

SCHOOL OF VETERINARY MEDICINE

FACULTY NEWSLETTER

UNIVERSITY OF MISSOURI - COLUMBIA

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Biomedical Communications Important to Veterinarians

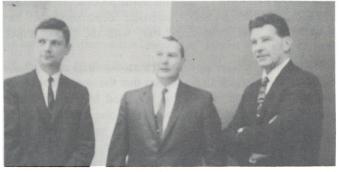
"The most important tool or aspect of communications is people," stressed Dr. Norman H. Hutton, a veterinarian from Iowa State University in a speech January 28 at the School of Veterinary Medicine here.

Dr. Hutton cited many personal experiences in his talk on "Coordination of Biomedical Communications Activities in Veterinary Medicine." He discussed audiovisual materials, learning resources, library materials and the tools needed to bring these educational items to all people.

"Human resources are of great value and must be utilized to the fullest extent" said Dr. Hutton. "The expertise of each school, resources group or governmental agency must be shared with other schools or groups desiring information on a specific subject." He feels that each organizational unit must work together on all levels to help utilize their available resources. In this way the new technology can be studied and used where applicable.

Slides were shown of the operation at the Oral Roberts University in Tulsa, Oklahoma where many of the devices Dr. Hutton mentioned were being utilized for teaching and learning purposes.

Also an important part of biomedical communications is the computer according to Dr. Hutton. He said, "Our students of today are going to be living with these machines and a computer is going to be affecting them every day of their lives."



Dr. William McCulloch (left), director of veterinary medical continuing education, introduced Dr. Hutton to the faculty including Dean Kingrey (right).

Dr. Hutton is presently an instructor in veterinary pathology and in computer science at Iowa State University, Ames. He also coordinates the biomedical communications section for the dean of the College of Veterinary Medicine there. He received his D.V.M. degree from Iowa State University in 1966 and is working on a masters degree in computer science. While an undergraduate and professional student from 1960-66 he worked part-time in the ISU Computation Center where he broadened his interest in this area.

The author of several publications, Dr. Hutton has presented papers and speeches at many national, state and local meetings. He also provides consulting services for various groups.

Drs. Strong, Marshak Complete Lecture Series

Two guest speakers will complete the lecture assembly series for the School of Veterinary Medicine this year.

Dr. M. Jerome Strong of Baylor University College of Veterinary Medicine at Houston, Texas spoke on "Cardio-Pulmonary Management During Anesthesia" February 20 in the Veterinary Hospital-Clinic.

Dr. Strong is an associate professor in the Division of Anesthesiology in the Department of Surgery at Baylor University. He has also worked in the area of experimental anesthesiology and has been closely associated with the cardiac surgery and transplantation work at Baylor.

The third guest lecture for the school year will be presented by Dr. Robert R. Marshak, professor and chairman

of clinical sciences at the University of Pennsylvania New Bolten Center in Philadelphia, at 7:30 p.m., March 6 in the UMC School of Medicine Auditorium. Dr. Marshak will talk about "Studies on Bovine Leukemia."

The annual Career Day for the School and the MVMA is scheduled for March 27. With increasing numbers of interested students each year the program has been slightly altered to accommodate everyone in two groups.

An auditorium orientation will be presented both in the morning and in the afternoon. Tours will also be presented twice. A catered lunch will be served at the New Livestock Center south of the Veterinary Medical campus.

Researchers Uncover New Facts On Breech Births in Humans

Two faculty members of the School of Veterinary Medicine have advanced a theory that could lead to a reduction in percentage of difficult breech births in humans and have developed a method of obtaining a partial physical examination of babies before birth.

Dr. Saul D. Larks and his wife and research associate, Mrs. Golda Larks, have published their findings in scientific journals after studies at Cook County General Hospital in Chicago between 1962 and 1966. Their research on fetal physiology, fetal electrocardiograms, and the birth process encompassed some 5,000 pregnancies. Obstetrical departments of the hospital and UMC cooperated fully with the Larks in their research.

After their studies of breech (buttocks first) and cephalic (head first) births, the Larks suggest that the normal rotational process of the unborn child is regulated by the endocrine glands. If certain hormonal imbalances occur during part of the pregnancy, the result is the persistent breech presentation and delivery because the normal rotational pattern has been disrupted. With this information, scientists may further attack the problem of breech births, which occur in about four per cent of the nation's births each year.

Among old theories on breech births, the most frequently cited is that of a kind of mechanical adjustment of the fetus to the pear-shaped uterus.

The Larks' new concept and supporting evidence is published in the January 15 issue of the *American Journal of Obstetrics and Gynecology* under the title of "Quantitative Studies in Fetal Electrocardiography. III. Comparison of Breech and Cephalic Presentations, Endocrine Basis for Fetal Rotation."

Other significant observations were (1) there is a greater than usual probability of breech presentation among twins; (2) fetal electrocardiograms in breech position are more likely to show small or absent signals; (3) breech-born infants show an increased probability of death within two years; and (4) breech-born babies have a smaller mean birth weight.

In their studies leading to the partial physical examination of babies before birth, the Larks extended electrocardiographic knowledge back into pregnancy. They obtain fetal electrocardiograms through the abdomen of the mother. The electrocardiograms show possibilities of predicting certain components of the newborn's E.K.G. before birth.

The Larks obtained EKGs on unborn babies as early as 10-1/2 weeks after estimated date of conception. From their study, and from previous research, they have determined that it is important medically to know the sex of an unborn baby. They currently are attempting computerized research along this line.

Their current findings, recently published in the international journal Cardiologia in Switzerland under the title of



Dr. and Mrs. Saul D. Larks

"Prenatal Prediction of Neonatal Electrocardiographic Patterns," are expected to throw additional light upon the little understood condition of life of the fetus before birth.

The researchers are members of the veterinary physiology and pharmacology staff at UMC but their studies date back to research at the University of California at Los Angeles, the University of California at Davis, and, for Dr. Larks, to Marquette University in Milwaukee.

Dr. Larks, a bioengineer, has degrees from Springfield College (A.A.), the University of Illinois (B.S.), Northwestern University (M.S.) and the University of California (Ph.D). Mrs. Larks holds a B.S. degree from the University of Illinois and did postgraduate work at the University of North Carolina when awarded an Illinois fellowship in public health education while serving as a staff bacteriologist for the Illinois Department of Public Health.

<u>Dr. George C. Shelton</u>, associate dean, has been appointed to the Advisory Board of the *Southern Veterinarian*. Geared primarily to the needs of the practitioner, the *Southern Veterinarian* is a non-profit publication with a circulation figure of about 8,000 which includes veterinarians in the southern United States. The editorial staff is seeking technical articles of interest to the practitioner. If you would like to submit any papers, please send them to *Southern Veterinarian*

2713 Hanover Circle Birmingham, Ala. 35205

—About the Faculty—

Dr. Arthur A. Case, professor of veterinary medicine and surgery, participated in a conference of the American College of Veterinary Toxicologists January 22 in Las Vegas. He also participated in workshops of the Intermountain VMA January 23-25 in Las Vegas. On January 25 he presented table clinics and simple field tests for poisons.

Dr. Charles E. Martin, assistant professor of veterinary medicine and surgery, presented a paper on "Why Cows Fail to Show Heat" at the Dairy Fieldman's Conference held January 24 in Columbia. He also attended the meeting of the NCR-64 Technical Committee on "Mastitis-Metrites-Agalctia Complex in Sows" February 3-5 in Madison, Wisc.

Three faculty members recently have been awarded their Ph.D. degrees. *Dr. Charles R. Short*, instructor in veterinary physiology and pharmacology, received his degree in the area of pharmacology. His thesis was "Drug Metabolism in Newborn Studies." He will continue teaching and research in the School's Section on Pharmacology.

Another pharmacology degree went to *Dr. Frederick W. Oehme*, research associate in veterinary physiology and pharmacology. He wrote his dissertation on "A Comparative Study of the Bio-Transformation of Excretion of Phenol." Dr. Oehme returned to Kansas State University where he is teaching toxicology at the Dyskstra Veterinary Hospital in the College of Veterinary Medicine.

Dr. Charles W. Purdy, research associate in veterinary microbiology, completed requirements for the Ph.D. degree in January. His dissertation was entitled "Induction and Passive Transfer of Experimental Allergic Encephalomyelitis." Dr. Purdy is now director of immunologic research for the Philips-Roxane Inc. in St. Joseph, Mo.

Dr. Harlen E. Jensen, research associate in veterinary medicine and surgery, presented papers on ophthalmology at three different places in January. He presented two papers at the Wisconsin VMA Jan. 20-23 in Milwaukee; a two-day seminar Jan. 25-28 to the veterinarians of northern Florida in Jacksonville, and a paper Jan. 28-30 to the veterinarians of southern Florida in Ft. Lauderdale.

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Dr. LeRoy D. Olson, associate professor of veterinary pathology, will attend a course on "Comparative Neuropathology" March 10-14 at the Armed Forces Institute of Pathology in Washington, D. C.

Dr. James E. Breazile, professor of veterinary anatomy, presented a paper on "Canine Pediatric Neurology" Feb. 4 at the annual meeting of the Oklahoma VMA in Tulsa.

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Three members of the Department of Veterinary Medicine and Surgery attended a meeting of the American College of Veterinary Surgeons Feb. 5-7 in Philiadelphia, Pa. Those attending were *Dr. Mark P. Rines*, professor and chairman; *Dr. John P. Hickcox*, assistant professor, and *Dr. Richard E. Hoffer*, associate professor.

Dr. Charles E. Short, assistant professor of veterinary medicine and surgery, has been invited to give papers and seminars at several places from February 26 to March 9. He will present two papers entitled "Surgical Procedure of the Male (Bovine) Genitalia under Electroanesthesia" and "Comparison of Carotid and Cerebral Circulation with Barbituate and Electroanesthesia" on February 26-28 at the annual Neuroelectric Conference in San Francisco, Calif. He was a member of the Conference's organizing committee.

From March 2-5 he will present a paper on "Considerations in Anesthetic Management for Medical Experimentations" at the 43rd International Congress of the Anesthesia Research Society in Miami, Fla.

While attending post-congress sessions of the Society in San Juan, Puerto Rico from March 6-9, Dr. Short will present a special seminar on "Inhalation Anesthesia in Small Animals" with live demonstrations for the Puerto Rico VMA.

Dr. Thomas M. Eagle, associate professor of veterinary medicine and surgery, attended the Kansas VMA meeting and executive board meetings January 25-28 in Wichita, and the Oklahoma Veterinary Medical Association meeting and executive board sessions February 1-4 in Tulsa.

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School Hosted Its First Veterinary Radiological Workshop

A Radiology Workshop for veterinarians was held February 15-16 at the Veterinary Hospital-Clinic.

Two members of the American Board of Veterinary Radiology and a radiological technician directed the two-day workshop on principles of radiology and basic radiographic interpretation.

Geared to the veterinary practitioner, the program was presented by Dr. E. A. Corley, professor of veterinary medicine and surgery; Dr. J. W. Ticer, associate professor of veterinary medicine and surgery; and Mr. J. W. Evans, radiological technician.

This workshop was sponsored by the UMC School of Veterinary Medicine and the Extension Division.

Second Faculty Wife, Mother of Four Dies

Mrs. JoAnn Swenson, 35, died January 19 at Boone County Hospital after two months illness.

Her husband, Dr. Gene H. Swenson, is a research associate in veterinary microbiology in the section of bacteriology. The Swensons moved to Columbia in August, 1968 from Pecatonica, Ill.

Immediate survivors include her husband, four children—Richard, 15; Diane, 13; Donald, 11; and David, 8—her mother in Cambridge, Ill. and sister in Coal Valley, Ill.

The funeral was held on January 23 in Geneseo, Ill. A memorial fund for medical research has been established. Contributions can be sent to the Section of Bacteriology, School of Veterinary Medicine, Connaway Hall, Columbia, Mo. 65201.

School of Veterinary Medicine FACULTY NEWSLETTER

104 Connaway Hall University of Missouri - Columbia Columbia, Missouri 65201



Activity Schedule Busy For Winter Semester

The winter semester is already bustling with activity and some of you may want to note the following events.

March	6 - Guest lecture by Dr. Robert	7:30 P.M.
	R. Marshak on "Studies on	Med. Sch. Aud.
	Bovine Leukemia."	

6:30 P.M.

Vet. Clinic

March 8 – Faculty Wives Couples Dinner.

	Flaming Pit
March 10 - AVMA Student Chapter Meet-	7:30 P.M.
ing-Dr. Blenden. Mr. Stuart	Student Union
Zimmerman will also discuss	
financial aids available to vet-	
erinary students.	

	Upjohn dinner for senior students.	6:30 P.M. Student Union
March 27 –	Career Day	9:30 A.M.
		3:30 P.M.

April	14 - AVMA Chapter Meeting -	7:30 P.M.
	Guest practitioner to speak.	Student Union

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Apı	ril 26 – Jr.–Sr. Banquet.	To be announced
May	v 1 – Phi Zeta Banquet	To be announced

mencement.

Holidays, sickness and printing breakdowns have put the "Faculty Newsletter a little behind schedule. Please accept our apology for being somewhat late with delivery.

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