

# MISSOURI ALUMNUS

JANUARY-FEBRUARY 1971

## VET MED SECTION

### 1970-71 Enrollment Totals 65 Students

When this School first began operating, veterinary classes held thirty students. In 1964, the enrollment leaped to twice that. This fall it jumped again, but only by five.

It's a little cramped, but those 65 students will be fine future veterinarians. There are seven women and 58 men, 20 are married.

To date 629 veterinarians have been graduated from the School of Veterinary Medicine by this, its 21st year of operation. Now there are several sons and daughters of graduates among the ranks of future veterinarians.

### Favorable Report From NIH Team

An optimistic report from the NIH Division of Educational and Research Facilities Site Visit teams almost made new facilities a reality for the School of Veterinary Medicine. Two different groups examined the school's facilities, faculty and programs before returning their decision.

A letter from the Department of Health, Education and Welfare stated that 66.67 per cent (approximately \$10.8 million) of funding for

new facilities for the School of Veterinary Medicine would be covered by federal funds. However certain stipulations had to be met.

"This is not a notification of award of funds," the letter read. "Many factors such as the availability of matching funds, the priority rating and the number of other approved applications, as well as the amount and availability of federal funds, influence the order and timing as well as the actual award."

Extenuating circumstances blocked even preliminary construction this year. Future plans propose building a veterinary complex in attachable units. Thus the facility could be built as funding became available.

### New Curriculum Set for June

"It's easier to move a cemetery than change curriculum," once commented a University faculty member. "The departments get locked into 25-30 credit hours and it becomes sacreligious to tamper with them. If they feel what they've got works, why change?"

But those statements also reflect caution. As the only Missouri institution for veterinary

education, the School of Veterinary Medicine feels heavily its responsibility for the veterinarians of tomorrow. That's why months of hard work are behind a radical curricular change here. Instructors must be sure the curriculum meets demands of the future.

Starting June 2, the School begins a new curriculum, without moving any tombstones. It is the result of a student proposal worked to practicality by all faculty and the student advisory board members. Many grueling months and long hours of study and testing are behind the abrupt change.

It is a block program of learning, dividing the final two years into 12, two-month blocks of one subject each. Instead of the conventional semester time blocks containing four to seven subjects, students will handle one subject, such as small animal surgery, for a solid eight weeks.

For graduation, students must successfully complete eight of the ten subjects in a two-year period. They may take the segments in any order and arrange the other four blocks to suit their needs. If a student feels weak in a certain area or wants to specialize, he can retake a block or pick up one in a related area.

Many students seek summer jobs for additional practical experience, veterinary students

included. With the new block program, they can schedule jobs at the time of year which best suits them and the practitioner.

The segmented curriculum idea was first presented about two years ago by several students in their fourth year of veterinary school. The philosophy behind the proposal was published in the Missouri Veterinarian, a student magazine, followed with a note from the School curriculum committee.

"The block system would tend to train students in more depth and give more critical training in clinical medicine. Why not break the trend away from research orientation in veterinary education and swing back to the task at hand, namely, training veterinarians for practice," was the gist of the article.

The attached note stated in part: "Logical questions that must be answered in any major curriculum revision are 1) Will it produce a better veterinarian? 2) Can the School, with its current physical plant, equipment, staff and operating budget, do a more effective job of teaching under a new curriculum structure, or is the old one preferable? 3) If a consensus is reached that a new curriculum structure is desirable, what is the cost in terms of staff, facilities, equipment and budget for its

implementation?"

Such were the jumping off points for the curriculum change. They were answered as witnessed by unanimous faculty approval of the segmented curriculum last fall.

Many instructors are enthusiastic over smaller classes and less teacher competition for student time. The block program trims class size to six to ten students per instructor, a perfect number for small seminars where personal attention can be given each student.

Supplementing instructors will be learning carrels. The autotutorial units are set up with 'mini-lessons' on color slides with tape cassettes explaining them. The latest operating procedures, disease discoveries and treatment methods are filmed and stored for immediate reference. With these educational resources, students have unlimited opportunities to expand their knowledge beyond the base of the classroom.

Besides aiding students, the learning carrels are great for a practitioner's continuing education. If a veterinarian wants a refresher in some speciality, he might spend a day or two at the School of Veterinary Medicine reviewing new practices.

If he needed more detailed knowledge or felt a complete course was necessary for continued excellence in his work, the practitioner could take a sabbatical from practice, a student on a free block might be available to fill in while one partner furthered his education.

Students, faculty and practitioners aren't the only ones who benefit from the new segmented

curriculum. The public will receive more extensive services.

Previously, the clinic had to hire summer assistants while students were on vacation. Often it ran short-handed. The segmented curriculum will now rotate third- and fourth-year students at an even number through the large and small animal clinics all year long. Client services will stay top-level while buildings and equipment are put into constant use.

Many committees, long hours and thoughtful hard work have gone into the segmented curriculum. Positive and negative aspects were carefully weighed before any facet was approved. To this end, faculty and students worked together. Each suggestion was examined by both sides to judge its workability. It is a radical change from the old system, but it was accomplished with full understanding and consent.

## 3 Lab Units Begin Service

Three connected temporary modular laboratory units were recently put into service by the diagnostic laboratory. Although they doubled work space, Dr. L. G. Morehouse, director of the diagnostic laboratory and professor of veterinary pathology sees them as 'another temporary measure.'

In the past year diagnostic work volume has jumped 40 per cent in the avian section, 18 per cent in general mammalian necropsy and 34 per cent in the research animal diagnostic section.

"The first and most urgent purpose was to help relieve the overcrowded working conditions in the three original modular units," Dr. Morehouse continued as he explained the additions.

Located directly south of the Veterinary Hospital-Clinic, the diagnostic laboratory was first organized into a unit three years ago. It serves clinicians in the School of Veterinary Medicine, veterinary practitioners, livestock and poultry interests, companion animal interests, wildlife conservationists and State-Federal animal disease regulatory officials. One section of the laboratory devotes full time effort to serving scientists using animals in their research on the four University campuses.

It is an interdisciplinary laboratory in which personnel from various departments and speciality areas such as bacteriology, pathology, virology and toxicology examine specimens for diagnosis. Too, it serves an important teaching function for veterinary medical and graduate students.

Commenting on the teaching services, Dr. Morehouse feels that the increased space will allow the diagnostic area to participate more effectively in the segmented curriculum and graduate education programs. "Before we had students, clients, staff and boxes crowded into a small laboratory area and that made learning difficult."

One feature of the additions is a seminar/learning center set aside specifically for students in the diagnostic pathology and

special species medicine block of the segmented curriculum. It provides study space that wasn't previously available in the diagnostic laboratory, autotutorial carrels and reference materials.

Taking up residence in the new units are four laboratory sections -- histotechnology, clinical toxicology and microbiology and a support laboratory for the research animal diagnostic laboratory. Five faculty members and their supporting staffs are housed there.

Academic personnel are Drs. R. F. Solorzano, associate professor of veterinary microbiology, senior virologist of the laboratory; E. L. McCune, associate professor of veterinary microbiology, senior bacteriologist; J. E. Wagner, associate professor of veterinary pathology, who handles laboratory animal pathology; H. E. Berrier, associate professor of veterinary pathology, clinical toxicology; and L. R. Nelson, assistant professor of veterinary medicine and surgery and campus veterinarian for experimental animals, laboratory animal diagnostic service/graduate training program.

## Edgar Ebert Killed

A very sad note dampened last summer for the School of Veterinary Medicine. Dr. Edgar F. Ebert, a nationally known equine practitioner and well-loved faculty member, was killed in a tractor accident on his farm near Rocheport, June 29, 1970.

Dr. Ebert served the School for 19 years in many capacities. He was director of clinics from 1950 until 1956, and

a former chairman of the department of medicine and surgery. He held a professorship in that department.

In 1966, Dr. Ebert was named Missouri Veterinarian of the Year and in 1965, recognized as Cosmo of the Year by the Columbia

Cosmopolitan Club. He had also been named to Who's Who in America.

A memorial fund has been established in honor of Dr. Ebert and contributions may be sent to the University of Missouri - Columbia School of Veterinary Medicine in care of Dr. C. J. Bierschwal, Veterinary Hospital Clinic.

## Short, Jensen Help Form New Groups

Two faculty members have made their mark on the veterinary profession as founding fathers.

Dr. C. E. Short and Dr. H. E. Jensen, both in the department of veterinary medicine and surgery, are charter members of a couple of new speciality organizations.

Dr. Short is the first president of the American Society of Veterinary Anesthesiology. It was founded in June during the 107th annual American Veterinary Medical Association convention. Goals of the organization are to improve the teaching of veterinary anesthesiology, encourage new knowledge through increased research, assist the practitioner and cooperate with industrial concerns in the area of anesthetics. Dr. Short is an associate professor and chief of veterinary anesthesiology.

The American College of Veterinary Ophthalmologists was chartered in November with Dr. Jensen as a

founding diplomate and first vice-president. It was established to provide more information and promote advanced training in the field and improve the general areas of veterinary ophthalmology. Dr. Jensen is a research associate and chief of veterinary ophthalmology.

Both organizations were established along American Veterinary Medical Association guidelines for specialty groups.

## Club Gives \$500

Five hundred dollars has been presented to the school in recent months by the Southeast Missouri Kennel Club. Some of it is in recognition of a 1953 graduate, Dr. Vern Owens, Jackson, Missouri.

A total of approximately \$1600 has been donated to the clinic area by this kennel club over a period of time. The gifts represent proceeds from the club's biannual dog shows, recognition of services rendered by Dr. Owens, and as private gifts from members.

## Course Examines Bull Soundness

Pioneers didn't die out with the conquering of the West. Continuing education and the clinic reproduction section are exploring practical new methods for teaching breeding soundness in the bull.

Using the newest trend in education, Dr. C. J. Bierschwal professor of veterinary medicine and surgery, coordinated a twelve-lesson, multiple-author correspondence course on "Infertility and Breeding Soundness

Examination of the Bull." Members of the American Veterinary Medical Association Study for Breeding Soundness contributed to the course's assignments. The material itself was taught via miniature slide projectors and cassette tape recorders in kits of three lessons.

Seventeen practitioners participated in the course. They were separated into two groups, one of which met with Dr. Bierschwal for question and answer sessions. The other studied independently.

This is the first time a slide-illustrated, multi-author course has been offered here. "It was designed as an in-depth study," according to Dr. Bierschwal. Previously such subjects were condensed into speed, short courses. Statistics revealed, however, that in the last eight years, eight courses had been given with the same practitioners attending to repeat the material.

## Canine Help for Child Psychiatry

Veterinary medicine has branched out into a new area of operation. Child psychotherapy, using a canine psychiatrist, was recently initiated at the Mid-Missouri Mental Health Center here with the assistance of Dr. Kenneth Niemeyer, associate professor of veterinary medicine and surgery.

The child care unit of MMMHC deals with emotionally and behaviorally maladjusted children between the ages of 5 and 16. Approximately twenty children live in the pleasant ward quarters and others visit on an out-patient basis.

Since many of these children have difficulty relating to staff and other children, Dr. Fernando Tapia, professor of psychiatry and director of MMMHC, originated the plan for a four-legged psychotherapist in hopes that the children would feel more comfortable with him.

Drs. Niemeyer and Tapia considered many breeds but finally settled on a Labrador. The veterinarian suggested a large dog with short hair and most important, a gentle disposition. A little investigative work discovered a Labrador named Smudge in Springfield, Missouri.

Dr. R. E. Hoffer, associate professor of veterinary medicine and surgery, and Dr. Niemeyer supervised inoculations and other physical treatment before allowing her onto the ward.

Reaction from the ward: "Smudge is Groovy"!

## Bioengineering Gets Increased Interest

Tick, tick, tick, tick... George is that your heart beating on my radio?

If it is George is probably an experimental animal and the radio is monitoring a battery that was surgically implanted in his body.

Bioengineering studies such as this are drawing the interest of several School of Veterinary Medicine faculty members. In fact two helped form a bioengineering interest group, engineering in medicine and biology, to further all three areas. Dr. Allen W. Hahn, professor of veterinary medicine and surgery and

investigator at the Space Sciences Research Center, and Dr. Saul Larks, professor of veterinary physiology and pharmacology pulled together men from three fields for the active group. Individually the two have unique projects underway that blend engineering and veterinary medicine.

Dr. Hahn is working with George and the radio. He hopes to perfect a power cell or battery that will power electrical devices within the body for a long period of time. Plans call for telemeters (batteries) so tiny that the animal carrying them can range freely without wires or ties. Dr. Hahn's research is financed by the National Heart Institute.

Dr. Larks, supported by the National Institute of Child Health, Center for Population Research, is concerned with biological-electric activity of the oviduct in vivo. In his research he is using sensors and eventually telemeters similar to Dr. Hahn's that register the bio-electric signals that trigger muscle movements and pressure changes.

Assisting both men is Dr. Richard E. Hoffer, associate professor of veterinary medicine and surgery. He handles many of the surgical implantations for their bioengineering research. Consultants from medicine and engineering also add their efforts.

Previously during the summer, third- and fourth-year students liked to work for practitioners and veterinarians enjoyed learning the latest developments in the field. Since the School is switching over to the segmented curriculum, many students will be

taking their free (vacation) blocks at other than the summer months. Because of this, the practitioners they had been working for may be unable to fit them into their plans.

To alleviate this problem the School of Veterinary Medicine is establishing a "Registry of Opportunities." Practitioners in all phases of veterinary medicine who are interested in student help will be listed. If you would like to have your name included in the registry please send a note to the Office of the Dean, 104 Connaway Hall, University of Missouri - Columbia, Mo., 65201. It should describe your operation according to size, and details you think would encourage student interest.

## 24-Month Residence Programs Scheduled

Beginning March 1 and July 1, 24-month veterinary residence training programs will be available in the following areas: medical services (radiology, anesthesiology, or clinical pathology), medicine (large or small animals), surgery (large or small animals) obstetrics and reproductive diseases and ophthalmology.

These were established to meet the increased need for specialization in veterinary medicine. After the initial program, training may be continued for an additional 12 months to partially fulfill board requirements.

The first year of the training program may, depending on the resident's background, involve rotation among supporting disciplines, although

residents at all times have a primary responsibility to their chosen disciplines. Residents will be appointed on a yearly basis as resident veterinarians and enjoy the same compensations, such as insurance, social security, etc. as accompany academic appointments.

The program will be centered in the Veterinary Clinic, however the Ellis Fischel State Cancer Hospital, the Medical School residency program and other divisions of the University of Missouri - Columbia offer additional training opportunities.

General residency guidelines are:

1. Residents will work under the supervision of senior staff members and participate in the daily activities of the medical and surgical services.

2. Residents will provide assistance in the instruction and supervision of veterinary students and assist in training junior residents. Emergency care to large and small animals during off-hours will be provided by residents on a rotating basis with assistance from assigned veterinary students.

3. With committee approval, residents may enroll in up to five semester hours of formal course work (not to exceed 10 hours per year) which are applicable to a specific section and may be compatible with a later degree program.

4. Participation will be required in regularly scheduled seminars. These will involve all residents and participating faculty as an integral part of the educational experience.

A resident's performance will be judged by a committee consisting of his major advisor, an

advisor from an allied clinical discipline and one from supporting faculty with the chairman of the department of medicine and surgery serving as an ex-officio member. Specialty board certification, where applicable, will serve as a quality measure of the program.

Also before a certificate of completion is awarded, the resident must prepare a paper suitable for publication in a refereed journal.

Selection of residents will be made on the basis of academic achievement and letters of recommendation.

Applications should be made to the chairman of the Department of Medicine and Surgery.

## Dr. Brown Named

Dr. Roger Brown, professor of veterinary medicine and surgery, has recently been appointed chairman of the department of veterinary medicine and surgery at the Columbia campus School of Veterinary Medicine.

He has been at the School since 1969, and has served in various capacities, most recently as director of educational resources and on the curriculum committee.

Dr. Brown received his DVM degree in 1950, from Michigan State University and his MS degree from there in 1960. He was involved in private practice and teaching at MSU from 1951-1963. In 1964, Dr. Brown was granted his PhD degree from Purdue University. Until he joined the faculty here, he served as assistant director of space utilization at MSU.