regents, the decision making body for the organization. The six-year term of an ACVECC presidential position includes three stages: two years as president-elect, two years as president and two years as past-president.

Dr. Mann joined the MU faculty as an assistant professor in 1988.

Research Will See If a Gene Helps Cause Heart Disease

The MU College of Veterinary Medicine will participate in a $3.5 million, five-year project funded by the National Institutes of Health for research on coronary artery disease.

MU researchers Harold Laughlin and Ed Rucker will investigate the activities of a gene that could be important in maintaining the health of coronary arteries. The group also will determine whether the gene is affected by regular exercise. According to the American Heart Association, the United States ranks sixth for women and seventh for men in the number who die from cardiovascular disease.

“Coronary artery disease is the leading cause of death in the United States,” said Dr. Laughlin, professor and chair of biomedical sciences. “We’ll be using the pig as a model for our research because the pig’s vascular system is very similar to humans. Some of our research will be looking at whether we can promote production of the enzyme that the gene produces in order to build healthier arteries.”

Sheltons, Levys Win Dean’s Impact Award

Four longtime friends of the MU College of Veterinary Medicine were presented 2003 Dean’s Impact Awards.

Retired associate dean Dr. George Shelton and his wife, Joy, were presented the award during the college’s alumni weekend in October. Kenneth and Barbara Levy of St. Louis received their award in
November during a dinner at the college. The Dean’s Impact Award is given to those supporters of the college who have made a lasting impact.

“Over his tenure as associate dean, Dr. Shelton played an important role in mentoring veterinary students who have gone on to successful careers in essentially every aspect of the profession,” said Dr. Joe Kornegay, dean of the college. “Many former students have cited Dr. Shelton’s influence in shaping both their professional and personal lives.”

Mr. and Mrs. Levy’s original connection to the college came when one of their Cavalier King Charles Spaniels was referred to the Veterinary Teaching Hospital. Consistently pleased with the care their pets have received, the Levys funded two endowments, the Kenneth and Barbara Levy Small Animal Emergency and Critical Care Endowment, and the Kenneth and Barbara Levy Residency Endowment in Veterinary Medicine. “In addition to their financial generosity, the Levys provide immeasurable support through their caring concern for the college, its faculty, staff, and students,” said Greg Jones, director of development.

Robert Miller Recognized By K-State Veterinary College

Dr. Robert Miller, associate professor at the MU College of Veterinary Medicine, received the 2004 Kansas State University College of Veterinary Medicine Alumni Recognition Award. The award is presented to people who have advanced veterinary medicine and who have played an exemplary role in professional and community settings.

Dr. Miller received his DVM from Kansas State in 1955 and subsequently spent 16 years in mixed animal practice in Warrensburg, Mo. In 1973, he came to the MU College of Veterinary Medicine for graduate work, completing an MS degree in 1975 and a PhD in 1976. Dr. Miller served on the College’s faculty from 1976 to 1999 and currently directs the Missouri Institute for Cattle.

During Dr. Miller’s tenure at MU, he taught hundreds of veterinary and pre-veterinary medical students, in addition to training a number of food animal interns. Dr. Miller has also served on numerous MU committees and professional organizations. He was president of both the American Board of Veterinary Practitioners and Western Veterinary Conference.

Class of 2004 Student Wins ABVP Award

Jill Forinash Luther, MU College of Veterinary Medicine Class of 2004, received first place in the American Board of Veterinary Practitioners Student Case Report Contest for her report “Arthroscopic exploration and biopsy for diagnosis of septic arthritis and osteomyelitis of the coxofemoral joint in a dog. Co-authors on this paper were Drs. Jimi Cook, assistant professor of veterinary medicine and surgery, and Melissa Stoll, then a resident at the college.

Tom Fangman Installed as Swine Association Director

Dr. Thomas Fangman, clinical associate professor of veterinary medicine and surgery and director of Middlebush Farm at the MU College of Veterinary Medicine, was recently elected as a director of the American Association of Swine Veterinarians (AASV).

The new directors began their terms this March. Each director serves a three-year term and is eligible for re-election to a second three-year term in 2007.

Dr. Fangman succeeds Dr. R.C. Ebert, MU DVM ’70, as district 3 director, representing Arkansas, Kentucky, and Missouri.

With a membership of 1,432

Robert Larson Appointed College’s Extension Director

Dr. Robert Larson, clinical associate professor of veterinary medicine with the commercial agriculture program at the University of Missouri-Columbia, recently was appointed director of Veterinary Medical Extension and Continuing Education at MU.

As director, Dr. Larson will be responsible for providing leadership for continuing education programs for practicing veterinarians. He also will oversee veterinary extension programs for the public in cooperation with regional extension specialists and campus colleagues.

“In the future, there will be an increased emphasis and need for life-long, continuing education in the veterinary medical field and MU will continue to strive to deliver this to graduates in a more convenient way,” Dr. Larson said. “As the amount of knowledge in biology and medicine increases at an ever-increasing pace, there will be more responsibility for universities and colleges to supply life-long education for our professional graduates.”

Dr. Larson believes teaching methods are becoming more effective and available by using concise delivery methods, such as internet courses and field training. Currently, continuing education and extension courses are offered on the MU campus to veterinarians and other professionals throughout the year. Also, outreach courses are being offered to Missouri farmers, ranchers and veterinarians throughout the state. The primary veterinary course topics include animal health care, current agriculture industry issues, animal production, health regulations and biosecurity. Dr. Larson received both his DVM and PhD degrees from Kansas State University. He is a diplomate of the American College of Theriogenology and the American College of Animal Nutrition.

Prior to joining the faculty at MU, Dr. Larson worked as a veterinarian and consultant in private practice.
veterinarians, AASV is an international organization including Mexico and Canada. It provides resources to enhance the effectiveness of its members and provides science-based information about industry issues.

**Potential Cause Identified For Polycystic Kidney Disease**

As many as 1 in 500 people are affected by polycystic kidney disease (PKD), a disease that shortens the life of the kidney, eventually necessitating dialysis and a kidney transplant. Currently, there is no cure. However, a MU veterinary pathobiology researcher has uncovered a possible cause for the disease, which could be the next step in developing a treatment for this life-threatening problem.

Polycystic kidney disease is a genetic disorder where the kidney develops fluid-filled cysts. These cysts cause the kidney to enlarge greatly and eventually cause complete renal dysfunction. Dr. Elizabeth Bryda, an associate professor of veterinary pathobiology at the MU College of Veterinary Medicine, has found a gene that may be directly responsible for causing the fluid-filled cysts.

“In our most recent study, we discovered that mutations in a gene called Bicc1 can lead to polycystic kidney disease in mice,” Dr. Bryda said. “The gene codes for a protein whose function in the kidney is unknown. We have some clues about this protein based on what the fruit fly version of this protein does and we are currently exploring whether Bicc1 works in similar ways in mammals. If we can understand the normal function of this protein in the kidney, we can begin to understand why defects in the protein lead to the formation of kidney cysts. This would allow us to think about possible interventions to slow or stop cyst formation.”

**Research Leaders Appointed In MU Veterinary Medicine**

Professors Dr. Ron Terjung and Jeff Tyler were named to research positions at the MU College of Veterinary Medicine this spring.

Dr. Terjung was appointed to the College’s research associate dean position. He is a professor and associate chair of the college’s Department of Bio-medical Sciences, a professor of physiology, and a research investigator at the Dalton Cardiovascular Research Center.

Dr. Jeff Tyler, professor of Veterinary Medicine and Surgery and Food Animal in-

---

**Gary Allen Named as MU Interim Chief Information Officer**

Dr. Gary Allen, associate professor in the Department of Veterinary Pathobiology in the MU College of Veterinary Medicine, has been named the interim chief information officer for the University of Missouri-Columbia.

Dr. Allen will be responsible for the information technology and telecommunications that span and support more than 35,000 faculty, staff, and students on the MU campus. He also will plan and support future technologies on the campus.

Dr. Allen earned his DVM degree in 1981 from Mississippi State University. He received a doctorate in microbiology from MU in 1985, and subsequently completed postdoctoral studies in both immunology and medical informatics. He was director of Information Technology at the MU College of Veterinary Medicine before accepting a post as MU’s associate chief information officer.

Dr. Allen serves as Executive Director of the University of Missouri Bioinformatics Consortium, a high-performance networking and computational infrastructure for bioinformatics research and collaboration across the four campuses of the UM System.
MU Post-Grad Program Teaches Emergency Care For Animals

One suffers from diabetes complications, one has knee surgery, another receives a pace maker during heart surgery. The ailments found at this MU ICU are the same ones found at any hospital, the only difference is that these patients bark and meow. In an effort to provide better emergency care, veterinary technicians from private practice now have the opportunity to study special techniques in an intensive program at MU’s Veterinary Medical Teaching Hospital’s Small Animal Critical and Emergency Care Unit.

“People often feel like their pet is a member of the family,” said Mary Flanders, the supervisory ICU technician at the MU Veterinary Medical Teaching Hospital. “Owners have begun expecting a higher level of care and service for their pet. It was on this foundation that the MU College of Veterinary Medicine developed a new program, designed to teach veterinary technicians the necessary skills needed for emergency medicine and intensive care.”

The college wanted to increase awareness of small animal emergency care in the veterinary field and provide professionals with the experience and training that will save lives at their private practice, Ms. Flanders said.

Depending on a student’s availability, this new post-graduate program can last between two and six weeks. Students learn from hands-on experience with emergency admissions and patients in the intensive care unit. They complete rounds, monitor the hospital’s ICU patients, and perfect a specific list of medical procedures before earning their certificate for the course.

Development of the program began in 2002, and last semester the program admitted its first student, Rebecca Relling, a veterinary technician from St. Louis. During her two-week program, she learned skills to address emergency veterinary techniques such as blood gases, ventilation systems, and tracostomy procedures and care.

“My exposure to some of the advanced methods of vet care was wonderful,” Ms. Relling said. “Exposure to emergency and critical care medicine on a higher level has allowed me to enhance my skills and learn tips that I now offer to other technicians. Furthering our skills in this way will bring our field to higher standards and hopefully allow us to receive the recognition we deserve.”
Tumor Identification System Highlights Cancer During High-Risk Surgery in Dogs

Dr. Peter Gordon
When removing a tumor, doctors often must cut into adjacent healthy tissue to ensure that all of the cancerous cells are removed. While this can be acceptable when a tumor is lodged in a limb, tumors that reside in the brain or other critical areas create a dilemma for surgeons. Removing healthy brain cells could result in substantial damage to the patient.

A University of Missouri-Columbia veterinarian believes he might have an answer.

Dr. Peter Gordon, an MU veterinary resident in neurology and neurosurgery, is working with terminally-ill dogs to discover whether a special water-based compound can help surgeons distinguish between brain tumor cells and healthy cells. Dr. Gordon’s challenge is to find the right chemical that will highlight all of the cancerous cells, while ignoring the healthy cells.

“Currently, to identify intracranial masses, doctors will inject an intravenous contrast agent into the patient and follow the injection with an MRI or CT scan,” Dr. Gordon said. “This technique allows the doctor to see the approximate location of the tumor and outlying cancer cells. However, although this provides us with a good pre-operative look at the mass, this method does not allow us to differentiate the tumor tissue from surrounding healthy tissue while the surgery is taking place.”

Preliminary tests indicate Dr. Gordon’s technique allows different wavelengths of light to cause the tumor itself to change color from surrounding healthy tissue. This allows surgeons to maximize the chance of a more complete excision, while minimizing the potential for removing normal adjacent brain tissue.

Dr. Gordon is testing sodium fluorescein, a compound that highlights tumor cells, to identify the cancer. His preliminary findings indicate that sodium fluorescein can accumulate within the tumor tissue. Then, when illuminated under cobalt blue or UV light, the compound releases an apple green fluorescence, thus identifying the cancerous cells, while healthy cells are not highlighted. Under normal lighting, sodium fluorescein is undetectable within the brain.

Getting the sodium fluorescein to the tumor was a challenge. The brain’s blood supply is surrounded by a layer of cells called the blood-brain barrier. This barrier protects the brain against entry by dangerous chemicals or molecules.

Dr. Gordon knew that tumors disrupt the blood-brain barrier, allowing a variety of compounds to pass into the abnormal tissue. He discovered that sodium fluorescein could also pass through the disrupted barrier.

“So far, our initial data sug-
gests the fluid will not identify healthy tissue and that’s a step in the right direction,” Dr. Gordon commented. “Now we need to make sure that all of the cancer cells are illuminated. While it’s important to make sure we don’t take any healthy cells, it is just as important to make sure that we eliminate all the cancerous cells. We don’t want the tumor to come back.”

Sodium fluorescein has proved harmless to the body. Currently, ophthalmologists use it, with the blue light, to detect corneal ulcers or to examine ophthalmic vasculature. In this case, the fluid is either applied topically or injected into the blood stream.

Dr. Gordon’s initial testing was done on nine dogs and one cat, which were euthanized at their owners’ request after veterinarians diagnosed them with cancer. The next step is to perfect the technique on live dogs that need intracranial surgery. If the technique evolves into use on humans, it will most likely be picked up by other scientists.

Dr. Gordon’s two-year research program is funded by a grant from the Scott Endowed Program in Veterinary Oncology in the Department of Veterinary Medicine and Surgery.
The next time a dog comes bounding up to you for a wet, sloppy kiss and a good belly rub, don’t back away. In an ongoing study, University of Missouri-Columbia researchers have found that interacting and petting animals creates a hormonal response in humans that can help fight depression.

“Our preliminary results indicate that levels of serotonin, a hormone in humans that helps fight depression, rise dramatically after interaction with live animals, specifically dogs,” said Dr. Rebecca Johnson, MU professor of nursing and veterinary medicine, who presented the initial research findings at the Companion Animals: Fountains of Health conference at Barcelona (Spain) Autonomous University this spring.

“This hormone is critical in the psychological well-being of an individual. In addition, we have discovered that there is no substitute for the real thing.”

In the study, Dr. Johnson and Dr. Richard Meadows, clinical associate professor of veterinary medicine, asked dog owners and non-pet owners to play with either a live animal or a robot dog for a few minutes. The team drew blood from the human and the dog prior to and after the interaction and then compared the blood for hormone levels. People taking part in the study ranged in age from 19 to 73 years. Preliminary results indicated a significant increase in the levels of serotonin across the age spectrum following interaction with the live dog, Dr. Johnson said.

“In addition to serotonin, we also are seeing increases in the amounts of prolactin and oxytocin, more of those ‘feel good’ hormones,” Dr. Johnson said. “Our research also is trying to determine what types of people would best benefit from being with animals. By showing this benefit, we can help pet-assisted therapy become a medically accepted intervention that might be prescribed to patients.”

“One previous study done in South Africa by Dr. Johannes Odendaal looked at fewer parameters than the current study and it also found that the interactions were beneficial for both the people and the dogs,” Dr. Meadows said. “We expect to see the same benefit to the canines in our study—good for the dogs and the people—a true ‘win-win’ situation.”

The study also indicated that interaction with a robot dog actually decreases levels of serotonin in humans. These preliminary findings could be helpful to psychologists or psychiatrists who want to complement their treatment to a patient suffering from depression, Dr. Johnson said. The researchers expect to have final results of the study in the fall.

“We also need to study how the animals react to this attention,” Dr. Johnson said. “It’s important to know when we take dogs to nursing homes or hospitals for therapy if they are feeling any kind of stress. We need to find the right balance where both animals and humans can benefit from interacting with each other.”

The Skeeter Foundation from Veterinary Pet Insurance sponsored the study with a $125,000 grant.
Computers have promised elimination of paperwork and repetition since their invention. The MU College of Veterinary Medicine may turn on such a system.
As veterinary medicine becomes more data intensive, the complexity of managing information has become burdensome. The volume of old-fashioned paperwork today makes it difficult to get important data to and from all of the people involved in a large clinic—radiologists, clinical pathologists, technicians, chemists, physicians and nurses, billing experts, consulting specialists, referring veterinarians, clients, and, of course, the primary clinician.

Add to this mix critical compliance issues and it's easy to see why clinical communication issues steal time from providing health care.

As a way to streamline data acquisition, dissemination, and record keeping at the MU College of Veterinary Medicine, college Information Technology experts are working with others to develop a new computer-based program to automate the process. The goals are to increase efficiency, accuracy and speed of the data flow of each clinical case. When implemented, it will provide all critical data about a patient in one location on the college's network, accessible by all stakeholders involved. It will replace the current hodgepodge system of phone calls, in-transit medical files, e-mails, and paper notes left in mailboxes.

The program is called UVIS, for Universal Veterinary Information System. This system is based on a commercial software product developed by the Ross Group, Inc., and initially was used by the University of Georgia to address Y2K issues. MU is part of a 13-member informal consortium of other colleges of veterinary medicine working to further develop and enhance the program.

When it goes on line later this year, it will not only help provide better clinical care, but it will provide for a better educational experience to students and give administrators new tools to evaluate the performance of the entire system, noting trends and bottlenecks.

**Install Software, Turn On?**

Installing something like UVIS sounds easy, right? Just dump everything into one humongous database and turn it on. Unfortunately, there are some big challenges.

The biggest hurdle is that each of the MU CVM departments involved in the project already have individual computer databases in place. These software programs are not designed to talk to any other program. Pulling data from the original programs and re-installing it into a new, universal, database would be a huge undertaking—especially in the middle of daily operations. In many cases, these individual databases have been carefully customized for important internal duties. No one is enthusiastic about replacing something that often required years to perfect.

Then, each department's informational needs are different. The data needed by accounting, the clinician, and medical records about a simple blood test, for example, are vastly different.

UVIS, is designed to be a translator and traffic cop, of sorts, between the various databases. It takes selected information regarding a pathology test, for example, and sends the data to the places where that data is needed. Along the way, UVIS converts the information from the original data format to those of the recipient computers. UVIS also picks and chooses the appropriate data to transmit—accounting, for example, doesn't need clinical test results, just that the test was performed and how much it costs. The clinician's first need isn't the cost of a test, but the technical results.

**What UVIS Offers the College**

Despite the work needed to get the program implemented, there will be significant practical advantages to having UVIS around. By being able to access all medical information in a standardized format, clinical and retrospective studies in disease processes will be much easier to conduct. College administrators will be able to access demographic and business trends, allowing the institution to better tailor future product and service offerings to the public.

The system also lessens the need for duplicated paperwork and keyboarding that comes when differing databases require entry of the same test results.

The majority of the improvement, however, will be on the clinic floor.

Speed is one of the most important advantages. A paper file requires its physical movement to a mailbox. A computer data file moves in a nanosecond, and can be accessed from any of the college’s computers. After accessing the data file, the clinician or diagnostician can immediately respond, requesting additional testing or another form of action.

With UVIS, lab information will be available to the clinician as fast as the data can be entered into the computer at the testing site. This up-to-the-minute data is also instantly available anywhere in the hospital—from ICU to surgery to a faculty office.

Time lost to searching for patient and vaccination records will be eliminated as that data will be part of the UVIS system.

As the system is computer-based, digital images of x-rays, pathology still photos, MRIs, and ultrasounds can be stored and displayed as easily as text.

Prescriptions can be entered by the student, approved by the DVM via electronic signature, and filled by the pharmacy. The system may later aid pharmacists by providing drug classification, controlled substance auditing, label preview and editing, drug information sheets, and alerts to possible drug interactions.

“These benefits will extend to the referring veterinarian, also,” said Pauletta King, who is directing UVIS’s implementation. “They will have the ability to have results e-mailed to them, allowing treatment to begin immediately.”

These increased efficiencies will allow clinicians and students to treat more patients, with higher efficacy in a shorter period. Students will benefit, too, by having more information at once—intensifying the learning experience.

Information sharing will extend to others not immediately treating the patient. Front desk personnel who initially see clients will also have selected UVIS data available to them and can enter data into the system. Inventory control specialists can track the use of hospital disposables and re-order them in a timely and more accurate fashion.

**The Team Turning UVIS On**

The MU team implementing UVIS is led by Ms. King, previously the MU Veterinary Medical Diagnostic Laboratory’s fiscal officer. The computing staff from the informational technology unit have also joined with faculty, staff, students, and clinicians to test the prototypes.

“The hardest part is making sure that all of the tables within the system are properly configured to allow the users to have easy access to the data they need,” Ms. King said. “It’s unbelievably tedious to set up and test all of the conversion tables so that they work the way they are intended.”

Testing of the system has already begun and plans are to implement the system in the VMDL sometime around Labor Day.

The teaching hospital will be implemented in phases, with the first section going live around November 1. It is hoped that the system-wide turn-on date will be in early March 2005.
Reggie is a natural with animals. The 17-year-old patiently handles each in his care, reading their actions and expressions, and reacting to their needs like the true veterinary assistant that he is training to be.

Reggie is under the tutelage of Dr. Melvin Gerstner, MU DVM ’66 and owner of Highland Park Animal Hospital, Pasadena, Calif. When Reggie leaves the hospital, he will have the skills necessary for his first job and a new life.

That would be a marked improvement for the young man. For almost all of his young life, he was the victim of parental abuse. His situation got so bad that a court order had to tear the violent and drug-addled home apart and place Reggie in a community treatment facility for children at risk. It was through that facility, Hillsides in Los Angeles, that Reggie met Dr. Gerstner, a veteran volunteer. And Reggie began a new direction in his life doing something that he loved, helping sick and injured animals.

Reggie is one of dozens of young men and women who have passed through Dr. Gerstner’s Highland Park Animal Hospital. They have used their new skills, and self-confidence, to build solid lives. And, Dr. Gerstner expects that a few more young people will find their way to his clinic.

Hillsides started in 1913 as an Episcopal orphanage. Children are referred to it by the Los Angeles Superior Court. Although they come from all over Southern California and encompass every ethnic and socioeconomic group, they share a common experience—the emotional scars that result from abuse. Hillsides offers them counseling and mental health treatment.

One part of this healing process, designed to promote self esteem and develop work skills, is placing residents in work internships or part-time jobs. This also bolsters the residents’ resumes, helping in their transition to a productive adult life. This is where Dr. Gerstner comes in.

“My support for Hillsides began 30 years ago in my exam room,” he said. “A counselor and six children stood there with their dying kitten that had been hit by a car. You never forget when a child cries in front of you. From that point forward, I became a supporter of their home and their cause.”

In addition to being a mentor, Dr. G, as Dr. Gerstner is called, has provided no charge veterinary care and boarding for animals displaced by family abuse. Often, assuring safety for these animals is a critical component in helping victims make the
Dr. G

“As you travel down life’s track, there’s two kinds of people you’ll meet—those that take your strength and those that give it all back.”

decision to leave an abusive situation. Victims will often not leave their beloved pets behind in a potentially fatal situation.

Dr. G said that Hillsides always seems to be bursting at the seams with children whose only mistake was being born into an unstable home. “I feel that it is important for children to grow up with animals and learn gentleness, responsibility, and caring,” Dr. G. related. “Countless times, the counselors tell me how a child’s personality changed for the better when a dog wagged its tail and showed affection.”

Reggie is typical of those who have gone through Dr. G’s Highland Park Animal Hospital. He shows up on time or early and doesn’t complain when tasked to do some of the smelly jobs that come in a clinic.

“He has a heart for sick and injured animals,” said Dr. G.

However, it takes more than a connection with the animals to become a successful veterinary assistant. Dr. G has taken Reggie under his wing, showing him the intricacies of operating a veterinary practice through one-on-one attention and hands-on experience. Through Dr. G, Reggie has learned to care for, feed, and handle sick and injured pets, skills that Reggie can use to transition to his first full-time job.

Dr. G provides more than job skills. Dr. G has given Reggie a stable role model.

“When he arrived at my practice his heroes were those nonsensical rappers,” Dr. G said. “He had never been to a ball game, never received a birthday gift, and never had a chance to earn pocket money to buy trinkets—the stuff that helps us grow up. The other day I found out that I am now his hero and I am the closest thing that he has had as a father figure.”

Reggie’s social worker, Noemi Medina, agrees. She has observed a difference in Reggie’s character since July 2003 when he began working with Dr. G, noting that Reggie has become more outgoing and confident, and has been allowing himself to trust people more easily. “Dr. G has been so supportive of Reggie’s interests, and that has motivated Reggie to look ahead,” Ms. Medina added. “This job has really made him push himself and look to the future.”

Reggie also agrees. “Now I’m more patient than I used to be,” he said introspectively. “I listen better, my communication is better, and so is my respect for everybody.”

Dr. G insists that Reggie’s dedication and hard work is responsible for his promising future. And, Dr. G said, Reggie has given just as much back to the hospital. “He gives us a lot of strength,” Dr. Gerstner expressed. “There’s a little poem my grandmother always used to tell us. ‘As you travel down life’s track, there’s two kinds of people you’ll meet—those that take your strength and those that give it all back.’ He gives a lot back.”

Reggie’s analysis is a bit simpler. “My favorite part is actually making sure that the animals have a nice, clean, warm safe spot to sleep in,” he said.

decision to leave an abusive situation. Victims will often not leave their beloved pets behind in a potentially fatal situation.

Dr. G said that Hillsides always seems to be bursting at the seams with children whose only mistake was being born into an unstable home. “I feel that it is important for children to grow up with animals and learn gentleness, responsibility, and caring,” Dr. G. related. “Countless times, the counselors tell me how a child’s personality changed for the better when a dog wagged its tail and showed affection.”

Reggie is typical of those who have gone through Dr. G’s Highland Park Animal Hospital. He shows up on time or early and doesn’t complain when tasked to do some of the smelly jobs that come in a clinic.

“He has a heart for sick and injured animals,” said Dr. G.

However, it takes more than a connection with the animals to become a successful veterinary assistant. Dr. G has taken Reggie under his wing, showing him the intricacies of operating a veterinary practice through one-on-one attention and hands-on experience. Through Dr. G, Reggie has learned to care for, feed, and handle sick and injured pets, skills that Reggie can use to transition to his first full-time job.

Dr. G provides more than job skills. Dr. G has given Reggie a stable role model.

“When he arrived at my practice his heroes were those nonsensical rappers,” Dr. G said. “He had never been to a ball game, never received a birthday gift, and never had a chance to earn pocket money to buy trinkets—the stuff that helps us grow up. The other day I found out that I am now his hero and I am the closest thing that he has had as a father figure.”

Reggie’s social worker, Noemi Medina, agrees. She has observed a difference in Reggie’s character since July 2003 when he began working with Dr. G, noting that Reggie has become more outgoing and confident, and has been allowing himself to trust people more easily. “Dr. G has been so supportive of Reggie’s interests, and that has motivated Reggie to look ahead,” Ms. Medina added. “This job has really made him push himself and look to the future.”

Reggie also agrees. “Now I’m more patient than I used to be,” he said introspectively. “I listen better, my communication is better, and so is my respect for everybody.”

Dr. G insists that Reggie’s dedication and hard work is responsible for his promising future. And, Dr. G said, Reggie has given just as much back to the hospital. “He gives us a lot of strength,” Dr. Gerstner expressed. “There’s a little poem my grandmother always used to tell us. ‘As you travel down life’s track, there’s two kinds of people you’ll meet—those that take your strength and those that give it all back.’ He gives a lot back.”

Reggie’s analysis is a bit simpler. “My favorite part is actually making sure that the animals have a nice, clean, warm safe spot to sleep in,” he said.
The University of Missouri College of Veterinary Medicine wasn’t always the premier institution of its kind in the state. In 1908, the Kansas City Veterinary College was recognized as the largest institution of its kind in America and fourth largest in the world, according to Kansas City Public Library records.

The college, a private institution, was located on the northwestern corner of Lydia Avenue in the city’s west bottoms. In those days, the bottoms were the center of business for Kansas City—especially agriculture. Steam-powered railroads crossed the bottoms’ patchwork quilt of warehouses, and the Kansas City Stockyards were nearby.

The college was established in 1891 with three pupils in two rented rooms in the Schutte Building uptown on Grand Ave. It grew quickly. It moved to a bigger building at 310 East Twelfth St., and then a still larger building at 1404 Holmes.

In 1902, it purchased property at Fifteenth and Lydia and erected a large two-story brick structure. The first floor housed faculty offices, library, pharmacy, student lounge, clinic wards, and a large clinic amphitheater. On the second floor were classrooms, a large museum, microscopic laboratory, and wards for small animals.

Small animal medicine in those days was an adjunct to the economically important food animal and equine medicine. The Kansas City Stockyards then were among the largest in the world. In rural areas, just a few miles away from the bottoms, horses and mules were yet to be replaced by mechanized vehicles.

Veterinary research was conducted at the college, directed by professor Dr. A.T. Kinsley. Dr. Robert Cummings Moore was elected president of the college board in 1898 and served in this capacity for many years.

An annex to the hospital was built in 1907. It contained wards for large animals, a judging arena and an amphitheater seating 500 people, a well-equipped chemical laboratory, and facilities for the study of anatomy and for necropsies.

The college featured the latest in technology—a darkroom for in-house development of photos. Three projection lanterns enabled instructors to shine images and microscopic slides on a screen to illustrate lectures.

A faculty of 20 instructed the 470 pupils enrolled in 1908. The school’s best recommendation laid in the recognition of its graduates by the government, which employed many of them in the U.S. Cavalry, Bureau of Animal Industry, and in the Quarantine and Meat Inspection Service.

The draft of World War I depleted the school’s ranks—the school’s income came solely from tuition. The financial loss caused the college to close its doors in 1918. The Interstate Casket Company used the building into the late ’30s. The old college burned in June 1956 and was razed the following month. Today, the ground is not in use, except for the north half of the block which was cut away for the construction of Interstate-70.

In its brief life, the school graduated 1,789 veterinarians.

Today, the only remnants of the college are its promotional postcards that show up at antique fairs and auctions.
Kansas City’s Other Colleges of Veterinary Medicine

The Kansas City Veterinary College wasn’t the only such institution to call the city home. While it was the largest, there were three other such schools at around the beginning of the Twentieth Century.

The Western Veterinary College existed from 1897 to 1908. University Veterinary College lasted just four years, from 1902 to 1906. A fourth college was actually in St. Joseph, Mo.—the St. Joseph Veterinary College. It lived from 1905 to 1923.

Educational requirements for all of the colleges were not nearly as rigorous as today. A prospective student would be admitted if he could read and write and had sufficient funds to pay the tuition.

Faculty, with few exceptions, were unpaid—their incomes came from their private businesses or government jobs.

The earliest graduates received their degrees after only six months’ study—mostly lectures. In 1889, graduation requirements were changed to two terms of six months each with an optional third term. In 1895, a three-year graded course was established.

As the private colleges faded, the Department of Veterinary Science at the University of Missouri began to grow into the vacuum. It had the advantage of MU’s strong agriculture and animal husbandry programs. Many College of Ag students were required to take some of the veterinary medicine courses—later putting them into competition with graduates from the private colleges.
Sparks Is Recognized For Iraqi Deployment Help

In recognition of the help, the US Department of Defense recently awarded the Pro Patria Award to James Sparks, MU DVM '90, and his employees. The award recognizes small business owners who support reserve troops in time of war.

William Hakes had a lot to worry about. Deployed as a Naval Reserve petty officer to Iraq, his wife and young child were struggling financially back home. It was a terrible feeling. “It just makes you feel bad, and that you’re not holding up your end of bargain,” he said.

But help would come to the young family in the form of a sympathetic Kansas City-area veterinarian and his staff who helped with food, clothing, and money. The help continued during the entire seven-month deployment until Mr. Hakes returned home and resumed his regular job as a Kansas City police officer.

In recognition of the help, the US Department of Defense recently awarded the Pro Patria Award to James Sparks, MU DVM ’90, and his employees. The award recognizes small business owners who support reserve troops in time of war.

Dr. Sparks owns Eagle Animal Hospital in Kansas City. He and his 26 employees aided Rachel Hakes, a part-time employee, when her husband was deployed to the Middle East, cutting off income and benefits to the family. To help, Dr. Sparks hired Ms. Hakes full time, and he and his employees assisted her with food, diapers, and other household necessities. When the employee had trouble paying a mortgage, Dr. Sparks paid two mortgage payments.

“To find out what the clinic staff was doing for us took my worry away,” Mr. Hakes said. “I was then able to focus on what we were doing over there.”

The employee’s Naval Reservist husband returned from Iraq in late June and nominated Dr. Sparks for the Pro Patria Award. Dr. Sparks and team were chosen from among 300 nominations.

“They deserved it,” Loretta Charleston, executive director for the Missouri committee for Employer Support of the Guard and Reserve. “They really went above and beyond. They didn’t have to do any of that. They showed exceptional support.”

Mr. Hakes agrees. “They’re not just a company that put a sign in the window that says ‘We support our troops.’ They actually do support the troops.”

“I cherish what they did for us,” Ms. Hakes said. “My husband was in tears. He was amazed that people were able to help take some of the stress off. They wanted to help me instead of watching me flounder.”

The Pro Patria Award, taken from the Latin phrase meaning For the Nation, is presented to those employers who demonstrate exceptional support for our national defense by adopting personnel policies that make it easier for employees to participate in the National Guard and Reserve. Each committee may give only one Pro Patria Award annually. Pro Patria Award winners are considered for the National Guard and Reserve’s highest honor, the National Freedom Award.

In addition to the direct help to Ms. Hakes, the Eagle Animal Hospital staff prepared almost 20 “care packages” to Mr. Hakes in Iraq. Each package consisted of letters, snack foods, and personal luxuries not available in Iraq. “They appreciated what he was doing over there and wanted to let him know that they were here for us,” Ms. Hakes said.

Such help is unfortunately rare. A Chicago placement firm conducted a survey of 200 companies and found that only seven percent had a policy of paying employees the difference between their salaries and their military pay. The firm found that companies with 50 or fewer employees employ about three quarters of the country’s 1.3 million reservists.

Dr. Sparks is no stranger to the Eagle Animal Hospital, located on suburban hill that overlooks downtown Kansas City. His first job there was in the 1970’s as a kennel cleaner. The facility is the oldest and largest metropolitan veterinary practice north of the Missouri River. Dr. Sparks has owned the clinic for more than eight years.

“I couldn’t have made it without all of these people,” Ms. Hakes said. “I just did what I thought I was supposed to do,” Dr. Sparks said.
Whether it is the Olympics, Major League Baseball, College Football, or Horse Racing, there have always been concerns about the use of multiple pain-relieving drugs to enhance performance. Now, one University of Missouri-Columbia College of Veterinary Medicine veterinarian is testing different combinations of non-steroidal, pain-killing drugs in horses to see if they really make a difference in horses’ performance as well as what types of side effects the drugs may have on the horses.

“Our hypothesis is that combining drugs won’t make much of a difference to the lameness of the horse,” said Dr. Kevin Keegan, an associate professor of veterinary medicine and surgery. “From our previous research, we think that combining drugs will not have any definite advantage to the performance of these horses and in fact, may even cause harm to the animal.”

To study the horses and their condition before and after drug treatment, Dr. Keegan is using a sophisticated computer motion detection system—the same system used for computer-generated graphics in movies such as “The Lord of the Rings.” Lame horses are brought to the MU College of Veterinary Medicine where they are treated with one of two different drug combinations. Dr. Keegan, who does not know which combination the horse has received, then attaches reflective markers to the horse at various places on its body and places it on a treadmill.

Once on the treadmill, multiple cameras positioned in various places film the horse from several angles and feed the data into a computer, which analyzes the movement at specific points where the markers are on the horse. Depending on the positions of the markers as the horse moves, the camera can determine whether or not the horse is exhibiting signs of being lame. The system is incredibly accurate, measuring differences in a horse’s movement of less than one millimeter.

So far, Dr. Keegan has examined 20 horses, and he hopes to have at least 35 by the end of the study. “These drugs that we are examining are not steroids and not stimulants,” Dr. Keegan said. “Often the horse might appear to be moving fine to the human eye after a drug treatment, but this motion detection system can see the finer points of movement. Since we’re examining the horse both before and after two different drug treatments, we are able to have a very detailed analysis of whether these drug combinations actually help the horse with its problem.”

Within the same study protocol, other MU scientists also are investigating whether or not there is an increased risk of gastrointestinal problems with the use of combinations of drugs. While people who treat the horses may feel they are helping the animals overcome the pain, they actually may be increasing the damage being caused to them, Dr. Keegan said.
A Pair ofMU

A Pair of MU's Mule Team
You've got to be pretty smart to go to college—especially if your assignment is to represent the institution and the university to thousands of people each year. It's not a job for just any pair of mules.

Tim and Terry are up to the task. This spring they joined the MU College of Veterinary Medicine as its third pair of mascot mules, replacing Jill and Shirley who had followed Hillda and Louise in the hitch.

As with their predecessors, Tim and Terry will travel to about 50 events each a year all over the state. By giving old-fashioned wagon rides and letting city kids pet their fuzzy noses, the team will provide a glimpse back at Missouri's rich mule heritage. Often, it is the MU mules that give city kids their first look at a real farm animal.

Finding the Perfect PR Mules

The Mule Search Committee of faculty, veterinary medical students, old mule hands, and friends of the college, spent six months combing the state of Missouri before finding the two lanky ten-year-olds from Greene County. Along the way, they encountered hundreds of Missouri mules, but few exhibited the right qualities.

There are all kinds of mules in the state of Missouri. Many are bred for riding or for jumping. But the College of Veterinary Medicine was looking for a team that would be representative of the 'Missouri Mule,' a large, strong, and docile draft-type animal. In addition, the searchers needed a team with a maturity and patience beyond the norm. The mules had to be calm in crowds and around kids. They had to ignore buses and cars zooming by as they clomped down the street. And they had to look cool doing it.

They had to be public relations professionals.

The search team was always mindful of this. Since 1984, the mascot mules with a 12-person wagon in tow, have represented the college and university at hundreds of high-visibility state events, including governor inaugurations, state fairs, American Royal parades, and St. Louis horse shows. It has been said that many Missourians know the MU mules bet-

A Pair of MU has been home to the “Missouri Mule Team” since 1984 when College of Veterinary Medicine Dean Robert Kahrs had the idea of purchasing a pair of Missouri Mules to serve as goodwill ambassadors for the college, university, and State of Missouri. His idea was an immediate hit.

Dean Kahrs certainly picked an appropriate mascot for the College of Veterinary Medicine, and with the help and advice of longtime mule man and MU professor Dr. Melvin Bradley, he purchased the college’s first Missouri Mule Team. Dr. Bradley wrote the book on mules—two in fact.

Hillda and Louise were purchased from Mr. Howard Sartain, a Howard County, Mo. farmer. With this purchase, the team began to make appearances at parades, picnics, fairs, festivals, and MU alumni events throughout the state. Hillda and Louise were retired to pasture and are approaching thirty years of age. Jill and Shirley, a team of fine-looking Molly mules bred by the Chipman family and hailing from Perry, Mo., replaced them in 1996. They served as the Missouri Mule Team until 2003, before retiring to the farm of alumnus Dr. Justin Berger.

Each year, a new class of veterinary medical students takes on the task of caring and presenting the mules, organized in a group called the Mule Club. It’s a tough job of driving a truck and trailer hours to events, coping with crowds and answering questions, driving the wagon through traffic, and handling a pair of occasionally stubborn animals. The rewards include gaining knowledge and experience in long-forgotten skills.

The Mule Team is a privately supported venture, and contributions of money and equipment are essential to the existence of the team. Donations can be directed to the Dean’s Office at the College of Veterinary Medicine.

For more information about the Missouri Mule Team, access its web site at: www.cvm.missouri.edu/org/muleclub/index.htm.
ter than their state politicians. The college’s mule mascots sometimes even rival the popularity of the official university mascot, Truman the Tiger.

Leading the search for the mule team was Dr. John Dodam, associate professor of veterinary medicine at the MU Veterinary Medical Teaching Hospital and Mule Club advisor.

Old Mule Hand Clarence Koch of Conway, Mo., who identified the team that the college purchased, provided expert opinion on candidate pairs. Before Tim and Terry were selected, he loaned the Mule Club four mules that appeared in the 2003 MU Homecoming Parade. He also provided new Mule Club students tips about driving, and let them use his team for practice.

Jim Cunningham of Columbia, Mo., who breeds Belgians, went on most of the candidate mule visits to provide his seasoned opinion. John Roy Chipman, Perry, Mo., also offered advice and checked out the mules that the college had a serious interest in. His family has been breeding large, draft mules for generations.

Dr. Ellen Ratcliff, of Buffalo, Mo., provided her professional appraisal, also. She is a MU College of Veterinary Medicine alumnus and a former Mule Club member. As it turned out, she has ties to the winning mules. Her family was well acquainted with the late Harold McKinnis. Mr. McKinnis bred and raised Tim and Terry, who were named after the sons of James Taylor, a neighbor of the McKinnis family, and a mule breeder himself.

Of course, the entire MU equine section got involved in evaluating candidate mules, discussing the advantages and disadvantages of each team. Dr. Amy Rucker, equine ambulatory clinician, even took a few long trips to evaluate mules in northwest Missouri and Illinois.

Why A Mule?

What’s so important about Missouri and mules?

The MU Mule Team is a reminder of Missouri’s history and heritage. In Missouri’s first century, mules were the backbone of the state’s agriculture. Mules helped grow the state by helping produce enough corn and other products to trade overseas. Farmers relied on the animals’ ability to work hard and eat less than a horse. Mules were uniquely qualified to pull stumps and plow the rocky and compacted Missouri soil. Mining companies alone used 12,000 of the animals.

The Missouri mule played a significant role in the westward expansion of the United States. Missouri farmers bred and sold the mules that moved freight and families on the Santa Fe and Oregon trails.

Mule breeding became a critical part of Missouri’s early economy. In the late 1800’s, when a typical Missouri farm had an average income of less than $700, a mule colt sold for $100, a major boost to a rural family.

As Missouri farmers were already growing grass and horses, it was a relatively small step to incorporate jack stock into the mix and produce mules for sale. Not only did Missouri produce mules for westward expansion, the state’s farmers also shipped mules to the Deep South for work in cotton and tobacco fields.

Missouri’s most notable contribution to the mule industry occurred when farmers began using draft mares to produce a large, strong, and relatively docile mule for heavy work. This type of mule became known as the Missouri Mule. Harry S Truman’s father was a mule trader, and President Truman was so proud of the Missouri Mule that he invited a four-Missouri Mule hitch to participate in his inaugural parade.

Tim and Terry are true Missouri Mules. Missouri Mules served during wartime when small farms provided tens of thousands of the animals. During the Spanish-American war, the animal’s ability to
pack heavy loads across rugged terrain for long distances was highly prized. In World War I, there were more Missouri Mules in the Army than mechanized vehicles, and they donned gasmasks and braved the terrors of trench warfare. Mules were used in World War II for use in remote areas, and were even parachuted into Burma where the terrain was too difficult for motorized transport.

The mule passed slowly from the state’s agriculture. Even in the late 1940’s, a Missouri farmer could still use a mule as a down payment on a John Deere tractor. While Missouri’s mule industry today is smaller than in the past, it is still around. It has shifted away from draft mules and instead concentrates on riding mules. There are still breeders of quality draft mules in the state, however, keeping the state’s most famous tradition alive.

**Promising Candidates From the Ozarks**

It was a Missouri Ozarks mule pair owned by Max Eagleberger in Elkland, Mo. that looked most promising to the search committee. Though the mules had not been used much as a team for six years, they were gentle, strong, and appeared physically sound.

Dr. Dodam and crew hauled the pair to MU for more extensive medical examinations and test wagon runs around campus. The mules seemed to like being in a university town and coped well with the busy traffic. They appeared to enjoy the celebrity status of being fawned over by adults and kids at every rest stop. Best of all, Tim and Terry got along well with the veterinary medical students in the Mule Club who would care for them.

“Tim is a little higher strung, but Terry is a good anchor,” said Dr. Dodam. “I think we have found the right pair.”

MU purchased the new mules using a donation by Sydenstricker Implement Co., a farm-vehicle dealership with stores across the state. No university funds were used in the acquisition.

With that, Tim and Terry made their new home in a pasture next to the MU College of Veterinary Medicine. They joined the original pair of Hillda and Louise who have retired there.

There was one more thing before the team went to work. A resolution in the Missouri House of Representatives honored the new team and the part of the state’s history that they represent.

Not bad for a pair of freshmen new to campus.
The 280-acre Middlebush Farm, south of Columbia on Highway 63, is a familiar place to generations of MU College of Veterinary Medicine students. For the last 17 years, theriogenology courses have been taught there at what used to be a working farm owned by Dr. Frederick Middlebush. Before it moved to the new Clydesdale Hall in 1993, the property was home to the college’s equine center.

Today, the facility’s mission is being expanded as it enters its third incarnation. While its educational mission continues, it is becoming a home for research programs intent on making Missouri agriculture more efficient and profitable. Some of the programs would surprise the old farmhands, and even some of the more recent DVM graduates.

**Toward the Next Generation of Agriculture**

Dr. Tom Fangman, a Kansas-born DVM and MU veterinary extension swine specialist, has been director of the center for about a year and a half. He’s overseeing the farm and the changes that will make it the home for testing and development work designed to help Missouri farmers and producers better compete in an increasingly global world.

“We are all committed to serving the livestock producers, veterinary practitioners and students interested in learning more about modern production agriculture,” Dr. Fangman says.

One of the most recent projects, for example, will study the process of how food animals convert feed into body mass. With this data, producers will be able to increase farm animals’ growth rates, getting to market faster.

Another study, a collaborative effort between the college and the USDA, is studying the relationship between nutrition, antibiotic use, and infections in certain types of food animals. Results from this work may later improve the efficiency of Missouri farms that are such an important part of the state’s economy.

New vaccine trials and toxic hay studies, similar to others already conducted, may also start soon.

Dr. Fangman points out that Middlebush is uniquely positioned for such work as it possesses the best of two worlds—a clean and efficient working farm and a proper research facility with scientific quality control.

“We have the flexibility to provide assistance in a variety of applied research needs,” Dr. Fangman says. With a little modification to existing buildings, we can provide a variety of specific applied research needs in areas of beef and pork production for veterinarians, animal scientists, and physiologists.

To this end, a new multi-purpose research and teaching facility was recently constructed. This new building is split into two halves, each with its own independent air space so as not to allow pathogens and other problems from contaminating the other. This allows different species, or different treatment groups within species, to be housed in the barn simultaneously.

This new facility sports a prototype filtration system called biofilters designed to trap typical agriculture-related odors, dust, and other emissions from indoor agriculture. Such a system, in commercial use, will allow sometimes-smelly farm operations to continue when suburban subdivisions grow nearby. This system is being developed as a collaborative project between the college and the MU department of biological engineering. If successful, the system may find its way to other Middlebush buildings as the Highway 63 corridor becomes more urbanized.

Such facilities will become more important as Middlebush takes on sophisticated research projects such as a recent National Institutes of Health-
middlebush and MU, a long relationship

Middlebush Farm is named after Dr. Frederick Middlebush, who owned the farm while university president from 1935 until 1954—the longest tenure in MU history. During this time, he helped oversee MU’s expansion, including new dormitories and Memorial Union. He set the groundwork for the MU System that would join the Columbia campus with Kansas City, St. Louis, and Rolla.

Dr. Middlebush willed his farm to the university. In 1963, Dr. Burnell Kingrey, second dean of the MU College of Veterinary Medicine, convinced the university that the college could make best use of the property.

In 1969, the college’s Equine Center moved to Middlebush with new buildings for its clinic, surgery suites, isolation areas, and research barn. The center would remain in operation there, doing research on laminitis and coronary artery disease, until 1993 when it moved to Clydesdale Hall.

By then, Middlebush Farm had assumed new educational and research missions. It provided students with hands-on veterinary experience with horses and livestock in a realistic environment beyond the classroom. Middlebush also provided space for students to study livestock reproduction medicine, and provided space for researchers to conduct studies in large animal issues.

Today, the farm is still home to those two broad missions. Students studying livestock reproduction do so in the safety of a system of holding areas and gates that has been the model for other facilities around the Midwest.

disease and vaccine trials to be conducted. Last year, he helped provide materials for a toxic hay research study.

His work has been recognized outside of the teaching and research communities. The federal Environmental Protection Agency and Missouri Department of Natural Resources use the Middlebush system of collecting and recycling fecal matter as fertilizer as a model for other farms.

“Its great to work with a resource where everything is exceptionally clean and always works,” Dr. Fangman said. “Dale does a great job at Middlebush. It’s amazing what he gets done with just himself and two other full time people.”

Another component of the farm that has been used as a model for other facilities is the theriogenology teaching barn. Here, student safety is paramount. Where students learn palpation, a steel bar keeps the cow from kicking a student. Safety zones are incorporated in the sorting pens so that a student is never in the same immediate area as an animal. The gate system is designed so that a student is always behind a steel gate when moving animals. This minimizes the always-present risk of injury.

The Educational Component Expands, Too

While its research mission has expanded, so has Middlebush’s educational component.

The theriogenology block is being constantly upgraded to give veterinary medical students the most up-to-date look into the best techniques in breeding soundness, artificial insemination, and pregnancy testing in both cattle and horses. One high-tech production method uses wireless telemetry that radios a cow’s temperature to a computer to best indicate when the animal is ready to breed.

In addition to the therio classes, 25 head of cattle from the Missouri Show Me Select Program are being used to teach students how the program increases production efficiency and boosts profits for Missouri farmers.

Dr. Fangman plans to expand on Middlebush’s teaching capabilities, with more food animal contact for students, and exposure to a well-run operation where production efficiency and safety are stressed.

A goal worthy of a facility’s third incarnation.

A Model Operation

Middlebush is a self-sufficient operation, overseen by long-time supervisor Dale Lenger. Most of the neat and clean buildings on the property were built by Mr. Lenger. He also makes sure the 24 large and 21 small pastures are precisely rotated and kept so as to be ready for any research mission that pops up. Mr. Lenger, who has been with the college since 1993, also developed many of the isolation features at the farm that allow infectious disease and vaccine trials to be conducted. Last year, he helped provide materials for a toxic hay research study.

His work has been recognized outside of the teaching and research communities. The federal Environmental Protection Agency and Missouri Department of Natural Resources use the Middlebush system of collecting and recycling fecal matter as fertilizer as a model for other farms.

“Its great to work with a resource where everything is exceptionally clean and always works,” Dr. Fangman said. “Dale does a great job at Middlebush. It’s amazing what he gets done with just himself and two other full time people.”

Another component of the farm that has been used as a model for other facilities is the theriogenology teaching barn. Here, student safety is paramount. Where students learn palpation, a steel bar keeps the cow from kicking a student. Safety zones are incorporated in the sorting pens so that a student is never in the same immediate area as an animal. The gate system is designed so that a student is always behind a steel gate when moving animals. This minimizes the always-present risk of injury.

The Educational Component Expands, Too

While its research mission has expanded, so has Middlebush’s educational component.

The theriogenology block is being constantly upgraded to give veterinary medical students the most up-to-date look into the best techniques in breeding soundness, artificial insemination, and pregnancy testing in both cattle and horses. One high-tech production method uses wireless telemetry that radios a cow’s temperature to a computer to best indicate when the animal is ready to breed.

In addition to the therio classes, 25 head of cattle from the Missouri Show Me Select Program are being used to teach students how the program increases production efficiency and boosts profits for Missouri farmers.

Dr. Fangman plans to expand on Middlebush’s teaching capabilities, with more food animal contact for students, and exposure to a well-run operation where production efficiency and safety are stressed.

A goal worthy of a facility’s third incarnation.

A Model Operation

Middlebush is a self-sufficient operation, overseen by long-time supervisor Dale Lenger. Most of the neat and clean buildings on the property were built by Mr. Lenger. He also makes sure the 24 large and 21 small pastures are precisely rotated and kept so as to be ready for any research mission that pops up. Mr. Lenger, who has been with the college since 1993, also developed many of the isolation features at the farm that allow infectious disease and vaccine trials to be conducted. Last year, he helped provide materials for a toxic hay research study.

His work has been recognized outside of the teaching and research communities. The federal Environmental Protection Agency and Missouri Department of Natural Resources use the Middlebush system of collecting and recycling fecal matter as fertilizer as a model for other farms.

“Its great to work with a resource where everything is exceptionally clean and always works,” Dr. Fangman said. “Dale does a great job at Middlebush. It’s amazing what he gets done with just himself and two other full time people.”

Another component of the farm that has been used as a model for other facilities is the theriogenology teaching barn. Here, student safety is paramount. Where students learn palpation, a steel bar keeps the cow from kicking a student. Safety zones are incorporated in the sorting pens so that a student is never in the same immediate area as an animal. The gate system is designed so that a student is always behind a steel gate when moving animals. This minimizes the always-present risk of injury.

The Educational Component Expands, Too

While its research mission has expanded, so has Middlebush’s educational component.

The theriogenology block is being constantly upgraded to give veterinary medical students the most up-to-date look into the best techniques in breeding soundness, artificial insemination, and pregnancy testing in both cattle and horses. One high-tech production method uses wireless telemetry that radios a cow’s temperature to a computer to best indicate when the animal is ready to breed.

In addition to the therio classes, 25 head of cattle from the Missouri Show Me Select Program are being used to teach students how the program increases production efficiency and boosts profits for Missouri farmers.

Dr. Fangman plans to expand on Middlebush’s teaching capabilities, with more food animal contact for students, and exposure to a well-run operation where production efficiency and safety are stressed.

A goal worthy of a facility’s third incarnation.
Ralph Henderson Named MU Alumnus Of The Year

Ralph A. Henderson, DVM and professor of small animal surgery and oncology at the College of Veterinary Medicine, Auburn University, was named the University of Missouri College of Veterinary Medicine 2003 Alumnus of the Year.

The Alumnus of the Year award is selected and presented by the alumni association of University of Missouri College of Veterinary Medicine in recognition of outstanding professional and personal achievements and contributions to the enhancement of the veterinary profession. Dr. Henderson earned his doctor of veterinary medicine degree from MU in 1972.

Dr. Ron Cott, associate dean for student and alumni affairs at the MU College of Veterinary Medicine, said that Dr. Henderson was chosen from among several MU alumni who had been nominated during the past year. This award has been presented to many prestigious recipients including three AVMA past presidents: Dr. Gerald Johnson, Dr. Leon Russell, and Dr. Jim Nave.

Dr. Henderson is a diplomate of both the American College of Veterinary Surgeons and the American College of Veterinary Internal Medicine (Oncology). He received the Auburn College of Veterinary Medicine Norden Distinguished Teaching Award in 1993, and the 1995 Student Chapter of the American Veterinary Medical Association’s Certificate of Teaching Excellence. Dr. Henderson was named the Charlotte & Robert Lowder Distinguished Professor in 2000.

Dr. Henderson is married to Diana Kay Henderson. The family lives in Auburn, Ala.

Cecil Moore Named Veterinarian Of The Year By Missouri Veterinary Medical Association

Cecil Moore, DVM, director of the University of Missouri Veterinary Medical Teaching Hospital and chairman of the department of veterinary medicine and surgery, was honored at the Missouri Veterinary Medical Association’s (MVMA) Annual Convention as the 2004 Veterinarian of the Year.

Dr. Moore is a 1972 graduate of the MU College of Veterinary Medicine, and an active member of several associations including the American Association of Veterinary Clinicians, American Animal Hospital Association, American Veterinary Medical Association, Association of American Veterinary Medical Colleges, American Society of Veterinary Ophthalmology, and the Missouri Veterinary Medical Association, among others.

Dr. Moore is past president of the Missouri Veterinary Medical Foundation Board and the American College of Veterinary Ophthalmology. He is currently serving as secretary/treasurer for the American College of Veterinary Ophthalmologists Foundation Board.

In his spare time, Dr. Moore has mentored several generations of aspiring veterinarians. He has presented the world of veterinary medicine to dozens of young people through his work with local 4-H chapters, and has counseled and encouraged many graduate and undergraduate university veterinary students.

Nominations for the award are solicited from the nine MVMA districts across the state. A panel of non-veterinarians then judge the applications based partly on professional accomplishments, but also largely on the candidate’s contributions to their community, their state, and to people whose lives they have touched.

Michael Lairmore Receives Grant To Study Retroviruses and Cancer

Dr. Michael Lairmore, chair of the Ohio State University’s Department of Veterinary Biosciences and MU DVM ’81, will direct an almost $10 million project to study how viruses cause cancer, how they might be used to fight cancer, and how the body’s immune system recognizes and reacts to viral infection. The project is funded by the National Cancer Institute.

He was also recently named associate director for basic research for The Ohio State University Comprehensive Cancer Center.

As associate director of basic research,
Dr. Michael Lairmore.

Dr. Lairmore will oversee the efforts of over 200 investigators in 13 colleges across The Ohio State University campus in developing programmatic synergy in basic cancer discovery.

Dr. Lairmore is a nationally recognized expert on retroviruses, molecular virology, and veterinary pathology. He has a special interest in the biology of cancer-causing viruses, including HTLV-1, a retrovirus that can lead to adult T-cell leukemia/lymphoma. Dr. Lairmore holds nearly $13 million dollars in research awards from the National Institutes of Health to study various aspects of retroviral infection and its consequences.

He has served on a number of study sections within the National Institutes of Health (NIH) and has been an active member of various committees for the U.S. Public Health Service.

Dr. Lairmore has won several teaching awards and has mentored nearly two dozen pre- and postdoctoral students and veterinarians. He directs or co-directs two major training grants supported by the NIH; one is designed for postdoctoral students studying mouse models of pathogenesis; another is specifically for research training for veterinary students.

The OSU College of Veterinary Medicine awarded Lairmore the Dean’s Excellence in Graduate Education Award in 1999 in recognition of his contributions in the classroom. He was also recently named as a Distinguished Scholar by OSU. The award, established in 1978, recognizes exceptional scholarly accomplishments by senior professors who have compiled a substantial body of research, as well as the work of younger faculty members who have demonstrated great scholarly potential. The award is supported by the Office of Research with honoraria provided by The Ohio State University Foundation. Recipients are nominated by their departments and chosen by a committee of senior faculty, including several past recipients of the award.

Bill Gengler is Wisconsin's Veterinarian of the Year

William “Bill” Gengler, MU DVM ’72, was named the Wisconsin Veterinary Medical Association’s Veterinarian of the Year. The award is given annually to the member who has made the greatest contributions to the advancement of veterinary medicine.

Dr. Gengler is a board-certified veterinary dentist. He was recently appointed associate dean for clinical affairs and director of the Veterinary Medical Teaching Hospital at the University of Wisconsin. He is past president of the Dane county Veterinary Medical Association, a past member of the Wisconsin Veterinary medical Association’s Executive Board, and was previously recognized as Veterinarian of the Year by the Wisconsin Veterinary Technician’s Association. In 1997, he was recognized as being among the best veterinarians in Madison, Wisc. by Madison Magazine.

James Crooke Chairs Group To Reduce Dog Bite Incidents

James Crooke, MU DVM ’80, was selected to chair a Springfield, Mo. committee designed to reduce the number of dog attacks in the city.

The eight-member panel is made up entirely of local veterinarians—a group accustomed to dogs trying to bite them, Dr. Cooke said. The committee was formed by the Springfield City Council after a rash of dog attacks in the area.

Also on the com-
Many of the therapies and technologies common today were once uncommon. Each advance in capability occurred because dedicated people decided to see something happen.

Radiology and nuclear therapy were once uncommon technologies at the MU College of Veterinary Medicine. A small group of faculty members came together in the early sixties to change that.

One of those people was Everett Allen “Al” Corley, retired professor of veterinary medicine and associate dean. He helped scrape together the beginning of a modern radiology and therapy program at MU, providing a foundation on which later generations would build.

Planting a Seed for Veterinary Medicine

Dr. Corley grew up around farm animals in Greenwood, South Carolina, but that wasn’t what got him interested in veterinary medicine. He worked part-time during high school for the local veterinarian, cleaning out small animal kennels and assisting in minor surgeries. “That planted the seed,” he said.

Dr. Corley earned an animal husbandry undergraduate degree from Clemson A&M. The Korean War interrupted his goal of a DVM degree. He served as a First Lieutenant platoon leader in the Infantry, attached to the famous Rainbow and Thunderbird Divisions, receiving two bronze stars and a Purple Heart for his service.

Dr. Corley came home in 1953. With the GI Bill, he began veterinary medical studies at the University of Georgia.

College life and teaching appealed to him, and he accepted an invitation to stay on at the school in small animal surgery and radiology. Though an attractive opportunity to practice in Florida reached out, he stayed at the college until 1963 when he started a PhD program in radiology at Colorado State.

“I developed a passion for teaching and made up my mind to stay in education. Radiology was always a strong suit of mine,” Dr. Corley said.

It was a great time to become involved in the science. New imaging techniques were emerging, as was the concept of nuclear medicine. With his new degree in hand, he accepted a faculty position at the University of Missouri College of Veterinary Medicine.

The MU radiology program? “With all due respect to the icons of veterinary medicine who were already here, Missouri veterinary radiology consisted of two Army surplus x-ray machines held together with bailing wire and band aids,” he said. “There was no therapy unit at all.”

Dr. Corley had found his mission in education—helping build the MU radiology department.

“We had a very good start with a core of excellent faculty, and the vision of Dean B.W. Kingrey and Associate Dean George Shelton,” he remembered. “Our goal was to make something happen.”

That start was humble: the purchase of a larger mobile x-ray unit. But, it was a beginning.

“We had to convince the clinicians, students, and practitioners what radiology could do for them,” Dr. Corley said in his still audible southern drawl. “Once they saw the value of what we could do for them, they would help lobby for a formal program.”

To provide those results, Dr. Corley and team worked deals with the radiology and radiation therapy units at the MU human medicine teaching hospital. Occasionally, they smuggled animals in for treatment.

Soon, veterinary clinicians found that they couldn’t do a good job without radiological support.

Around the effort to build new radiology capability, the veterinary college was growing up, also.

“We were seeing increased numbers of applicants and doubled the class size,” he said. “We adopted the block system, and started a residency program—the first pure residency program in veterinary medicine. We were turning our some darn good people,” he said.

Life After Retirement

Dr. Corley retired from MU in 1989 as a professor and associate dean. He left believing that he had accomplished what he set out to do—begin the process of helping build an excellent college of veterinary medicine. He had received virtually all of the college’s highest honors—including the Norden Distinguished Teaching Award in 1969 and 1971, and the MU Faculty and Alumni Award in 1979.

“I always enjoyed teaching,” he said. “Students keep you young. They keep you active. You learn more from them than you impart. My greatest pleasure in life is seeing a student put together a number of concepts and, poof, the little light bulb goes off in their head.”

Dr. Corley has been affiliated with the Orthopedic Foundation for Animals since 1967. After his MU retirement, he took over as the organization’s director and, later, president. Today, he lives in Columbia, keeping track of MU’s basketball program. He occasionally travels overseas, and is still active in radiology.
Class Notes

50's
Clair Hibbs, MU DVM '53, was chosen as a member of Who's Who in America 2003. He reports that because of his first name, he also was offered membership in the Who's Who of American Women. Dr. Hibbs lives in Lyden, Wash.

60's
R.F. Taylor, MU DVM '62, and K.M. Vroman, MU DVM '69, were recently inducted into the Missouri Academy of Veterinary Practice. They operate the Howard county Veterinary Service in Fayette, Mo.

Merrill "Doc" Townley, MU DVM '63, was one of four people who received the Missouri Farm Bureau's Outstanding Service to Agriculture Award. He was cited for his strong support of agriculture and property rights for farmers and ranchers. Dr. Townley authored the current fence law enacted in the Missouri Legislature. He lives in Chamois.

Andrew Love, MU DVM '64, recently moved his Webster Groves Animal Hospital a tenth of a mile west to 8029 Big Bend Blvd., Webster Groves, Mo. The new 16,000-sq-ft. facility has 11 examining rooms, two surgical suites, two dental stations, and two waiting areas. The practice employs 19 veterinarians.

70's
Gabrielle Hoepner, MU DVM '70, trained and showed a World Grand Champion English Pleasure Horse at the 2003 Missouri Fox Trotting Horse Breeder's Association's World Championship Show. Dr. Hoepner lives in Salem, Mo.

Tom Blumhorst, MU DVM '75, and his wife Kathy, have expanded their Blumhorst Veterinary Hospital in Marshall, Mo. The business recently celebrated its 25th anniversary.

80's
Marie Bauer, MU DVM '85, married Joe Baisa in June 2003. They reside in Manchester, Mo.

Bruce Bramum, MU DVM '86, and Kelly (Burkhardt) Carrow, MU DVM '97, recently purchased the Cox Animal Clinic, near Cape Girardeau, Mo. They renamed the clinic Heartland Veterinary Care.

90's
Shaun Sweiger, MU DVM '94, recently completed the University of Nebraska's year-long Cattle Production Management course. The course is designed to provide in-depth training in beef production, management, and economic strategies. Dr. Sweiger lives in Edmond, Okla.

Vance and Tricia Grossenberg, both MU DVM '95, announced the birth of their son, Connor David Grossenberg, born July 25, 2003. The family lives in Marshall, Mo.

David and Amber Urke, MU DVM '95 and '96, respectively, announced the birth of twins on January 14, 2003. The twins, Catherine Amber and Madeline Nicole, join big sister Elizabeth. The family lives in New Lenox, Ill.

Jenny Lindquist, MU DVM '96, has opened the Lindquist Veterinary Care Center in Edina, Mo. The facility will specialize in small animal and equine medicine, reproductive health, and dentistry.

John Ragsdale, MU DVM '96, recently achieved board certification from the American College of Veterinary Pathologists. He lives in Manhattan, Kan.

Candace Stormer, MU DVM '97, and her husband Christopher, announced the birth of a son, Andrew Bernard Stormer, born May 21, 2003. The family lives in Columbia, Mo.

John Tyler Peacock, MU DVM '98, passed the American College of Veterinary Surgeons certification examination and is now board certified specialist in veterinary surgery. He is a small animal surgeon at South Texas Veterinary Specialists, San Antonio.

Michelle Cahill, MU DVM '99, and her husband Mike, announced the birth of a son, Harrison James, born August 3, 2003. Dr. Cahill is an associate veterinarian at the Central Pet Care Clinic in Cathage, Mo.

00's
Jennifer Keaton, MU DVM '00, announced the birth of her daughter, Courtney Anne Keaton, born on Oct. 20, 2003.

Cliff Miller, MU DVM '00, opened a new mixed animal clinic in his hometown of Moberly, Mo. The new facility is called the Green Hills Veterinary Clinic.

Angela Marie Elizabeth Scherer, MU DVM '01, married Matthew Bonmarito in a ceremony in February in Cape Girardeau, Mo. She is a small animal surgery resident at Veterinary Specialty Services there.

Marshall Dean Conrad, MU DVM '50, died at his home in Liberty, Mo. on Sept. 6, 2003. Dr. Conrad was born and raised in Polo, Mo. where he graduated as valedictorian of Polo High School. He graduated from William Jewell College in Liberty, Mo. after serving three years in the US Navy during World War II. After graduation from the MU College of Veterinary Medicine, he established a practice in Plattsburg, Mo. and resided there for the next 40 years. He is survived by his wife, Janie Conrad, a sister, and four sons. He was preceded in death by his first wife, Lynn Conrad, in 1988.

Joseph Minnick, MU DVM '53, died April 19, 2004 at his home in Blue Grass, Iowa. He served as a captain in the Air Force before joining the US Department of Agriculture in charge of meat inspection for 33 years. He retired in 1983. Survivors include his wife, Judy, his son, Jeff, and three daughters: Jody Moeller, Vicki Cullifer, and Shelly Minnick. Dr. Minnick raised and showed Tennessee Walking Horses and Yorkshire Terriers. He also enjoyed woodworking, gardening, and sports.

W.D. Buzard, MU DVM '54, died Oct. 12, 2003, at the Excelsior Springs Medical Center. He was born Sept. 26, 1924 in Bogard, Mo., the son of Norman LeVan and Beulah Opal Pitts Buzard. He is survived by his wife Bonnie Mae White Buzard, a daughter, and three sons. He had previously lived in Rogers, Ark.

Donald Blenden, MU DVM '56, died Jan. 12, 2004 at Boone Hospital Center, Columbia, Mo. Dr. Blenden was born Aug. 13, 1929, in St. Louis to Henry and Sarah Miranda Coven Blenden. He married Patricia Crawford on June 9, 1951, in Webster Groves, and she survives. He joined the faculty of the MU College of Veterinary Medicine in 1957, and retired as a professor emeritus in 1990. Dr. Blenden was recognized as the chief expert on diseases transmitted from animals to people and was internationally recognized for his research on rabies. He was a consultant to the World Health Organization and national and state departments of health. He was an active teacher and leader in the area of disaster preparedness. Survivors include two children and five grandchildren.

In Memoriam

Tommy Williamson, MU DVM '01, has joined the Deer Ridge animal Hospital in Jackson, Mo. as a full-time associate.

Jennifer Legg, MU DVM '02, has joined the Banfield Animal Hospital in Sunset Hills, Mo.

Kerri Carter, MU DVM '03, has joined the Banfield Animal Hospital in St. Charles, Mo.

Colleen (Mulloy) Retz, MU DVM '03, has established an equine ambulatory program at the Animal Health Center, Sikeston, Mo.

Marshall Dean Conrad, MU DVM '50, died at his home in Liberty, Mo. on Sept. 6, 2003. Dr. Conrad was born and raised in Polo, Mo. where he graduated as valedictorian of Polo High School. He graduated from William Jewell College in Liberty, Mo. after serving three years in the US Navy during World War II. After graduation from the MU College of Veterinary Medicine, he established a practice in Plattsburg, Mo. and resided there for the next 40 years. He is survived by his wife, Janie Conrad, a sister, and four sons. He was preceded in death by his first wife, Lynn Conrad, in 1988.

Joseph Minnick, MU DVM '53, died April 19, 2004 at his home in Blue Grass, Iowa. He served as a captain in the Air Force before joining the US Department of Agriculture in charge of meat inspection for 33 years. He retired in 1983. Survivors include his wife, Judy, his son, Jeff, and three daughters: Jody Moeller, Vicki Cullifer, and Shelly Minnick. Dr. Minnick raised and showed Tennessee Walking Horses and Yorkshire Terriers. He also enjoyed woodworking, gardening, and sports.

W.D. Buzard, MU DVM '54, died Oct. 12, 2003, at the Excelsior Springs Medical Center. He was born Sept. 26, 1924 in Bogard, Mo., the son of Norman LeVan and Beulah Opal Pitts Buzard. He is survived by his wife Bonnie Mae White Buzard, a daughter, and three sons. He had previously lived in Rogers, Ark.

Donald Blenden, MU DVM '56, died Jan. 12, 2004 at Boone Hospital Center, Columbia, Mo. Dr. Blenden was born Aug. 13, 1929, in St. Louis to Henry and Sarah Miranda Coven Blenden. He married Patricia Crawford on June 9, 1951, in Webster Groves, and she survives. He joined the faculty of the MU College of Veterinary Medicine in 1957, and retired as a professor emeritus in 1990. Dr. Blenden was recognized as the chief expert on diseases transmitted from animals to people and was internationally recognized for his research on rabies. He was a consultant to the World Health Organization and national and state departments of health. He was an active teacher and leader in the area of disaster preparedness. Survivors include two children and five grandchildren.

Eugene Ennenbach, MU DVM '59, died April 22, 2004 in a Columbia, Mo. hospital. The Marceline, Mo. resident was born July 7, 1928 in Mendota, Ill., the son of William and Mary Ennenbach. He married Mary Kathryn Washburn on Dec. 22, 1973 in Columbia. Dr. Ennenbach served in the US Coast Guard. He practiced in Marceline for 40 years and owned the Green Hills Animal Clinic. Survivors include his wife and son, John Ennebach.

Timothy O'Neill, MU DVM '77, died May 13, 2004, in Frederick, Maryland. He was employed as a veterinary pathologist with Spring Valley Laboratories in Woodbine, Maryland, and was a co-owner of Biomedical Research Consultants. Dr. O'Neill served a pathology residency in the US Air Force, and received a doctorate degree from the University of Maryland. He was previously employed by the National Institutes of Health. Dr. O'Neill served two tours in Vietnam in the Marine Corps, where he was a sergeant. He received the Purple Heart, Navy Commendation Medal, Cross of Gallantry, Vietnam Service Ribbon, and Combat Action Ribbon. Surviving are his wife, Susan, and two sons, Brian O'Neill of Pensacola, Fla., and Phillip O'Neill of Jefferson, Maryland.
MU’s KOMU-TV Celebrates Its 50th Anniversary

Not long after the University of Missouri graduated its first class of DVMs, it celebrated another milestone—broadcast of the first television signal in mid-Missouri. On a cold winter day, KOMU-TV, the TV laboratory of the MU School of Journalism, transmitted an inaugural weak, snowy, and shaky signal from its tower south of Columbia.

Beginning in 1947, the year after the College of Veterinary Medicine admitted its first class, a handful of RCA seven-inch black and white TVs exploded to more than one million sets in 1949. There were 10 million by 1950.

KOMU began broadcasting on Dec. 21, 1953, airing programs from all four networks of the time—ABC, CBS, NBC, and Dumont. The black and white broadcast day ran from 4:15 p.m. until 10.

Local early programming consisted of televised MU classes and live theater department dramas. There was a strong early focus on women’s issues with shows called Ladies Fair and Of Interest to Women. Dr. Edward Lambert, vice president for MU television, hosted the long-running Missouri Forum. Kids watched Captain Bob and his cartoons.

In 1954, commercial stations KRCG and KCBJ entered the mid-Missouri market. KRCG became the official CBS affiliate. Dumont dissolved in 1956.

In June 1956, KOMU expanded its coverage hours by broadcasting a test pattern at 11:30 a.m., with programming beginning at 11:45.

KOMU established its interest in local programming in December 1956 with the first documented remote in mid-Missouri—a program called Wide Wide World from Stevens Playhouse. Weather reporting, too, had early significance with installation of a teletype weather wire straight from the Columbia Weather Bureau. The station shared its latest data with local radio stations and police. For a public who previously got their weather information from the city’s daily newspaper, early warnings of violent weather were a dramatic, and welcomed, change.

Local Television Programming Evolves

Network 1950’s TV programming started out as recycled radio shows, but soon evolved into the popular fare of the decade—westerns. Lash LaRue was CBS’s first cowboy hero, followed by the Virginian and Wagon Train. Sunday evening’s Bonanza ran from 1959 to 1973.

The Missouri Forum was one of mid-Missouri’s most popular programs in the 1970’s. It was filmed using studio cameras once used to cover the Republican Convention.

The use of videotape revolutionized local broadcasting in the 1960’s, making it easier to create programs about area events.
77 Sunset Strip, a western set in modern LA with the heroes driving T-Birds instead of horses, aired from 1958 until 1964. Sky King chased the rustlers with his twin-engine Cessna Songbird each Saturday morning from 1951 until 1962.

In February 1960, KOMU started an 8:25-8:30 a.m. weekday newscast run entirely by journalism students. They used a single black and white TV camera and 16 mm silent film.

In 1962, KOMU broadcasted its first color network program, even if the local shows were still in black and white. An early live program in January 1965 covered Governor Warren Hearnes’ inauguration—the feed being picked up by KCMO-TV in Kansas City.

With an outlay of $84,500, KOMU began local color broadcasting in December 1966. Videotape began to replace 16 mm film in 1968. In 1969, KOMU broadcasted its first color documentary, the dedication of the Churchill Memorial in Fulton. 1969 also saw Paul Pepper begin his decades-long relationship with KOMU, starting as a weatherman. His show, Pepper and Friends, would broadcast its 5,000th episode in February 2004.

Doctor programs replaced TV westerns in the 1960s with potboilers like Ben Casey and Dr. Kildare. These, in turn, were supplanted in mid-decade by secret agents like The Man From U.N.C.L.E., Mission Impossible, The Avengers, and I Spy. Gilligan’s Island, an allegory about humanity’s fall from grace and its desire to return to a better world, aired from 1964 to 1967. The decade ended with programs about hippies, The Monkees and Mod Squad.

**Second-Hand Color**

KOMU established all-color programming in 1972 after the purchase of three used studio cameras from KMOX TV in St. Louis. At the end of the decade the station would begin using portable video recorders known as ENGs (electronic news gathering), allowing for greater field and live coverage. Budding TV journalists, now gray-haired veterans at stations around the country, got their first journalistic experience lugging these still heavy and awkward cameras around campus.

The 1970’s was the decade of the sitcom—the Jeffersons, Mary Tyler Moore show, Partridge Family, and WKRP in Cincinnati. 1971 saw CBS’s cancellation of one of its most popular programs, The Beverly Hillbillies, a prime time comedy with 60 million viewers. Premiering in 1962, it featured the life of a Bug Tussle, Missouri family in ultra-swank California. CBS abruptly cancelled the popular Hillbillies, and its other rural programs Green Acres and Mayberry RFD, sending the network into a rating’s tailspin.

In 1982, KOMU’s first satellite dish was installed, allowing it to receive network feeds via satellite. A used satellite news-gathering truck (and equipment to transmit stereo audio) was purchased in 1987 from an Albany, NY station. Network programming, meanwhile, featured the Brady Bunch, A-Team, Knight Rider, and Magnum, PI.

TV detectives dominated the 1990’s with Murder One, X-Files, Diagnosis Murder, and NYPD Blue. For KOMU, 1992 saw experimentation with wireless microphones. Dave Schmidt began work as a weathercaster in 1993, just in time to cover the floods that ravaged the area. In 1995, KOMU launched www.komu.com, the first television website in Missouri.

Digital tape, a revolution in editing efficiency, appeared in 1997. In 1998, the first renovation of KOMU’s facilities took place since construction in 1953. In December 2000, the last 16 mm film and photographic slide film equipment was turned off in the control room, replaced by an all-digital system.

Digital TV, the next revolution in television that will feature movie-like image quality, will be the next change for the station, which, like the College of Veterinary Medicine, heads into the future.

(Far left) One of the most popular local programs in the 1980s was called It’s a Woman’s World. The program featured local news, interviews, and cooking tips.

Where it all began, the raising of the first broadcast TV tower south of Columbia.
What a Legacy!

A bequest in 1999 from Col. Charles Mc Kee—Arizona rancher, horse-breeder and MU journalism graduate—established the Col. Charles and Charlene Mc Kee Professorship in Microbial Pathogenesis. The Mc Kee Professor will complement other scientists who are investigating molecular determinants contributing to the virulence of pathogens—research which is critical to development of effective vaccines, as well as greater knowledge in food safety, antibiotic resistance, and bio-terrorism threats. • The gift came as a wonderful surprise to the College, as the McKees’ bequest plans were unknown. We were never able to appropriately thank Col. and Mrs. Mc Kee for their generous gift, nor were they able to see the plans for the use of their gift.

What Is Your Legacy?

Your memory and legacy can also live forever and benefit hundreds of students at the MU College of Veterinary Medicine or researchers through scholarships, professorships, or other endowment opportunities bearing your name.

To learn how to establish a legacy at the College

• Call the MU CVM Development Office at 1-888-850 2357. (E-Mail: joneslr@missouri.edu)
• Call the MU Office of Gift Planning and Endowments at 1-877-GIFT2MU.
• Visit Our Web Site at: http://www.cvm.missouri.edu/giving/ways.htm

Your bequest will ensure that your memory will endure at the MU College of Veterinary Medicine.