



VETERINARY MEDICAL REVIEW

School of Veterinary Medicine, University of Missouri-Columbia



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OFA Receives Top Award

Selected by more than 1800 members of the dog world's professional members as the "organization making the most outstanding contribution to the sport of dogs—1970," the Orthopedic Foundation for Animals, Inc. recently received a coveted "Winkie." The award was presented in Palm Beach, Florida, by *Kennel Review* magazine during the ninth annual Kennel Review dinner. Representing the OFA was Dr. J. S. Larsen, assistant professor of veterinary medicine and surgery at the University of Missouri-Columbia School of Veterinary Medicine and project director for the Foundation.

Based on the UMC campus, the OFA studies bone and joint problems in animals and is especially concerned with hip dysplasia in dogs. The organization offers professional services to purebred dog breeders and practicing veterinarians for detection of the disease.

On request, it will furnish information and directions for producing pelvic radiographs, commonly known as hip X-rays. The OFA then consults with the

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Dr. Larsen

Dr. Corley

Woods Foundation Gives \$12,000 to School

In appreciation for the "broad spectrum of services" performed by the School of Veterinary Medicine, University of Missouri-Columbia, \$12,000 has been given to the School. The sum originated from the James H. Woods Foundation, St. Louis.

Diagnostic services and skilled treatment of domestic livestock and pets over a period of time sparked the donation. A letter from one foundation trustee reads

in part "Because we were so impressed with our consultation, ... and the kind, bright young men observing the examination, we would like to better acquaint ourselves with your work, your research and services, and with the clinic."

The gift has been allocated for development of a Teaching Surgery Laboratory to be outfitted with complete surgery suites and auxiliary equipment. Plaques will designate the suites as a gift

of the James H. Woods Foundation.

According to Dr. B. W. Kingrey, dean of the School of Veterinary Medicine, such a laboratory will be of great use to many components of the Veterinary Hospital-Clinic. "Of special importance," he said, "is the ophthalmology section." The proposed equipment would also be available for instruction in anesthesiology, cardiology, orthopedic surgery and intensive care studies.

New Insignia Chosen



Double entwined snakes about a winged staff with a superimposed 'V' has long been recognized as the symbol of veterinary medicine. But a recent motion by the American Veterinary Medical Association House of Delegates set the caduceus aside in favor of a more relevant and accurate emblem.

The controversial caduceus is the staff of Mercury (Greek-Hermes) with two snakes around it. The serpents represent healing, immortality and renovation of life through the yearly shedding of their skins.

Often around ancient temples, snakes became associated with healing by the belief that they aided cures through contact. The ailing slept in the temples and were comforted by the closeness of the snakes.

The controversy deals with Mercury's appropriateness as a proper patron of the veterinary profession. Once source reads, "The winged wand of the caduceus was a symbol of the Greek god Hermes (Mercury) who was associated with such unsavory callings as highwaymen, thieves, intrigues and the fat purse."

Another reference says "As god of the high-road and the market place, Mercury was perhaps above all else the patron of commerce and the fat purse; as a corollary, he was the special protector of the travelling salesman. As spokesman for the gods, his silver-tongued eloquence could always make the worse appear the better..."

The Aesculapian staff was adopted in keeping with the following piece of mythology. Aesculapius, the Greek god of healing, was the son of Apollo and pupil of Chiron the centaur who is frequently associated with the veterinary medical profession. Aesculapius had hu-

man form and carried a staff with a single serpent wreathed around it. After his death, caused by a lightning bolt thrown by Zeus, he was depicted by the staff and serpent alone. From this comes the term Aesculapian staff.

The revised official seal of the AVMA with the Aesculapian staff will be registered as a service mark under the Trademark Act of 1946, and may be used by no other organization. The Aesculapian staff, however, will be made available to the AVMA membership and to other related organizations.

The University of Missouri-Columbia School of Veterinary Medicine will be using the new insignia on stationery, letters and other material as opportunity permits.

Mrs. Martin Joins Staff



Mrs. Martha Jo Martin is replacing Miss Jill Southworth in the publications office. Miss Southworth will be leaving at the end of February.

Mrs. Martin has B.S. and M.S. degrees in home economics journalism from UMC and was in a similar publications position at the School of Home Economics from 1964 to 1969. She most recently was a fashion and feature writer for *The Apparel News* in Los Angeles.

Mrs. Martin's husband, Jim, is a physical therapist and instructor in physical medicine and rehabilitation at the Medical Center. They have one son, Greg, 9.

Dr. G.M. Buening Elected Diplomate

The board of governors of the American College of Veterinary Microbiologists has recently announced that Dr. Gerald M. Buening, associate professor of veterinary microbiology at the University of Missouri-Columbia School of Veterinary Medicine, has been duly elected a Diplomate of the college.

"Dr. Buening has complied to all the prerequisite requirements for eligibility, including the moral and ethical standards of our profession. He subjected himself to examination by his peers as a veterinary microbiologist," reads part of a letter from Dr. C. H. Cunningham, secretary-treasurer of the American College of Veterinary Microbiologists.

Dr. Buening received his D.V.M. degree from Purdue University in 1964 and his Ph.D. from that institution in 1969. He has been a member of the University of Missouri-Columbia faculty since July 1969.

His professional and honorary society memberships include the American Veterinary Medical Association, the Indiana Veterinary Medical Association, Gamma Sigma Delta, Phi Zeta and Sigma Xi.

OFA Con't

American Board of Radiology for unbiased evaluation of the radiograph. Dr. E. A. Corley, UMC professor of veterinary medicine and surgery and chief of veterinary radiology, also collaborates with the OFA and serves as vice-president of the organization. If a dog does not have hip dysplasia, he is certified as such.

Thirty-eight national and local breed clubs maintain liaisons to the OFA. The world's largest collection of all-breed, canine pelvic radiographs are on file with the Foundation and represent more than 80 breeds.

Nominations for Kennel Review "Winkies" are made by members of the three dog world professional groups: licensed all-breed and group judges, licensed handlers and members of the Dog Writers Association of America. Ten awards are presented ranging from outstanding dog world writer and best handler to contributions to the sport of dogs.

School Awarded Four Grants

More than \$341,167 in grants from the U.S. Public Health Service has recently been awarded to the School of Veterinary Medicine. Projects funded range from "Alcoholic Studies in Mice" to a general research support grant.

Largest of the four awards was \$180,000 marked for Sinclair Research Farm. It is for "Animal Resources for Aging and Chronic Disease Study" under the supervision of Dr. C. C. Middleton, associate professor of veterinary pathology and director of Sinclair Farm.

Portions of this sum will support interdisciplinary studies in the process of aging using Hormel miniature swine, investigation of atherosclerosis-diabetes connections and genetic links to alcoholism. Research will continue with projects such as undernutrition in young Sinclair miniature swine, and antigenic studies of swine cutaneous melanomas.

As well as providing facilities for UMC and University-wide projects, Sinclair Farm collaborates with groups from other institutions. A pediatric team from Washington University is examining brain fat in normal and undernourished swine while the Cleveland Psychological Clinic Analyzes brain enzymes. Blood genetic factors are being evaluated by Wayne State faculty and immunological work using hybrid animals is being conducted in conjunction with Rochester University.

School of Veterinary Medicine faculty active at the farm include: Dr. Middleton; Dr. M. E. Tumbleson, associate professor of veterinary physiology and pharmacology; Dr. Patrick Manning, assistant professor veterinary pathology; Dr. Russell V. Brown, associate professor of veterinary pathology; Dr. David P. Hutcheson, assistant professor of veterinary physiology and pharmacology and Dr. John B. Mulder, assistant professor of veterinary medicine and surgery.

For general research support, \$82,381 was received by the School of Veterinary Medicine. The amount of this grant is determined by research programs financed by the National Institutes of Health and the National Institute of Mental Health.



Seated, left to right, Dr. L. G. Morehouse, Dr. L. E. Boley, Dr. R. C. Meyer, Dean B. W. Kingrey, Dr. E. R. Ames, Dr. P. D. Beamer, Dr. A. H. Safanie, and Dr. B. E. Hooper, Standing, Dr. W. M. Newton and Associate Dean G. C. Shelton.

Illinois Committee Visits

Five representatives from the University of Illinois College of Veterinary Medicine visited the UMC School of Veterinary Medicine Jan. 28 to discuss curriculum and facilities.

The University of Illinois committee has been charged with the responsibility of developing a pre-clinical curriculum and making recommendations for a new building that will support and contribute to the proposed curriculum changes.

While here they discussed multi-purpose, autotutorial, and inter-

In addition to several post-doctoral fellowships, NIH and NIMH funded projects such as cerebral control of autonomic responses, fine structure and hormones of the neurohypophysis, engineering studies of a biological power cell, bioelectric activity of the oviduct *in vivo*, drug metabolism in the newborn, biologic profiles for miniature swine and pathogenesis of allergic encephalomyelitis.

For the third year, Dr. R. V. Brown, associate professor of veterinary pathology, will encourage his mice to have "just one more little drink", courtesy of the U.S. Public Health Service. "Alcoholic

disciplinary approaches used on the UMC campus and how the segmented curriculum and continuing education affect the pre-clinical years. They visited the School of Medicine as well as the School of Veterinary Medicine.

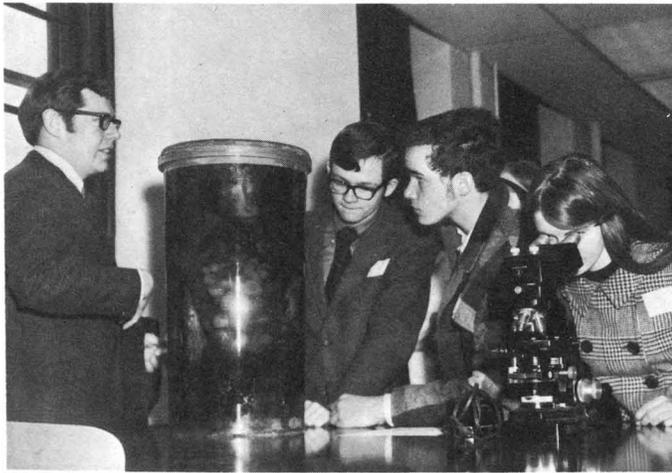
In the Illinois group were Dr. L. E. Boley, dean for academic affairs; Dr. R. C. Meyer, associate professor of microbiology; Dr. W. M. Newton, professor of physiology and pharmacology; Dr. A. H. Safanie, associate professor of anatomy; and Dr. R. D. Beamer, professor of pathology.

"Studies in Mice" is investigating the relationship between excess imbibing and genetic makeup under a \$14,624 grant.

According to Dr. Brown, "Alcohol affects the body in at least two ways: a pharmacological effect on the central nervous system (intoxication) and metabolism by the organism for energy production." Experiments show that genetically controlled metabolic factors determine how much alcohol animals drink.

Metabolic tolerance would only partly determine an individual's drinking habits in that it determines capability but has nothing to do with psychological,

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One of the many exhibits at the School during the 1970 Career Day was this preserved primate with an exposed digestive tract. One of the veterinary student tour guides explains the display.



Dr. B. W. Kingrey, dean of the UMC School of Veterinary Medicine, welcomed the more than 230 students and practitioners who participated in the 1970 Career Day.

Career Day Set for March 25

Career Day for 1971 is scheduled for March 25. This is the Eighth Annual Veterinary Career Day at the UMC School of Veterinary Medicine. A project of the Missouri Veterinary Medical Association, it is held in cooperation with the faculty of the School and the student chapter of the A.V.M.A.

Students from across the state are sponsored by local veterinarians for the one-day visit to the school. During the day they examine the School's facilities and are shown many of the duties of the veterinarians-in-training. They are also introduced to the nature of the profession as it concerns large and small animal

practices, government service and industrial veterinary medicine. Demonstrations and tours of the hospital-clinic are a part of the plans.

For information, contact Dr. George Shelton, Associate Dean for Academic Affairs, Connaway Hall, School of Veterinary Medicine, University of Missouri, Columbia, Missouri. 65201.

Sprouse Receives Grant for Study

A study of histoplasmosis, a respiratory infection, is entering its second year of research at the University of Missouri-Columbia School of Veterinary Medicine. Supported by a \$19,000 continuation grant from the U.S. Public Health Service, the project is under the direction of Dr. Ronald F. Sprouse, Associate Professor in both the School of Veterinary Medicine and of Medicine.

Histoplasmosis, which mimics tuberculosis and a variety of other chest ailments, is caused by a soil fungus indigenous to the Missouri River Valley. The abundant, highly-infectious spores from this fungus are wind-carried. When inhaled by man and animal they produce respiratory problems similar to the common cold or mild influenza.

Dr. Sprouse's objective is improvement of the skin test antigen used for detection of histoplasmosis. To date he has isolated a glycoprotein (a protein-carbohydrate compound) that elicits delayed hypersensitivity to the histoplasmosis fungus. The skin test would be invaluable in epidemiologic surveillance and clinical diagnosis plus providing a valuable tool in the study of host immunity.

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It's A Boy!

The A. R. Dommerts welcomed the first boy, Andrew Byrle, into the family on Wednesday, Feb. 10. He weighed in at 8 lb. 15 oz. The happy parents were joined by three daughters ages 3, 5, and 6 in a big welcome for the young man.

* * * * *

Vet House Needs Books

Students living in and using Vet House have been trying to accumulate some reference books and periodicals over the past year. Several faculty members have contributed to the collection which is a supplement to the Veterinary Medical Library. Additional materials are still needed, however.

Pi chapter of Phi Zeta has been collecting duplicate copies, slightly-used copies and older editions of publications for the Vet House. If you have these or any other periodicals which you would like to contribute, contact Dr. J. E. Breazile, Vet House Advisor, 103 Connaway, or students at the Vet House, 1410 University Avenue.

Three Named To Who's Who

Three students at the University of Missouri-Columbia School of Veterinary Medicine have been named to Who's Who Among Students in American Universities and Colleges. All are completing their fourth year of study.

Ben F. Ellis, son of Mr. and Mrs. B. F. Ellis, Cape Girardeau, Missouri, was admitted to the School after completing three years of pre-veterinary work at UMC. He has received the Veterinary Anatomy Award for outstanding scholarship and was initiated into Phi Zeta scholastic honorary in 1969. That year he was also the recipient of the Lassie Veterinary Award, donated by the Wrather Corp., manufacturers of Campbell Soup.

Mr. Ellis has been active in 4-H work for many years. He was a 1963 delegate to the National 4-H Livestock Conservation Demonstration Contest and a 1964 county 4-H King. He also served two years in the county 4-H council and was a 4-H camp counselor. He is married and has maintained a 3.8 grade average during his veterinary medical studies.

Leland J. Volker is the son of Mr. and Mrs. L. F. Volker, Humboldt, Nebraska. He received his B.S. degree in agriculture from the University of Nebraska, Lincoln, before entering the University of Missouri School of Veterinary Medicine. He has a 3.23 grade average, and is married.

Former treasurer and now president of the student chapter of the American Veterinary Medical Association at UMC, Mr. Volker was the recipient of several honors while at the University of Nebraska. He was awarded the Margaret K. DeBord, Regents, Sears Roebuck, Chris Sanders Memorial, Moorman Manufacturing Co., and Borden scholarships. Ranking in the upper 10 per cent of his class, Mr. Volker also received the R.O.T.C. Minute Man Award.

Mr. Volker was president of the U. of Nebr. Agricultural Executive Board; president, Burr Resident Hall; and treasurer, Nebraska Chapter of Alpha Zeta. Strong participant in intramural athletics, he was also a member of Gamma Sigma Delta Honorary; and the Nebraska Intercol-

Twelve Attend Workshop

Twelve Missouri veterinarians including seven UMC alumni attended an "Equine Surgery and Anesthesiology Workshop for the General Practitioner," a two-day short course held Feb. 20-21 at the School of Veterinary Medicine Hospital-Clinic.

Veterinarians attending were: Dr. J. D. Kinkead, Windsor, Dr. M. W. Gilmore, Springfield, Dr. A. G. Robinson, Palmyra, Dr. Edward Powell, Maryville, Dr. Charles Leezy, Cuba, Dr. Leo Rohlfing, Hermann, and Dr. Charles Vosbrink, Salinas, California.

Dr. Gerald D. Schrater, High Ridge; Dr. Wesley H. Wertz, St. Charles; Dr. B. N. Winchester, Hannibal; Dr. Hugh M. Wallace, Mound City; and Dr. W. A. Andrews, Bonner Springs, Kansas.

Faculty for the workshop included: Dr. J. H. Johnson, head of equine medicine and surgery, School of Veterinary Medicine, Auburn, Alabama; Dr. C. E. Short, associate professor of veterinary medicine and surgery and chief of anesthesiology, UMC School of Veterinary Medicine; and Dr. J. G. Merriam, instructor of equine medicine and surgery, UMC School of Veterinary Medicine.

The workshop was sponsored by the Continuing Education Program for Veterinarians, a joint effort of the School of Veterinary Medicine and the Extension Division.

Four laboratory sessions were held with the group divided into teams of four to perform selected surgical procedures including: inguinal approach to the cryptorchid castration, standing castration, cunean tenotomy, medical patellar desmotomy, standing flank laparotomy, neurectomies, abdominal hernia repair.

legiate Dairy Cattle judging team.

Ted Lock is the son of Mr. and Mrs. Ted Lock, Carrollton, Mo. He has been a student assistant in laboratory work in the UMC Department of Agricultural Chemistry. A class representative at the School of Veterinary Medicine, Mr. Lock was also a member of the Student Advisory Committee on Policy to the school administration. During his sophomore year, he initiated, designed and edited the school yearbook *Anastomosis*, during its first year on campus.

Participants also administered prolonged I.V. anesthesia with various agents and prolonged inhalation anesthesia with halothane and methoxyflurane. In each group, two veterinarians performed as anesthesiologists and two as surgeons with the roles reversed in succeeding sessions. The fourth session allowed each participant to select an area of surgery or anesthesia he wanted to repeat or try.

Each session was preceded by a lecture-discussion period on the principles of the surgical and anesthesia techniques to be performed. Some specific items discussed were: the economics of general anesthesia and surgery in the horse; introduction of orthopedic surgery for the general practitioner; special diagnostic or surgical problems; fundamentals of tranquilization and advantages and disadvantages of barbiturate anesthesia, lameness examination—facts and fantasies; cost, fee structure, minimum equipment needs, and facility requirements for routine equine surgery and anesthesia in general practice; how to control complications; and new information on intravenous anesthetics and toxic factors that may influence anesthetic responses.

Dr. Arango Visits School

Dr. M. Arango of Bogota, Colombia, South America, is working in the hospital-clinic for the next six to eight months. He attended the National University in Bogota and received his D.V.M. in July. Dr. W. A. Wolff, assistant professor of veterinary medicine and surgery, is on loan from the School and is teaching at the National University where Dr. Arango was one of his students.

Dr. Arango was in private practice from July until his arrival here the first of February. He plans to go back to Bogota either to teach or to return to his practice.

He came to the School to get practical experience in large animal medicine and is presently working with the large animal ambulatory clinic.

Film Series Scheduled

A series of short teaching films is being shown to interested students and faculty at 12:15 p.m. every Friday. The twelve week series began Feb. 26. Several films are shown each week during the 20 to 30-minute session at the Clinic Auditorium.

The films are a series of 96 single-concept films produced by the Purdue University College of Veterinary Medicine. The Educational Resources Committee of the School of Veterinary Medicine has purchased a copy of the series which will be available for use by the faculty.

Dr. E. R. Ames, director of educational resources and associate professor of veterinary microbiology, said the committee will ask students and faculty to evaluate the usefulness and value of each film to the School curriculum.

The films can be broadly categorized into five subjects: Radiological techniques, suture patterns, surgery preparation and technique, clinical pathology, and parasitology. Subjects for each week are announced in advance.

Grants Con't

moral or social factors involved. "Some individuals may be, metabolically speaking, either incapable of heavy drinking, or potential alcoholics," Dr. Brown continued.

Now in its third year, the "Research Animal Diagnostic Laboratory" project has been awarded \$64,352 under the direction of Dr. J. E. Wagner, associate professor of veterinary pathology.

Utilizing space in the Veterinary Medical Diagnostic Laboratory, this project provides consultative services to personnel engaged in research requiring laboratory animals at the four campuses of the University of Missouri and other regional paramedical research institutions. The laboratory conducts in-depth studies destined to increase understanding of spontaneous diseases of research animals.

Another important function of the laboratory is the preparation of reference material as teaching aids. Additionally the laboratory serves as a residency station for training of post-doctoral fellows in Laboratory Animal Medicine. Also, third and fourth year professional veterinary medical students rotate through the Research Animal Diagnostic Laboratory as a portion of their clinical experience.

The laboratory maintains constant surveillance of specimens of animal origin for potential applications as research models for study of similar diseases in man.

Participating in this work are: Dr. B. E. Hooper, chairman and associate professor of veterinary pathology; Dr. L. G. Morehouse, director of the Veterinary Medical Diagnostic Laboratory and professor of veterinary pathology; Dr. R. F. Solorzano, associate professor of veterinary microbiology; and D. R. Owens, research associate in veterinary microbiology.

Pets Attend Rabies Clinic

The UMC School of Veterinary Medicine Hospital-Clinic participated with all veterinary hospitals in the Columbia area in holding a vaccination clinic for rabies on Saturday, Feb. 6.

It was decided to hold the clinic on a Saturday for the convenience of pet owners to encourage them to have their pets vaccinated.

Dr. J. D. Rhoades, assistant professor of veterinary medicine and surgery, said the clinic was held in an effort to keep dogs and cats in the community vaccinated since there has been an increase in the incidence of rabies in wildlife in the area. While there has not been an increase in the number of pets with rabies, it is hoped this can be prevented with widespread coverage of the vaccination.

Two Faculty Members Speak At Annual MVMA Meeting

Two members of the School of Veterinary Medicine faculty at the University of Missouri-Columbia participated on the program of the Missouri Veterinary Medical Association held on Feb. 7, 8, 9 in Jefferson City.

Dr. C. J. Bierschwal Jr., professor of veterinary medicine and surgery, discussed fetotomy (embryotomy) at a large animal session on Monday, Feb. 8. He used super 8mm film to show fetotomy techniques which he learned while on sabbatical at the University of Utrecht, Utrecht, Holland. The technique is now being used in the Veterinary Medicine Hospital-Clinic. Negotiations are going on in this country to produce the instrument used in this technique, a fetotome, which was developed at the University of Utrecht.

Dr. R. E. Brown, chairman and professor of veterinary medicine and surgery, discussed fundamental surgical techniques with small animals on Tuesday, Feb. 9. One of the areas he covered was an approach to publication of clinical techniques which included midline abdominal

closure, cephalic venipuncture, catheterization of the male cat, castration of the male cat, and hematoma of the ear.

Dr. Edward C. Mather, associate professor of veterinary medicine and surgery, presided at one of the sessions. He was a member of the MVMA program committee which planned the sessions for the annual meeting.

Other areas were cesarian section of small animals; the miller's knot for ligation; the point of entry for intermedullary pinning of the femur, tibia and humerus with an explanation of regional anatomic boobytraps; declawing the five-day-old puppy; and feline restraint in procedures such as oral administration of medicine, oral administration of liquids subcutaneous injections and intramuscular injections.

Dr. Bonnard L. Moseley, associate professor of veterinary pathology, was re-elected to the office of secretary-treasurer.

Many faculty members and students from the School attended.

Chemagro Aids Equine Research

A \$500 grant-in-aid from the Chemagro Corporation, Kansas City, has recently been received for the study of equine anesthesia at the University of Missouri-Columbia School of Veterinary Medicine. The project is under the supervision of Dr. C. E. Short, associate professor of veterinary medicine and surgery and chief of veterinary anesthesiology.

Dr. Short's studies will hopefully isolate the effects of certain drugs and anesthetic combinations on the cardiopulmonary system of the horse. A series of 14 clinical evaluations plus studies on heart and respiratory rates, responses, induction time and duration of anesthetic will be conducted on each subject.

Moving Time Is Here Again

Spring will see many moves—facility-wise—at the School of Veterinary Medicine. Offices and sections from the departments of microbiology, pathology, anatomy and medicine and surgery have been moved. The small animal receiving area at the Veterinary Hospital-Clinic, too, has been renovated.

The Department of Veterinary Microbiology has moved partially into the western section of Connaway Annex. That's still TD-7 on University mailing. Laboratory Animal Resources, formerly at 823 Virginia St., is entrenched in the eastern wing and several members of the departments of veterinary medicine and surgery, anatomy and pathology now have office space there.

Future plans for the eastern wing call for Veterinary Medical Continuing Education to combine its offices from Connaway Hall and the clinic there. That move will come later this spring.

At the hospital-clinic remodeling has separated veterinary medical records from the receiving desk for increased efficiency. That division is now occupying the former student learning center which has been moved to the clinic auditorium. Office space for clinical pathology has also been marked out of the former learning center.

Former Dean Receives MVMA Life Membership

Dr. A. Holland Groth, former dean of the School of Veterinary Medicine, was presented a lifetime membership in the Missouri Veterinary Medical Association at its 79th Annual Convention last week in Jefferson City.

He received the honor in recognition of the 40 years of service to the veterinary profession.

Dr. Groth was instrumental in separating the School of Veterinary Medicine from the College of Agriculture Sciences and was named its first dean.

In 1963 he was named dean emeritus and professor of veterinary pathology. He retired in August 1968.



— About the Faculty —

Dr. L. C. Murphy, associate dean for veterinary research, participated in an NIH site visit for the Animal Resources Division at the University of Southern California Medical School, Los Angeles; and the University of California at San Francisco, January 2-6.

Participating in the 3rd Annual Biochemistry and PYCRI Symposium *Dr. Olen R. Brown*, associate professor of veterinary microbiology and investigator at the Space Sciences Research Center, was in Miami, Fla., January 17-22.

Dr. Donald Howard, research associate in veterinary medicine and surgery, was in Park City, Utah, February 2-6, participating in the American College of Veterinary Surgeons 6th Annual Meeting. He presented two papers on ophthalmology at the Oklahoma Veterinary Medical Association meeting February 7-9, in Tulsa.

Dr. Donald R. Howard, research associate in medicine and surgery, attended the American College of Veterinary Surgeons, Feb. 3-8 in Salt Lake City.

Dr. H.-D. Dellmann, professor of veterinary anatomy, presented a seminar on "Morphologic and Functional Investigation on Hypothalamo-Hypophysial Neurosecretory Systems" at the Max Planck Institute for Hirnforschung (for brain research) in Frankfurt, Germany on Dec. 12.

At the same time Dr. Dellmann conducted a two-day training session in electron-microscopy techniques. Dr. Dellmann is on sabbatical in Strasbourg, France, with the Laboratoire de Physiologie Generale.

Dr. C. J. Bierschwal, professor of veterinary medicine and surgery, was in Auburn, Ala., January 20-23, to deliver a paper, "An Approach to Infertility in the Beef Cow-Calf Herd." He spoke at a Symposium on Bovine Infertility.

"Equine Inhalation Anesthesia" was presented by *Dr. Charles E. Short*, associate professor of veterinary medicine and surgery, as part of a continuing education program at the Auburn University School of Veterinary Medicine. He was in Auburn, January 23-26.

Speaking to the Lincoln County Pork Producers Association, *Dr. Charles E. Martin*, associate professor of veterinary medicine and surgery was in Millwood, Mo., January 15-16. He spoke on "Diseases Affecting the Sow at Parturition." January 7-9 *Dr. Martin* was in Des Moines, Iowa, at a meeting of the National Pork Producers Council Research Coordination Committee.

"The Role of the Small Intestine in Diarrheal Diseases" was presented by *Dr. B. E. Hooper*, associate professor and chairman of veterinary pathology, January 17-19, at the University of Georgia College of Veterinary Medicine. *Dr. Fred Troutt*, formerly of the UMC School of Veterinary Medicine, and *Dr. Hooper* jointly presented a seminar at the same meeting.

Dr. Charles R. Short, assistant professor of veterinary physiology & pharmacology and medical pharmacology, attended the

Gelman Chromatography Short Course, January 27-30 in New Orleans, La.

Dr. A. A. Case, professor of veterinary medicine and surgery, presented an illustrated lecture on disease conditions common to piglets and their dams during an in-service training session in Butler, Mo., December 15.

Attending a course sponsored by the U.S. Armed forces Institute of Pathology, *Dr. L. D. Olson*, associate professor of veterinary pathology, was in Washington, D.C. February 1-5. The course was "Neuropathology." February 8-11, he was in Las Vegas, Nev., participating in the Western States Animal Health Conference and the Western States Veterinary Conference. The Intermountain Veterinary Medical Association sponsored the conferences.

Dr. Richard E. Hoffer, associate professor of veterinary medicine and surgery, spoke to a small animal surgery short course on "Surgery of the Liver, Pancreas, Duodenum, and Pylorus" in San Francisco and also attend the American College Veterinary Surgeons in Salt Lake City the week of Feb. 4-11.

Dr. C. J. Bierschwal lectured on "Reproductive Problems in the Mare" on Feb. 4 to an Equine Short Course in Kansas City.

Dr. A. W. Dobson, assistant professor of veterinary medicine and surgery, and *Dr. W. F. McCulloch*, professor of veterinary microbiology and director of veterinary extension, were in Joplin, January 28-29, to present "Epidemiology of Leptospirosis."

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Derivatives - Access copy

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