today is being conducted on naturally occurring disease in mice, cattle, cats and dogs. We know that leukemia in the mouse is caused by a virus and have obtained excellent leads on how it is spread in cattle.

Where would we be in leukemia research today but for these animal disease models? We probably would not have the foggiest notion of the nature of the disease and, indeed, might not have much of an idea about how to find out.

If leukemia is ever brought under control, and we are confident that it will be, much will be owed to the animal disease researchers who discovered the models and have conducted research on them.

Liver Disease in Man and Sheep.—Exciting progress is being made in understanding perplexing liver diseases of people as a result of the discovery by veterinarians in sheep of two diseases caused by liver function defects. One of these liver diseases in sheep is identical to Dubin-Johnson syndrome in man. Together they have provided medical science with its best "models" for understanding liver function in health and disease. Both veterinary and human medical researchers are using these sheep for important research on liver disease in people.

FINANCIAL CRISIS IN VETERINARY EDUCATION

America's schools and colleges of veterinary medicine face their most serious financial crisis in the long history of veterinary medical education. Because veterinary medical education must be offered at the graduate level and requires intensive instruction in the basic clinical and medical sciences, as well as a great deal of contact with animals, the cost is very high. Data obtained from the University of California indicate that the cost of veterinary medical education exceeds that of most medical schools. The reasons are clear. Instruction in veterinary medicine is at the same high academic plane as it is in human medicine. The students have completed at least in our School, over 4 years of preveterinary medicine in strong schools and colleges. They enter our veterinary medical school with an average of more than a "B" obtained in some of the nation's top colleges and universities. The course of study is very similar to that in a human medical school, except that all aspects of the program emphasize, in their laboratory and clinical portions, more contact with animals because the animal—not man—will be the patient of the veterinarian. Consequently, more time must be devoted to animal aspects of laboratory exercises in anatomy, physiology, surgery, obstetrics and similar courses, than in human medical schools. This increases educational costs fantastically because animals used in veterinary medical programs, including those in anatomy, must be purchased and are not donated to veterinary schools as they are to most human medical schools.

Adequate clinical instruction requires an abundance of animal patients for study. Unlike human hospitals, many of these patients must be admitted and cared for at a cost less than the real cost of the services rendered to the patient. This is true because the fee that can be charged is limited by economic factors and no medical insurance exists for animals. The cost of care is far greater than in private animal hospitals because they are used for teaching. Consequently, clinical education, by and large, costs a great deal and the activities of the veterinary clinician do not result in earning money for the veterinary medical program, as is the case in many human medical schools.

The cost of operating a veterinary medical school amounts to approximately $7500 per professional student per year. The cost of educating an undergraduate student is far less than this. Consequently, legislators and university administrators are sometimes unable to allocate sufficient funds to veterinary medical programs when the demand for educating large numbers of students cannot be adequately met. The problem is accentuated by the fact that since there are only 18 veterinary medical schools in the country, a significant number of students in all schools of veterinary medicine come from out of the state that supports a veterinary medical school. Consequently, legislators are reluctant to spend the required funds to adequately support a veterinary medical program. They reason that because a few states must educate all of the veterinarians for the entire United States, federal funds should be made available to assist in supporting veterinary medical educational programs. Their reasoning is hard to refute.

In my opinion, if veterinary medical schools are to meet their commitment to supply badly needed veterinarians for all types of service to society, at least 50 percent of the total costs of veterinary medical education must come from other than state sources. For our School this would amount to approximately $3,750 per student per year.