

University of Missouri-Columbia College of Veterinary Medicine and Cooperative Extension Service

# VETERINARY MEDICAL REVIEW

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# Alumni Profile

## Alumnist Excels As Educator, Researcher and Leader

Respected as an educator, an epidemiologist and as a leader in the veterinary profession, Dr. Leon H. Russell, professor in the Department of Veterinary Public Health at the College of Veterinary Medicine, Texas A&M, is an ideal choice for the Alumni Profile.

Dr. Russell earned his BS and DVM from the University of Missouri in 1953 and 56 respectively. In 1958 he received his MS in Public Health from Tulane University and in 1965 he received his PhD from Texas A&M. Dr. Russell is also a Diplomate of the American Board of Veterinary Public Health.

As an educator, Dr. Russell excels. His students and colleagues respect and honor him for his outstanding contributions to this field. In 1969 Dr. Russell was presented the TVMA Faculty Achievement Award, the TAMU Veterinary Student's "Good Stick Award" in 1974, the Norden Distinguished Teaching Award came in 1977, the TAMU Former Students Association Faculty Distinguished Achievement Award in 1979 and the TAMU Former Students Association Excellence in Teaching Award in 1982.

Dr. Russell is renowned for his expertise in Epidemiology and Food Toxicol-

ogy. He has authored many scientific articles and presented numerous continuing education seminars on these subjects.

This past year Dr. Russell was installed as President of the TVMA. He had previously served on the TVMA Executive Board since 1980 and on their Board of Directors from 76-80. During his presidential term Dr. Russell has tried to enhance the Association's continuing education and public relations programs, to increase activity into areas of specializations and to "keep the image of TVMA on a professional and ethical level".

Dr. Russell also serves as Chairman of the U.S. Animal Health Association's Rabies Committee and a member of the Governing Board of the Brazos County Board of Health. He has just completed a term on the AVMA Council of Public Health and Regulatory Veterinary Medicine.

Dr. Russell and his wife, Martha, have been life members of the Missouri Alumni Association since the mid-sixties. As Mrs. Russell remarks, the couple keep up with their Missouri friends by reading the *Veterinary Medical Review* and the *Missouri Alumnus Magazine*.

### cover story

Dr. Rodney Straw, resident in small animal surgery, performs a surgical procedure as veterinary students observe. As a Teaching Hospital the College prides itself on its service to its patients, clients and referring veterinarians.

See the referral form and updated faculty list in the center of this publication.

—Photo taken by photographer Doug Thurmer.

## Pfizer Foundation Makes Contribution to UMC

by Bob Esse

*Sr. Information Specialist, News Service*

The Pfizer Foundation has made a contribution of \$30,000 to establish a computerized pharmacy records center in your College of Veterinary Medicine.

Located in the Veterinary Medical Teaching Hospital, the pharmacy dispenses pharmaceuticals to the various veterinary clinics and research centers on the UMC campus. It also provides over-the-counter sales to the general public.

The Pfizer Foundation gift will provide the hardware and software support needed to manage a pharmacy inventory of 3,000 pharmaceuticals and biological and hospital items. In addition, a computerized data-management system will provide faculty, staff and students with immediate cross-referencing of drug contraindications and adverse drug reactions.

Established in 1953 by Pfizer, Inc., a worldwide leader in pharmaceuticals and health-care products, the Pfizer Foundation provides financial assistance to organizations whose purpose is to enrich life through activities in areas such as education, health care, civic affairs, culture and the arts and international affairs.

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# Mizzou's Mules Are a Hit

by Sue Engle

Dr. Robert F. Kahrs, Dean of the College of Veterinary Medicine, University of Missouri-Columbia, has a hit on his hands. Two of the best received newcomers at the college are Mizou's mules Hillda and Louise, and their popularity is taking off like the Discovery space shuttle. "They attract a smiling crowd wherever they go," said Kahrs.

After their welcoming luncheon in Trowbridge Livestock Arena on July 27, the big sorrel draft mules appeared at such diverse functions as the national meeting of the American Society of Animal Science held on the Columbia campus August 6-10, the Missouri State Fair, and the opening of the Pepsi Cola bottling plant in Columbia.

An audience of 1600 delighted participants at the ASAS meeting watched the mules pull the black and gold wagon to a halt on Faurot Field while Dean Kahrs told their story. "I have never been associated with an activity that got so much positive response," said Dr. Melvin Bradley, UMC Animal Science Department. "One man told me he was so thankful that the mules replaced the raucous music he had been treated to in other years," Bradley continued, "and many others stopped to tell me how much they'd enjoyed the show." Jumping mules under the direction of Roger Conklin, Brown Station, were also featured at the event.

At the opening of the Pepsi plant, Hillda and Louise walked and trotted a  $\frac{3}{8}$  mile course, pulling wagonloads of children and patiently tolerating mobs of admirers. A halt had to be called after  $4\frac{1}{2}$  hours, long before the children tired of the activity, or the mules would be walking there yet, as one staff member put it.

The mules got the same enthusiastic reception at the Missouri State Fair. Although they did not compete or parade, crowds of children stopped at their stall and hopped up on a bale of straw—put there for the purpose—to pat them, feel their long ears and generally make friends. Dr. and Mrs. Kahrs and veterinary students were nearby to answer the questions of both children and adults. Many older folks also stopped to admire Hillda and Louise and to talk of mules and veterinarians they had known.

Hillda and Louise represent not only Missouri's special love for the mule,



Don Connor, Photo

they are an important component in Dean Kahrs' approach to creative funding. The dean was searching for a way to gain recognition for the school's financial problems, which he faced when he assumed the office of dean. He had enjoyed and been impressed by a horse and carriage ride at the University of Pennsylvania when he visited there. The emeritus dean who arranged the ride told him that, if he ever needed to impress potential supporters, giving them a carriage ride would open their pocketbooks as tours of buildings and laboratories never would do. On the way back to Missouri, Kahrs liked the idea but felt horses wouldn't do for Missouri. That smacked too much of me-too-ism. Then it hit him. What could be more appropriate than a pair of Missouri mules? "Like Missouri's veterinary profession, mules are a faithful, hardworking, ruggedly individualistic group of dedicated public servants," said Kahrs, "and their unsung contributions need public acknowledgment."

To locate the mules he needed, Kahrs contacted Melvin Bradley, senior horse and mule specialist on the UMC animal science faculty. Bradley was involved in a Mule History Project. He'd been interviewing old-time mule men around the state; and, if anyone knew where a good pair of mules could be bought, it was likely to be Melvin Bradley.

Bradley knew that one of the men he'd interviewed, Howard Sartain of Fayette, Missouri, was being forced by

poor health to find a home for his last pair of mules.

Mr. Sartain, 87, has raised mules all his life. It cost him dearly to part with Hillda and Louise, but he can no longer give them the meticulous care he insists is their due.

Frail health, however, did not prevent Mr. Sartain from driving a hard bargain before he parted with his four-footed ladies. After all, he'd had offers from all over the United States, and bargaining is half the fun of training and trading mules. Finally the agreement was made and Hillda and Louise came to live at the Trowbridge Livestock Center (with an intermediate stop at the Equine Center for worming, hoof care and clipping) at the University of Missouri-Columbia—after several thousand dollars went into Mr. Sartain's pocket.

Several people thought perhaps Dean Kahrs had his instructions backward. He was supposed to make money, not spend it. However, many people had already expressed an interest in the project in the form of donations. Louise Matthews of St. Louis, an old friend and supporter of the veterinary school, was very enthusiastic about the mules and donated the money for their harness. Dr. John L. Mara of Hill's Pet Products, Inc. was equally enthusiastic and arranged for the company to reimburse the school for the cost of the mules. In the face of such generosity, the mules were renamed Hillda and Louise. Forty

Continued on page 15

## New Chairman Appointed

Dr. Henry Richard Adams has been named the new chairman in the Department of Veterinary Anatomy and Physiology. Dr. Adams earned his BS and DVM from Texas A&M in 1965 and 1966 respectively. He received a PhD in 1972 from the University of Pittsburgh.

Before taking an academic appointment, Dr. Adams served as research veterinarian and captain in the United States Army. In 1968 he joined the Department of Pharmacology at the University of Pittsburgh as a research associate while working on his PhD. Then, in 1972, Dr. Adams moved to the University of Texas Southwestern Medical School Department of Pharmacology where he served first as an Assistant Professor and, later, as an Associate Professor. Since 1977 Dr. Adams has held a joint appointment with the Medical School and, as a visiting faculty member, with the Texas A&M School of Veterinary Medicine Department of Veterinary Physiology and Pharmacology.

Dr. Adams has a great deal of experience in the fields of education and research and he has published extensively.

## Dr. Robertson Earns New Title

Missouri veterinarians have been familiar with Dr. John J. Robertson's work for several years now. Dr. Robertson originally joined the College in 1980 as a resident in small animal surgery. In this position he instructed veterinary students, developed veterinary continuing education programs, served as faculty advisor and head of the College Raptor Rehabilitation Program, performed surgery on clinical patients and researched many surgical topics including the use of subtotal intracapsular prostatectomy in dogs and the use of isobutyl alpha cyanoacrylate and cancellous bone grafts in facial reconstructions.

After completing his residency at UMC in 1982, Dr. Robertson was asked to remain on the College faculty as an instructor in small animal surgery and, as of October, 1984, he earned the title of Assistant Professor—Surgery—in the Department of Veterinary Medicine and Surgery.

Dr. Robertson received his BS and DVM from the University of California, Davis. Before coming to UMC he worked for 5 years in private veterinary practice.

# In Your College

## The Dean's Club



Don Connor, Photo

Charter members of the Dean's Club, Dr. M. Joseph Bojrab (left), Dr. James Nave (UMC '68, right) and Dean Robert F. Kahrs (center) celebrate together as the first Jefferson Club members to complete payment of their \$10,000 pledges to the College of Veterinary Medicine.

## 60th Annual Conference 2nd Annual Veterinary Technicians Conference

As in years past, the College of Veterinary Medicine Annual Conference for Veterinarians and the 2nd Annual Veterinary Technicians Conference were a smashing success. These gatherings attracted veterinarians and technicians from all across Missouri and the nation. A total of 240 veterinarians attended the Annual Conference and 95 men and women were at the Veterinary Technicians Conference.

At the Annual Conference for Veterinarians, Dr. Steve Withrow presented an in-depth review of oncology for the small animal practitioner, while Drs. Kirkbride and Spire reviewed diagnosis and control of abortion in large animals

and beef herd management programs. Our own outstanding College of Veterinary Medicine faculty presented additional short practical informative topics on both days of the function.

At their Conference, technicians heard faculty from all areas of the College provide them with insights into the field of veterinary medicine.

The Monday lunch at the conferences was again provided courtesy of the exhibitors present. Cash prizes were presented to Drs. Kyle Kent and Ed Snider.

Make plans now to attend the 61st Annual Conference in the fall of 1985 at your College of Veterinary Medicine.

## Looks May Deceive

Recently a patient at the College Teaching Hospital helped confirm the belief that "looks sometimes deceive". The patient that provided this lesson was a three year old castrated male collie suffering bouts of mucoid diarrhea for several weeks prior to presentation. The collie still had a good appetite, a good attitude and, other than the persistent diarrhea, he looked in good health.

A fecal floatation and a direct smear proved negative for ova and blood work was normal except for a slight eosinophilia.

Dr. Brent Jones, small animal medicine clinician on the case, used proctoscopy and coloscopy to assist in the diagnosis. Sherri Russell (VM4) was the veterinary student working with Dr. Jones.

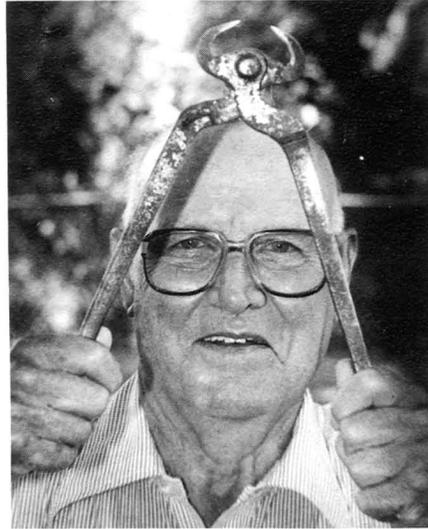
With the endoscope Dr. Jones carefully visualized the descending, transverse and ascending colons. No gross abnormalities were found. However, after years of experience with the scope, Dr. Jones knew better than to trust his visual assessment alone; "What looks normal doesn't always prove to be normal," he says. Dr. Jones took impression smears and biopsy samples from the colon for later review.

Histopathology identified lymphocytes and plasma cells within the submucosa of the intestines, but no specific reason could be given for the inflammatory changes.

Dr. Steven Stockham then examined the impression smears of the colon and here the diagnosis was made. The organism, *Entamoeba histolytica* was found on the mucosa prep. No organisms were located on the submucosa. The organisms hadn't been seen on histopathology for a good reason; the *Entamoeba* wasn't present on the slides. Preparation of the tissue samples for histopathology had simply washed the mucosal organisms away.

After discovering the presence of the protozoa, the collie was placed on a ten day therapeutic regime of *Flagyl*. Within 48 hours the dog's diarrhea had ceased.

As Dr. Jones stresses, this case explains the value of taking both histopath and cytology samples each time the endoscope is used. A veterinarian must trust his/her eyes, but the veterinarian must also trust the quality of specialized laboratory examinations.



Larry Boehm, Photo

## Talented Trimmer Hangs Up Clippers

By Laurie Navar  
Reprinted with permission  
from *Mizzou Weekly*

When Bill Donaldson attempted to retire in 1976 from his position at the College, Missouri cattlemen protested. As one of the few skilled cattle hoof trimmers in Missouri, Donaldson's services were valuable to the cattle industry.

John Dickerson, a Salisbury, Mo., cattleman, contacted his friends in the pure-bred cattle business and encour-

aged them to write to the University requesting that Donaldson's services remain available. Dickerson and his associates negotiated a deal under which Donaldson continued to trim hooves part time for another eight years.

On August 31 of this year, Donaldson finally succeeded in retiring.

Donaldson was employed by the University for 27 years as a beef cattle herdsman. In 1961, when the University moved all its large animals outside of Columbia to make room for Hearn's Multipurpose Building, Donaldson was transferred to the veterinary clinic where he began trimming hooves.

Donaldson, 73, said he learned hoof trimming from his father, a Scots herdsman who immigrated to the United States around the turn of the century. The technique which Donaldson learned as a young man differs greatly from the technique used at the University. "They've got some fancy contraptions at the vet clinic," he says, "but you get the same results just using a stock and some ropes."

From his Columbia home, Donaldson says he is enjoying his retirement. He spends time playing golf and is planning to do some traveling with his wife, Pauline, to visit a granddaughter.

Before his retirement, Donaldson trained two animal caretakers, Frank Ireland and Bill Jones, in cattle hoof trimming. "Those men were trained," Dickerson says, "by a great craftsman."

### Your Help Is Requested:

Drs. Dudley McCaw and Jimmy Lattimer have recently received funding to study the effect of radiation therapy for the treatment of canine lymphosarcoma.

Animals to be used are dogs with generalized lymphosarcoma which have not been previously treated. The protocol calls for the initial workup, staging, and the radiation therapy to be performed at UMC. There is no charge to the client for this portion.

The chemotherapy and monitoring is to be performed by the referring veterinarian. There is no funding for this so the client is responsible for paying for this part. We estimate for a 60 pound dog about \$50 per month for chemotherapy and monitoring.

If you have any clients who would be interested in participating, please

contact Dr. McCaw or Dr. Lattimer at 314-882-7821.

### Specimens Wanted

Dr. Dudley McCaw is trying to determine the prevalence of testicular involvement in canine lymphosarcoma. Specimens needed are the testicles and a lymph node placed in formalin from any male dog with lymphosarcoma which dies or is euthanized. Please indicate breed, age, and whether the animal had received chemotherapy. Please include your name and address and you will be reimbursed for the postage.

Send samples to:

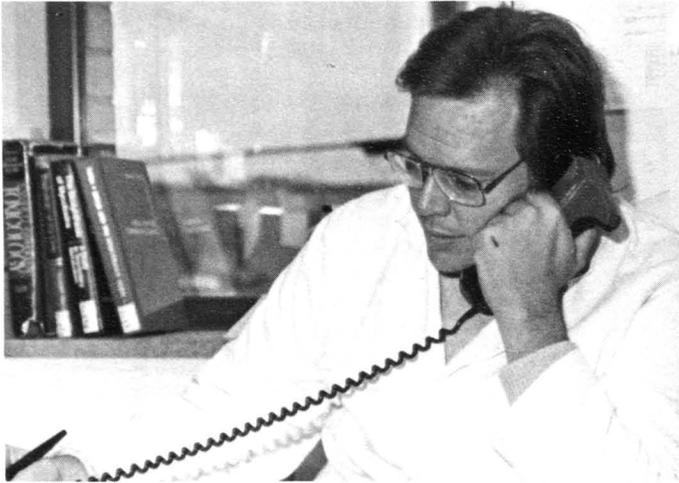
Dudley L. McCaw, D.V.M.

W109 Veterinary Teaching Hospital

1600 E. Rollins Rd.

Columbia, MO 65211

# Your College At Work For You



*Dr. Raisbeck on the phone to a referring veterinarian.*

## *The Toxicology-Chemistry Laboratory is Service Oriented*

The Veterinary Medical Diagnostic Laboratory (VMDL) and the Department of Veterinary Pathology have announced the promotion of Dr. Merl F. Raisbeck to Assistant Professor of Veterinary Pathology and supervisor of the Toxicology Laboratory at the VMDL.

Dr. Raisbeck is a native of Colorado. He holds the DVM degree from Colorado State University and earned both his MS in Veterinary Pathology and his PhD in Area Pathology with an emphasis in Toxicopathology at UMC. He is a Diplomate of the American Board of Veterinary Toxicology (AVBT) and now serves as chairman of the Graduate Training Committee in the AVBT.

The Toxicology-Chemistry Laboratory in the VMDL is a service oriented section. Each year more than 1000 cases of suspected poisonings and/or chemically induced disease are handled in this laboratory. Dr. Raisbeck and Dr. George Rottinghaus, Analytical Chemist and Assistant Professor of Veterinary Biomedical Sciences, consult with veterinarians, livestock producers and pet owners across the state of Missouri as well as clinicians at the College Teaching Hospital on their clinical toxicological problems.

To assist in making their diagnoses, the Toxicology-Chemistry Laboratory features advanced technology and instrumentation. Atomic absorption, ultraviolet spectrophotometry and thin layer gas, liquid and high pressure liquid chromatography are performed here. This labo-

ratory is capable of detecting minute quantities of substances such as a variety of herbicides, insecticides and heavy metals as well as a wide variety of plant alkaloids, fungal toxins and substances such as pentachlorophenol (PCP), nitrate, nitrites and anticoagulant compounds.

In addition to its extensive clinical caseload, the laboratory also remains active in research. Areas of recent study include detoxification of mycotoxin contaminated grain in feedstuffs, effects of zearalenone on estrus and ovulation in swine, the isolation and purification for studying the toxicity of the trichothecene (T2) mycotoxin metabolites, and participation in an interdisciplinary program for protection from mycotoxins (fungal toxins) that are economically important in Missouri. The past two years the Toxicology-Chemistry laboratory has been particularly active in surveillance work. It has studied the degree of contamination of fungal toxins in scabby wheat (deoxynivalenol - "vomitoxin" and zearalenone - "F2 toxin") and it has assessed the levels of aflatoxin present in Missouri's corn crop. With its surveillance work the laboratory has been instrumental in assuring that Missouri's grain products can move in interstate commerce.

Dr. Raisbeck and Dr. Rottinghaus welcome phone calls and inquiries from Missouri veterinarians and livestock producers. Dr. Raisbeck says that a preliminary phone call often helps to im-

## **Research Toxicologist Also Appointed**

The College has also hired a research toxicologist, Dr. Chada Reddy. Dr. Reddy is an Associate Professor in the Department of Veterinary Anatomy/Physiology. He will coordinate his activities with that of the Toxicology-Chemistry Laboratory.

Dr. Reddy was born in India. He received his BVSc. (equivalent to the DVM) at the College of Veterinary Medicine, Andhra Pradesh Agricultural University, Hyderabad, India in 1971. He earned his MS in the field of Food Science and Technology in 1977 at Alabama A&M University and his PhD in Toxicology and Pharmacology at the University of Mississippi Medical Center in 1980.

Many honors have been bestowed upon Dr. Reddy in his career. NIH presented him the New Investigator Research Award for the term 1983-86. He received the National Research Service Award from the Public Health Service of the U.S. Department of Health, Education and Welfare in 1978-80 and the Andhra Pradesh Agricultural University Scholarship for merit in 1966-71. Dr. Reddy was also named to Personalities of America in 1984 and to Who's Who in Frontier Science and Technology in 1983 and he is a member of Phi Zeta, Sigma Xi and Phi Kappa Phi.

Before joining the College faculty Dr. Reddy held the position of Assistant Professor at the College of Veterinary Medicine, Ohio State University from 1980-84.

Presently Dr. Reddy is studying the biochemical mechanisms involved in the pathogenesis of cleft palate. He is also researching the mechanisms of toxic heavy metal interactions and the role of metallothioneins in such interactions.

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prove the quality of samples sent to the laboratory and even helps to save a client and/or veterinarian the expense of overtesting.

If you have questions that the Toxicology-Chemistry Laboratory might answer or if you wish to send samples to the laboratory, call 314/882-6811 or write the Veterinary Medical Diagnostic Laboratory, Toxicology-Chemistry Section, P.O. Box 6023, Columbia, Missouri 65205.

## ***Veterinary Teaching Hospital Encourages Use of Referral Form***

The Veterinary Teaching Hospital (VTH) continues to be interested in attracting referral cases. Such cases are important for effective clinical instruction; the patient, client, and referring veterinarian should also benefit.

It is imperative the attending clinician be aware of the veterinarian's diagnosis, treatment, and thoughts when a case is referred to the VTH. To enhance this communication, the Patient Referral Form is being distributed to all Missouri veterinarians.

Such a completed form provides the VTH with valuable information which becomes a part of the patient's permanent record. The map on the back of the form will also make it easier for a client to find the Teaching Hospital. The Referral Form should accompany the client.

When a veterinarian receives a referral response letter from the attending clinician, two new forms will be included; thus a supply of forms should always be available. Use of this form in the future by all referring veterinarians will be of real help to all concerned with a referral case.

An updated list of faculty and their area of specialty is attached.

**Department of Veterinary Medicine and Surgery  
College of Veterinary Medicine  
University of Missouri-Columbia**

Teaching Hospital - Small Animal Information .....	(314)882-7821
Small Animal Appointments .....	882-6770
Large Animal Information & Appointments .....	882-6857
Equine Center .....	449-3121
Emergency (after hours) - all areas .....	882-4589
Department Office - Dr. James E. Creed, Director of Teaching Hospital .....	882-4648

**Small Animal Medicine Faculty:**

*Chastain, C. B.	Dermatology, Endocrinology, Infectious Diseases .....	882-6810
McCaw, Dudley	Cardiology, Neurology, Oncology .....	882-2846
Jones, Brent D.	Gastroenterology, Respiratory Medicine .....	882-6829
Hahn, Allen W.	Cardiology .....	882-3837

**Small Animal Surgery Faculty:**

*Bojrab, M. Joseph	Soft Tissue, Neurosurgery .....	882-2754
Tomlinson, James	Orthopedic Surgery .....	882-7020
Robertson, John	General Surgery .....	882-3039

**Equine Center Faculty:**

*Tritschler, Louis G.	Equine Surgery and Medicine .....	449-3121
Garner, Harold E.	Equine Surgery and Medicine .....	449-3121
Green, Eleanor M.	Equine Medicine .....	449-3121
Ortenburger, Arthur I.	Equine Surgery .....	449-3121

**Food Animal Faculty:**

*Miller, Robert B.	Food Animal Medicine and Surgery .....	882-6433
Zinn, Gene	Food Animal Medicine and Surgery .....	882-4342
Wolff, William	Food Animal Medicine and Surgery .....	882-3229

**Theriogenology Faculty:**

*Youngquist, Robert S.	Large Animal Reproductive Diseases .....	882-2628
Bierschwal, Clarence J.	Large Animal Reproductive Diseases .....	882-6859
Braun, William F.	Large Animal Reproductive Diseases .....	882-2032

**Radiology and Anesthesiology Faculty:**

*Lattimer, Jimmy C.	Diagnostic Radiology, Radiation Therapy .....	882-7679
Aronson, Everett	Diagnostic Radiology .....	882-2666
Corwin, Louis A.	Diagnostic Radiology, Radiation Therapy .....	882-3521
Hurst, Thomas S.	Anesthesiology .....	882-6880
Tamas, Paul	Anesthesiology .....	882-7821

**Ophthalmology:**

Wheeler, Cynthia .....	882-6849
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**Orthopedic Foundation for Animals:**

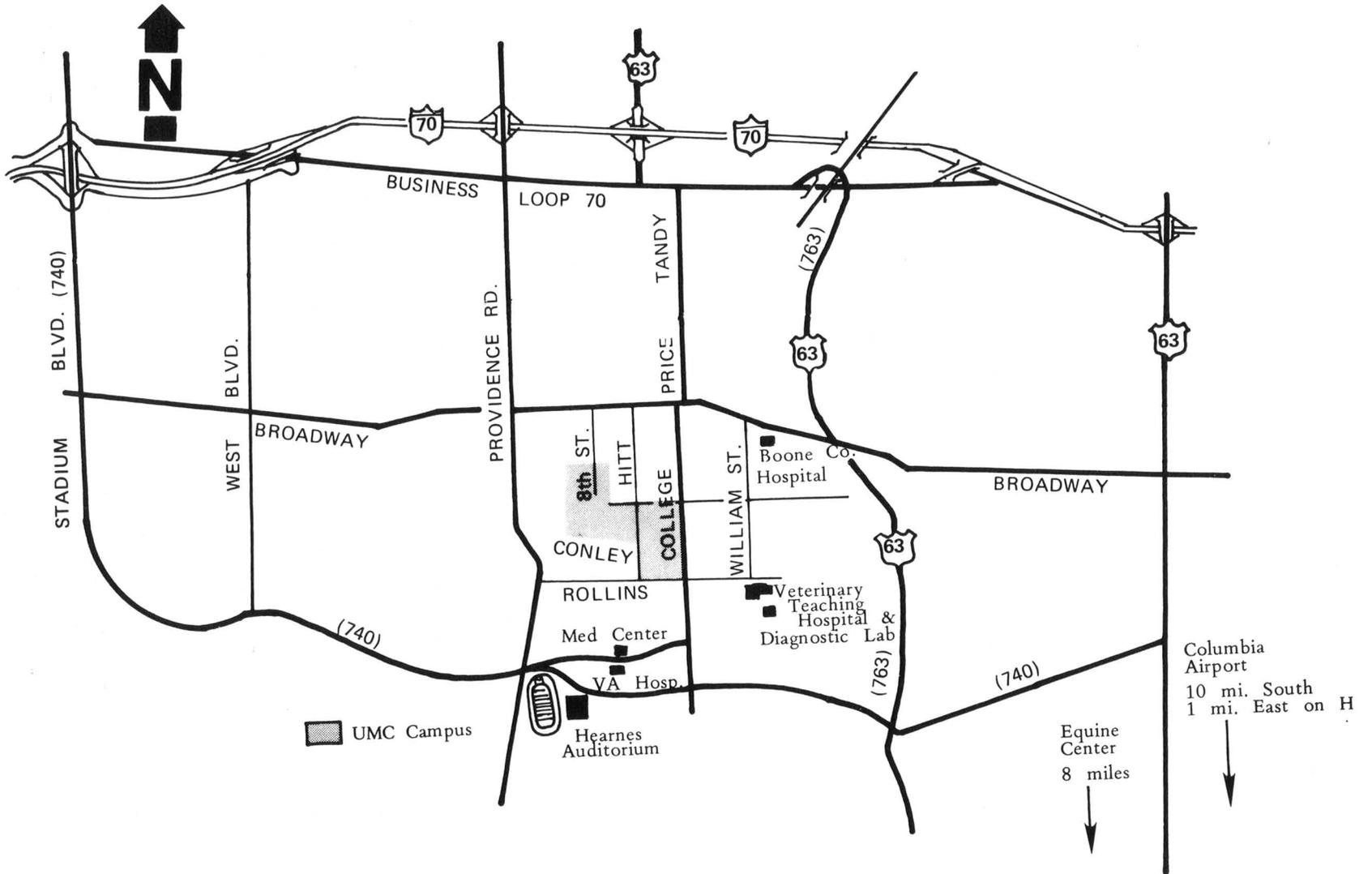
Corley, E. Allen .....	442-0418
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**Zoo Animal Medicine:**

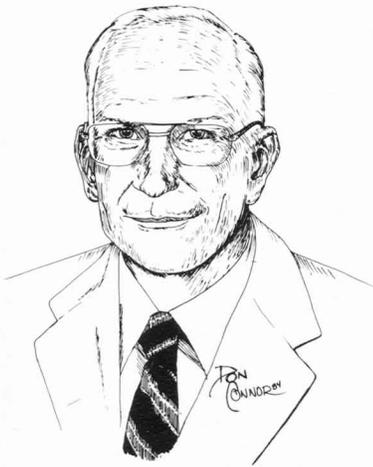
Boever, William	St. Louis Zoo, St. Louis, Missouri .....	781-0900
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\*Instruction Leader for respective area.





## The Dean's Corner



Dear Alumni and Friends:

In late August, forty two men and thirty four women of the class of 1988 began veterinary studies. On arrival, 66 Missourians and 10 out-of-staters found your College preparing for a September reaccreditation visit from the AVMA Council on Education, undergoing preliminary tentative discussions of possible contracts to provide preclinical education for Nebraska veterinary students and adjusting to a streamlined College administrative structure.

Administratively, Dr. Ken Niemeyer's promotion to Associate Dean will add academic leadership to his admission, student affairs, alumni relations and fund raising responsibilities. Two former associate dean positions were dissolved and their responsibilities delegated to working faculty including Dr. John Berg as Director of Graduate and Post-doctoral Studies; Dr. Seshu Ganjam, Director of Biomedical Research; Dr. Hal Eyestone, Director of Agricultural Research and Assistant Director of the Agricultural Experiment Station; Dr. Ron McLaughlin, Director of Research Animal Resources; Dr. Al Hahn, Director of Computing Activities; and Dr. Joe McGinity, Director of Alumni Relations.

The College's financial position remains uncertain after the 1984-85 quality improvement program was only fractionally funded and a campus committee reviewing academic programs left Veterinary Medicine out of its recommendations for enhancement. If your alma mater ever needed friends it's now!

On the brighter side, five new faculty have been appointed since the listing in the last issue\*, (see box) campus officials have again requested the state increase faculty and staff, the Missouri

Department of Agriculture has increased funding to the Diagnostic Laboratory, faculty and staff received their first general salary increase in three years and two more alumni and one friend have joined the Veterinary College Chapter of the Jefferson Club by committing a \$10,000 investment in the future of your College. The Pfizer Foundation has donated \$30,000 to upgrade the pharmacy program and Mr. George Menos of St. Louis has donated funds for upgrading the anesthesiology equipment.

By now you know the Veterinary Medicine Missouri Mule Team was donated by Hill's, makers of the prescription diets, the wagon and harness by the late Louise Mathews of St. Louis and accessories by numerous private donors including the students of the 3rd year class. Hillda (named for Hill's Pet Products, Inc.) and Louise delivered Don Faurot to the 50-yard line at half-time of the Mississippi State game so 70,000 fans could pay tribute to the legendary coach. We hope this beautiful span of mules will continue to be a focal point as they were at the State Fair to bring the College and the veterinary profession recognition and acknowledgement for their many accomplishments and contributions to the owners of Missouri livestock and companion animals. We are still seeking donors for a horse trailer and pickup truck to transport them and double as clinic vehicle.

One reporter writing about your alma mater asked: "Has the College suffered by doing its job too well, for too long and too quietly?" In any case, the sands of time have been drifting in the path of progress. Neighboring institutions seem to have gotten a big jump in terms of

facilities, staffing and ability to meet the expectations of students as well as the veterinary profession, the animal-owning public and the biomedical and bioagricultural industries so vital to Missouri's economy.

Two written reports have suggested that unless major support is forthcoming soon, the time is approaching for public discussion on whether Missouri really needs, wants, and is willing to support a College of Veterinary Medicine. What do you think?

Those answering yes to those questions can rally to the cause by increasing personal commitments through annual giving, by steering potential benefactors to the College or by alerting legislators of its needs. If you want to help, call Dean Kahrs (314-882-3768) or Dr. Niemeyer (314-882-3554) for facts.

It was nice to see so many at alumni weekend and Annual Conference. Please stop in when you are in the area.

### NEW FACULTY

Dr. Paul Tomas, Anesthesiology  
 Dr. Arthur Ortenburger,  
 Equine Surgery  
 Dr. John Robertson,  
 Small Animal Surgery  
 Dr. Jerry Roth,  
 Equine Medicine & Surgery  
 Dr. Merl Raisbeck, Toxicology

### NEW JEFFERSON CLUB MEMBERS

Dr. Bernie Lauhoff  
 Dr. Gary Weddle  
 Dr. Jack Stevens  
 Mr. George Menos



Don Connor, Photo

## Pitman-Moore Donates

Chip Whitlow (left) of Pitman-Moore pharmaceutical company presents a set of autotutorials to Dr. Kenneth Niemeyer. These veterinary related programs are housed in the Veterinary Medical Library for viewing by visiting veterinarians, students and faculty members.

# Faculty Accomplishments

## Faculty Publish

The following have recently been published by members of your College:

Mrema, J.E.K.; Johnson, G.S.; Kelley, S.T.; Green, T.J.: "Activated Partial Thromboplastin Time of Owl Monkey (*Aotus trivirgatus*) Plasma", *Laboratory Animal Science*, Vol. 34, #3: 295-298, 1984.

Mrema, J.E.K.; Schmidt, D.A.; Caldwell, C.W.; Stogsdill, P.L.; Green, T.J.: "Erythrocyte Morphology of Healthy Colony-Born Owl Monkeys (*Aotus trivirgatus*)", *Symp. Xth Int. Congr. Primat. Vol. Primate Environmental Factors and Colony Management*. (Nairobi, Kenya), 1984.

Fales, W.; Stockham, S.; Lattimir, J.: "Pyothorax Caused By *Candida albicans* In A Cat", *JAVMA*, Vol. 185, #3: 311-312, 1984.

Wagner, J.E.; Warriner, W.J.; Bradfield, S.A.; Farrar, P.L.; Morehouse, L.G.: "A Computer Based System For Collection, Storage, Retrieval and Reporting Accession Information In A Veterinary Medical Diagnostic Laboratory", *Comput. Biol. Med.*, Vol. 14, #3:325-344, 1984.

Fallon, R.K. and Swayne, D.E.: "Canine Transmissible Venereal Tumor: A Diagnostic Dilemma—A Case Report", *The Compendium on Continuing Education for the Practicing Veterinarian*, Vol. 6, #5: 415-421, 1984.

Franklin, R.T.: "The Use of Glucocorticoids in Treating Cerebral Edema", *The Compendium on Continuing Education for the Practicing Veterinarian*, Vol. 6, #5: 442-451, 1984.

## Dr. Wagner Honored

On June 30, 1984, Dr. Joseph E. Wagner, Professor in the Department of Veterinary Pathology, completed a 4 year term of service on the NIH Animal Resources Review Committee, a study section of the Division of Research Resources. During 1983-84 Dr. Wagner served as Chairman of the committee.

Dr. Wagner was recently awarded a Certificate of Appreciation by the U.S. Department of Health and Human Services for his work on this committee.

While serving on the NIH committee, Dr. Wagner made several dozen site visits to major medical research institutions in the U.S. and abroad and reviewed hundreds of NIH grant applications.

## Fulbright Grant Awarded to Dr. Solorzano

Dr. Robert F. Solorzano, Professor in the Department of Veterinary Microbiology, has been awarded a Fulbright grant to conduct research on Pseudorabies of Swine in Mexico.

Dr. Solorzano heads the Virology and Serology Sections of the Veterinary Medical Diagnostic Laboratory. He has a B.S. degree from Georgetown University and an M.S. and Ph.D. degree in Microbiology from Pennsylvania State University. He has done extensive research and diagnostic work on Hog Cholera which led to the eradication of that disease in Missouri in 1972 and later in the United States. Research work on enteric virus infections of swine has also been performed in his laboratory with current efforts concentrated on swine Rota and Picorna viruses. Research on pseudorabies has led to the development of effective control measures for this disease. His work in collaboration with Mexican scientists will be on the epidemiology and control of this important herpes virus disease.

Dr. Solorzano is one of approximately 2,100 Americans being sent abroad for the 1984-85 academic year under the Fulbright exchange program. Established in 1946 under Congressional legislation introduced by former Senator J. William

Fulbright of Arkansas, the program is designed "to increase mutual understanding between the people of the United States and the people of other countries." Scholarships are awarded to American graduate students, teachers and professors to study, teach, lecture and conduct research abroad, and to foreign nationals to engage in similar activities in the United States. Individuals are selected on the basis of academic and professional qualifications plus their ability and willingness to share ideas and experiences with people of diverse cultures.

In the past 36 years, more than 55,000 Fulbrighters from the United States have gone to some 126 nations and over 95,000 Foreigners have studied and taught in this country. Scholarships are awarded through open competition with final selections made by the Presidentially-appointed Board of Foreign Scholarships. They are financed and administered largely by the United States Information Agency, whose mission is to inform other nations about American society and to provide opportunities for Americans to learn about the rest of the world. Twenty-four foreign governments also share in the funding of these exchanges.

## Niemeyer Named Associate Dean

by Peggy Davis  
Information Specialist, News Services

Dr. Kenneth Niemeyer, former assistant dean for student and alumni affairs at your College of Veterinary Medicine, has been appointed associate dean for academic and alumni affairs.

Dr. Niemeyer is now responsible for the College's admissions, alumni relations and developmental and academic programs.

Since 1976, Dr. Niemeyer has been professor and assistant dean for student and alumni affairs at the College. He has been responsible for alumni and pre-veterinary program activities and has supervised student admissions.

Dr. Niemeyer has worked with the College since 1955 when he taught small animal medicine. He directed the small animal clinics from 1963-69. During the next four years, he taught orthopedic surgery and was appointed block leader of small animal surgery. From 1973-76, he was associate chairman of the Department of Veterinary Medicine and Surgery.

Dr. Niemeyer attended UMC to study preprofessional requirements and earned a DVM and an MS in veterinary medicine and surgery.

## Faculty Profile

### Public Health Veterinarian Appointed

A combined interest in epidemiology, virology, bacteriology, research, nutrition, sociology, education and philosophy help to strengthen Dr. Manuel J. Torres' role as the recently appointed Public Health Veterinarian in the College Department of Veterinary Microbiology.

Dr. Torres received his DVM from the National University of Colombia, South America. In 1968, at Michigan State University, he earned his first MS in the field of Food Science with a minor in Microbiology. Then, at the University of California, Davis, Dr. Torres received his second MS in Preventative Veterinary Medicine in 1972 and a Ph.D. in 1974 in the field of Comparative Pathology.

As a native of Bogota, Colombia, Dr. Torres is committed to improving the health conditions in developing countries in order to protect the success of the industrial nations of the world. He feels that a strong understanding of animal and human health problems along with a cooperative effort between the veterinary and medical professions is needed to achieve this goal.

In addition, Dr. Torres feels that the University of Missouri College of Veterinary Medicine, with its interest in food animal associated diseases and its excellent Diagnostic Laboratory and Veterinary Library provides the ideal environment for his research. And, since joining the faculty on April 1st, Dr. Torres has been hard at work on three distinct, but potentially interrelated, areas of research.

The major focus of Dr. Torres' past and present work is the study of gastroenteric pathogens. The disease, Infant Gastroenteritis (Diarrheal Disease) is the biggest killer of young animals and children in the world today. This complex disease has been frequently linked to the use of infant formula or breast milk substitutes in humans or milk substitutes in artificially weaned animals. The United States is the largest producer, user and exporter of these human and animal products. However, due to what Dr. Torres addresses as "mishandling" of these essential products in other countries (caused by high ambient temperatures in these regions and a lack of refrigeration), sporeforming bacteria grow in the milk.

Dr. Torres is now working to provide proper "handling" procedures for infant



Don Connor, Photo

formula to allow its safe usage in other countries.

Dr. Torres is also greatly interested in the pathobiology of *Campylobacter jejuni*. This organism is presently one of the most important bacteria in human and animal gastroenteritis. However, it was only recently re-discovered as a causative enteric agent through the work of veterinarians. Veterinarians had originally described the importance of this bacteria more than 50 years ago.

The pathobiology of rabies virus is another area of research for Dr. Torres. Prior to arriving at the College he studied the Rhabdoviruses at the Wistar Institute in Philadelphia while also a faculty member at the Veterinary School there.

Dr. Torres and Dr. Donald Blenden are now working together at the College on much of the rabies research. Oddly enough, no one has yet identified exactly how rabies virus kills its victims. Dr. Torres states that it causes severe immunosuppression. His tests have demonstrated this using diminished growth rate and body weight losses as predictors of hypophysis dysfunction. DMSO was used comparatively to provide chemical immunosuppression in one group of animals in this test. Wild rabies virus was given to a second group of animals while an attenuated vaccine strain was

given to the third group. In all cases the rabid animals showed the most diminished rate of growth and immuno-depression.

Dr. Torres has also been able to identify and provide topographical studies of rabid animal brains obtained in Germany by Dr. Blenden that were preserved for over two years at room temperature in formaldehyde. He uses his improved version of the Peroxidase-Antibody technique to map out the affected areas of the brains. He has noticed that the one site consistently affected by the rabies virus is the hypothalamus. Against expectations, the hippocampus is affected less consistently in wild and experimental cases.

Besides his ambitious research schedule, Dr. Torres will help teach the Clinical Epidemiology and Veterinary Public Health courses to the veterinary students at the College and he is currently developing an extensive campus-wide course on Advanced Epidemiology of Food Associated Diseases.

In his little spare time Dr. Torres is a collector of pictures, carvings and statues of hippopotami. He feels that these large and "beautifully ugly" beasts, with their potential to contribute to the environment or to devastate it, provide an excellent example of the subtle equilibrium that exists in nature.

# Diagnosing the Red Eye

By C.A. Wheeler, DVM, MS

One of the most common ocular complaints a veterinarian has to deal with is the "red eye". A systemic approach to examination followed by a logical sequence of diagnostic tests will enable the practitioner to sort out and identify the general disease entity and institute appropriate therapy. The four most common causes of a red eye are conjunctivitis, superficial keratitis, anterior uveitis and glaucoma.

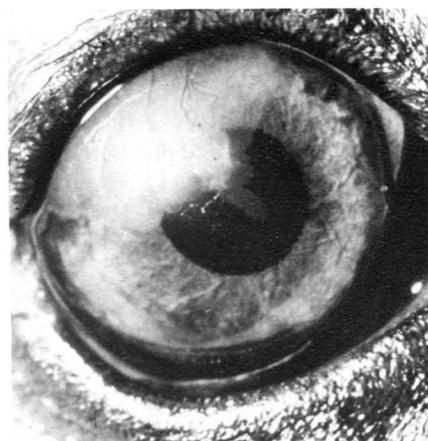
The first step in making a diagnosis is to obtain a detailed history including duration, environment, probable cause or previous ocular disease.

The second step is an orderly ophthalmic examination of *both eyes*, checking and comparing all structures visible, noting any abnormalities. Table I lists those parts of the eye that should be examined and the changes expected with each condition causing a red eye. Evaluation of the pupil size and response to direct and indirect light stimulation can be a quick indicator as to what the problem is.

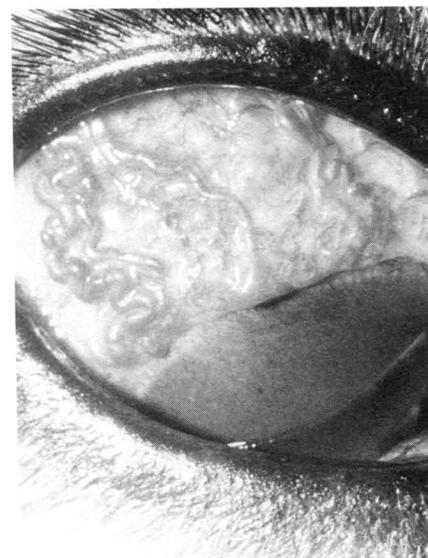
The third step is to perform appropriate diagnostic tests to support your clinical suspicions and rule out the other conditions. Table II lists these tests in the order they should be performed, beginning with the least invasive test and progressing to those that might affect the results of other tests if done too soon. Conjunctival scrapings and

bacterial/fungal cultures may indicate infective agents especially in conjunctivitis. Cocci (staph) and rod-shaped bacteria, fungi, viral inclusions and inflammatory cells often direct initial treatment while culture results are pending. In the cat chlamydial inclusions inside epithelial cells are easily seen on cytology slides stained with Diff-Quik. A schirmer tear test should follow to identify conjunctivitis and/or keratitis secondary to a lack of tear production. All red eyes should be stained with fluorescein and examined carefully for foreign bodies in the conjunctival fornices and under the third eyelid. Lastly, intraocular pressure (IOP) should be determined with a Shiotz tonometer. IOP is usually decreased with anterior uveitis (15mmHg), increased with glaucoma (30mmHg) and normal with conjunctivitis and superficial keratitis (15-30mmHg). If a tonometer is not available a crude estimate can be made by topically anesthetizing the cornea and gently depressing the corneal surface with a finger or blunt instrument (i.e. a hemostat). If only one eye is affected, the other eye can act as a normal control for comparison.

While many etiologies fall under each category, and all causes of a red eye are not presented, these facts should help the practitioner make a general diagnosis and institute proper therapy or initiate a further diagnostic work-up.



Superficial keratitis



Intraocular Tumor (Metastatic carcinoma)

Table I: Differentiating the Red Eye

	Conjunctivitis	Superficial Keratitis	Glaucoma	Anterior Uveitis
Photophobia	None	Severe	Slight	Moderate
Pain	None to Slight	Moderate to Severe	Severe to Acute	Moderate
Discharge	Moderate to Copious	Serous to Purulent	None	None
Pupil Size	Normal	Normal	Dilated	Small
Pupillary light response	Normal	Normal	Fixed	Irregular &/or fixed
Conjunctiva	Diffuse redness Thickened vessels hard to see	Vessels diffuse small, circumcorneal	Absent	Sluggish
Cornea	Clear	Cloudy, opaque	Superficial & deep vessel congestion	Straight circum- corneal vessels, not movable with the conjunctiva
Anterior Chamber	Normal	Normal - flare or hypopyon	Steamy over entire surface	Clear to Steamy
Iris	Normal	Normal	Increased depth	Flare - hypopyon
Intraocular Pressure	Normal	Normal	Normal - atrophied	Irregular surface thickened. Increased pigmentation neovacu- larization inflamma- tory exudate
			Elevated (>30mmHg)	Decreased (<15mmHg) to normal



# College Briefs

## Two Faculty Members Join Equine Medicine and Surgery

Dr. Eleanor Green has joined the faculty as an Assistant Professor in the Department of Veterinary Medicine and Surgery. Her specialty is equine medicine.

Dr. Green received her DVM from Auburn University in 1973. She earned her BS from the University of South Florida in 1967 and her MS from the University of Florida in 1969.

Dr. Green worked as a private practitioner in Mississippi for 4 years before joining the faculty of the College of Veterinary Medicine in Mississippi State as Assistant Professor in the Center for Clinical Science.

While in Mississippi Dr. Green served on several AVMA committees. She also made many presentations to professional and lay audiences and she authored numerous publications. Dr. Green was awarded the Florida Angus Auxiliary Scholarship and the Junior Scholarship Award from the College of Agriculture, University of Florida and, in 1969, she was named Outstanding Woman in the College of Agriculture, University of Florida.

Dr. Arthur I. Ortenburger, III, has also become a member of the Department of Veterinary Medicine and Sur-

## New Anesthesiologist

Dr. Paul M. Tamas joins the College as Assistant Professor in Anesthesiology. Dr. Tamas is a native of Hungary. He received his DVM in his homeland at the University of Veterinary Science, Budapest, Hungary. Later, Dr. Tamas moved to the United States where he completed his internship at Washington State University and his residency in Anesthesiology at the University of Tennessee.

Dr. Tamas and anesthesiologist, Dr. Thomas Hurst, will combine their efforts to provide quality service to patients in the College Teaching Hospital, to help educate veterinary students, and to assist Missouri veterinarians with their anesthesiology problems.

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gery specializing in equine surgery.

Dr. Ortenburger earned a BS in Bacteriology, a BS in Veterinary Science and a DVM from Washington State University and he received his MS from Michigan State University in 1984.

Prior to coming to UMC, Dr. Ortenburger completed an internship in Large Animal Medicine and Surgery at Louisiana State University in 1981 and a residency in Equine Surgery at Michigan State University in 1984.

## New Interns and Residents

Many new interns and residents have recently joined the Department of Veterinary Medicine and Surgery. Their names and areas of specialization are listed below:

### *Interns - Equine Medicine and Surgery:*

Julie W. Smith - University of Missouri, 1984

Delwin D. Wilmot - Iowa State University, 1981

### *Interns - Food Animal Medicine and Surgery:*

Larry Forgey - University of Missouri, 1984

### *Interns - Small Animal Medicine and Surgery:*

Martha S.R. Davis - Auburn University, 1984

Linda L. Garrison - University of Illinois, 1984

Lawrence E. Miller - Auburn University, 1984

John W. Tyler - University of Georgia, 1982

### *Residents:*

Bruce L. Clark (Theriogenology) - Mississippi State University, 1982

Patricia M. Hogan (Radiology) - Iowa State University, 1980

Albert E. Jergens (Small Animal Medicine) - Texas A&M, 1983

David W. Knapp (Small Animal Surgery) - Ohio State University, 1983

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## Veterinary Medical Review

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