

July 7, 2007

Prepared by Laura H. Kahn, MD, MPH, MPP - Bruce Kaplan, DVM - Thomas P. Monath, MD

“ONE HEALTH” ... in Action! [#5]

An Unsung “One Health” public health hero ... Graham E. Kemp, V.S., D.V.M., M.P.H.

(See attached historic photo and caption)

Veterinarian, Dr. Graham E. Kemp graduated with a degree in veterinary medicine from Ontario Veterinary College, University of Toronto, Guelph, Canada in 1951. He spent a year with the State of Illinois, Division of Livestock Industry, General Disease Control Activities primarily with their tuberculosis and brucellosis control program. Kemp entered the private practice of veterinary medicine (large and small animals) in Palestine, Illinois where he owned and operated the Wabash Animal Hospital. During this time he also assisted in the State-Federal Brucellosis and Tuberculosis Eradication programs and was a rabies inspector for Crawford County, Illinois.

After earning his MPH, majoring in epidemiology from the School of Public Health at UC, Berkley in 1958, Kemp became a public health veterinarian at the Bureau of Communicable Diseases, Division of Preventive Medical services at the California State Department of Health until 1964. He was in charge of California's psittacosis epidemiology as well as surveillance, epidemiology and control of foodborne diseases. He also worked with rabies, leptospirosis, tularemia, anthrax, trichinosis and other zoonotic diseases.

Kemp became a veterinary medical epidemiologists/virologist and began work in 1964 at the Rockefeller Foundation as a staff member assigned to the Virus Research Laboratory, Faculty of Medicine, University of Ibadan, in Ibadan, Nigeria where he held the appointment of senior lecturer in the University of Ibadan, faculty of medicine. While assistant director of the virus research laboratory he investigated the occurrence, prevalence and significance of many viral diseases of humans and domestic animals. This included working with wildlife attempting to elucidate the role(s) they played as vectors or reservoirs of zoonotic agents.

From 1972 to 1975, Kemp was chief of the virology section, Center for Disease Control at the San Juan Laboratories, Puerto Rico, USPHS. His work included research programs to elucidate aspects of dengue fever infections in the Caribbean and to prepare laboratory personnel for studies of dengue hemorrhagic fever and shock syndrome. From 1975 until his retirement, Kemp was a research veterinarian and chief, scientific services, office of the director, Division of Vector-borne Viral Diseases, Center for Infectious Diseases, Centers for Disease Control and Prevention, Fort Collins, Colorado. During that period he was responsible for arbovirus research, epidemic aid and animal care.

During his long career, Dr. Kemp worked collaboratively with many physicians, allied health scientists and veterinarians alike. Upon review of 56 scientific publications, Kemp collaborated---in the spirit of “One Health”---contributing his educational talents and expertise to many public health issues. He co-authored scientific papers with physicians such as Drs. T.P. Monath (see “ONE HEALTH in Action #3), E.G. Wood, H.N. Johnson, Robert Shope, Jordi Casals, T.I. Francis, R.W. Emmons, D.E. Carey, J.M. Troup, H.A. White, G.S. Bowen, J.H. Gear, K.R. Brinker, G. LeGonidec, and others; PhD allied health scientists, Drs. A.S. Browne, O.R. Causey, V.H. Lee, D.L. Moore, A. Fabiyi, R.W. Williams, D.B. Francy, D.W. Trent, C.H. Calisher, A.V. Vorndam, E.J. Rayfield, N. Karabatsos, H.W. Setzer and others; veterinarians, Drs. G. L. Humphrey, I. Alhaji, O. Tomori, A. Fagbami, G. L. Losos, F.A. Murphy (of Ebola virus fame in “ONE HEALTH” in Action # 1), and others.

To illustrate the huge volume of work Kemp and his colleagues produced we examined these 56 scientific publications where his name appeared on all as one of the co-authors; he was listed as senior author on 19 of these papers. Kemp has written and published others that are not available to us at this time. Contributions to virology medical science and public health (as seen in these articles) include issues regarding rabies, western equine encephalitis, Congo virus, African tick-borne viruses, Lassa virus, Herpesvirus hominis, yellow fever, Mokola virus, Ephemeral Fever virus, Rift Valley Fever virus, Nyamanini virus, Quarantilla virus, Dengue fever virus, Rocio virus, St. Louis encephalitis virus, Orbivirus and others.

^aKemp is perhaps best known for his work on new viruses related to rabies, which he isolated from insects and insectivores, and his exploration of the pathogenesis, transmission and vector host relationships of rabies-related viruses. He was also the first to isolate Bovine Ephemeral Fever virus in West Africa.

A few publication examples include:

Monath, T.P. [MD], Bowen, G. S. [MD], Trent, D.W. [PhD], Cropp, C.B., [MS] and Kemp, G. E. [DVM] 1981. Variation in infectivity, pathogenicity, antigenic reactivity, and genome structure of St. Louis encephalitis virus strains of different origin. Proc. Int. Symp. Trop. Arboviruses and Haemorrhagic Fevers. Belem, Brazil.

Gear, J.H. [MD], Bowen, G. S. [MD], and Kemp, G. E. [DVM] 1981. Yellow Fever in Chapter 28, Vol. 2, Textbook of Pediatric Infectious Diseases, Edited by Feigin and Cherry. W. B. Saunders Company.

Graham E. Kemp [DVM], George L. Losos [DVM], Ottis R. Causey [DSc], Richard W. Emmons [MD], and Robert R. Golding [Department of Zoology, Faculty of Science, University of Ibadan, Ibadan, Nigeria] Isolation of *Herpesvirus hominis* from Lemurs: A Naturally Occurring Epizootic at a Zoological Garden in Nigeria. *Afr.J. med. Sci.* (1972) **3**, 177-185.

Obviously, this multi-disciplined approach to epidemiology and medical scientific research was synergistic. Investigations and biological discoveries were derived from combined diverse knowledge. This type of creativity facilitated more rapid understanding and discoveries, beyond what would have otherwise been expected.

Dozens of “One Health” accomplishment stories are wrapped up in the exploits of this one veterinarian and his collaborators. Think of how many others in the past and present performing similar important work are never heard of or known about. Keeping these undertakings a secret does a disservice to our past, present and particularly our future public health and biomedical research programs. They have significantly enhanced and accelerated them but ...

“Multiply the past and present enlightened collaborations and imagine the advanced developments and rewards ... human and animal health care will be accelerated so that those of the present can receive benefits otherwise afforded only to those of the future!”

^aMonath, T. P. Personal communication. July 3, 2007.