Planning the New Veterinary Facility

F. K. Ramsey

Iowa State University

Follow this and additional works at: https://lib.dr.iastate.edu/iowastate_veterinarian

Part of the Higher Education Commons, and the Veterinary Medicine Commons

Recommended Citation
Available at: https://lib.dr.iastate.edu/iowastate_veterinarian/vol31/iss1/3

This Article is brought to you for free and open access by the Journals at Iowa State University Digital Repository. It has been accepted for inclusion in Iowa State University Veterinarian by an authorized editor of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.
Planning the New Veterinary Facility

F. K. Ramsey, D.V.M., Ph.D.*
Chairman of the Building Committee

History of the College of Veterinary Medicine at Iowa State University

Iowa State University was chartered by the Iowa General Assembly in 1858 as the Iowa Agricultural College. Concern for veterinary science was first noted in 1871: "Need a professor of practical agriculture, who, besides other important duties, will give lectures on comparative anatomy, physiology, and veterinary science." From 1872 to 1877 there was no veterinarian on the staff.

In 1877 an appropriation of $50.00 was made to the Department of Veterinary Science. The veterinary facilities during 1878-1879 were in the college president's old house (Fig. 1) and consisted of one small bedroom used as the laboratory and the front parlor, which served as a lecture room when the botany department was not using it. The president's barn became the first animal clinic. The second building occupied by the veterinary division is shown in Figure 2. The first building designed and built to be a veterinary hospital is shown in Figure 3.

Iowa State College was the first to establish a state-supported veterinary college in 1879. It was a two-year course and remained so until 1887. Dr. Milliken Stalker became the first dean of the school in 1879.

Dr. Stalker and a physician, Dr. D. S. Fairchild, carried the burden of responsibility for the Division of Veterinary Medicine at Iowa State College from its beginning in 1879 until 1893. Requests for funds for a new veterinary building of $4,000 to $5,000 were made in 1880. In 1890 there were 37 undergraduates.

From 1887 to 1903, veterinary medicine was a three-year course. There were 50 undergraduate students and four full-time faculty members in veterinary medicine by 1900. The requirements for the D.V.M. degree were increased to a four-year veterinary curriculum in 1903. Establishing a four-year high school diploma in 1911, 1 year of college preveterinary courses in 1931, and the two-year preveterinary college curriculum in 1949 as prerequisites are important events to note as requirements for entrance into the veterinary curriculum.
Brief History of Veterinary Facilities

The first major building for medicine was the veterinary quadrangle (Fig. 4), which was completed in 1912 at a cost of $150,000 and was known as one of the finest facilities in the world. It initially housed the entire College of Veterinary Medicine. The Veterinary Medical Research Institute (Fig. 5) was established in 1927. The Stange Memorial Clinic (Fig. 6) was a most welcome addition in 1938 and permitted the veterinary quadrangle to be used entirely by the preclinical departments. Construction of the Veterinary Medical Laboratory building and the Biomedical Engineering wing was completed in 1955 and 1963, respectively.

Preliminary Considerations and Planning of the Building Committee...

The committee noted that this community has been designated as one of the leading centers of veterinary education and research by virtue of the federal government locating the National Animal Disease Laboratory near Iowa State University. The National Animal Disease Laboratory is one of the largest, most modern veterinary research facilities in existence. Important visitors from out of state and from abroad are here nearly every week visiting or consulting with the staffs (more than 150 veterinarians) of the College of Veterinary Medicine or the National Animal Disease Laboratory. We are located in the center of one of the world's richest agricultural regions; yet we are attempting to carry on our educational, service, and research programs in one of the oldest and most antiquated veterinary physical plants in the United States.

The College of Veterinary Medicine should have a new facility if it is to discharge effectively and efficiently its responsibilities of:

1. Undergraduate and Graduate Instruction: The College of Veterinary Medi-
Figure 2. North Hall, second building occupied by the Veterinary Division, in conjunction with the Botany Department.

cine at Iowa State University is unable to accept any more students than it did 30 years ago because of limited facilities. Since more veterinarians are desperately needed, we must not turn away a large number of Iowa's young people from having an opportunity to enter the profession of their choice. More than 400 preveterinary students are officially matriculated at Iowa State University; more than 300 students apply annually for admission to the College of Veterinary Medicine. Therefore, to meet the ever increasing state and national obligations to the animal industry and to the health-related professions, our College of Veterinary Medicine must increase its enrollment from 75 to 120 professional students per class.

We have some 80 graduate students now and believe that the number should be increased to more than 150 graduate students. The demand for graduate instruction in all departments of our college far exceeds our ability to supply it. In addition to graduate students who are majoring in veterinary medicine, approximately 250 other graduate students take some 30 graduate-level courses per year in this college. The philosophy of increasing the number of graduate students and emphasizing graduate instruction is compatible with veterinary undergraduate instruction. There is a great demand for teachers in colleges of veterinary medicine and veterinary science departments in the United States. This need must be supplied to a great extent from veterinarians who receive M.S. and Ph.D. degrees as a result of graduate programs.
2. Continuing Education and Specialty Boards for Veterinarians: Continuing education for graduates in veterinary medicine is becoming more essential each year. The College of Veterinary Medicine through short courses, conferences, seminars and special training sessions should bring to veterinarians the new knowledge and techniques which are developing at a rapid rate. For the private practitioner to keep abreast of the changes taking place in animal production and animal disease prevention, it is essential that he participate in specialized lectures, laboratories and clinical courses in continuing education. At the present time we do not have adequate personnel or physical plant facilities to realistically meet the above responsibilities.

3. Diagnosing Animal Diseases for Citizens of Iowa: Many of our departments have a primary role as the service arm of our college. This role is essential for undergraduate teaching. Our present physical plant is inadequate to accomplish the services that the public demands and deserves.

4. The Veterinary Clinic: The College of Veterinary Medicine should have veterinary specialists and a veterinary clinic equipped to handle the ultimate in difficult problem cases of large and small animals referred for diagnosis and treatment. This is essential for sound professional training of veterinary students.

5. Research: We must continue our research endeavors and initiate new research programs. To prevent, control and eradi-
cate livestock and poultry diseases and to
insure that meat, meat products, eggs,
milk and milk products are not contami­
nated and are disease-free, definite steps
must be taken now by the College of Veteri­
nary Medicine at Iowa State University to
increase its research activities, its services
and its teaching facilities.

6. Diagnostic Needs: The significance
of developing diagnostic techniques for
more rapid and accurate diagnosis of dis­
eases, especially those caused by viruses
and toxic substances, is of primary con­
cern for human and animal health and of
great economic importance to the livestock
industry. More energy must be expended
in this challenging field of disease re­
search.

7. New Veterinary Services: There are
increasing demands for new veterinary
services from practicing veterinarians and
the public to establish a tissue culture lab­
oratory for the isolation and identification
of all pathogenic animal viruses, for de­
tection of chemicals and antibiotics used
in agriculture that might have harmful

Figure 4. Veterinary Quadrangle, finished in 1912. Note the streetcar track in the fore­
ground.

Figure 5. First structure at the Veterinary Medical Research Institute, looking east.
effects on animal and human health, for numerous serological determinations and for various tests to determine causes of death in animals from numerous toxicants.

8. Studying of Urgent Zoonotic Problems: In the past we have not been able to meet our responsibilities in studying emerging public health problems. We have many zoonotic problems of national concern, and in Iowa we have ample opportunity to contribute to research of diseases common to man and animals. A new facility with more adequate equipment and qualified personnel is essential to accomplish some of these objectives.

9. Our University Role: Cooperative endeavors with others areas of the university must be the approach for the solution of many disease problems of the livestock industry in Iowa.

10. Disposal of Organic Materials: Properly disposing of diseased carcasses and sterilizing effluent from our laborator-
ies containing pathogenic micro-organisms are important problems that our university must solve in the immediate future.

**An Evaluation of Our Capabilities, Potentialities and Responsibilities**

We made an appraisal of our challenges; our needs; our responsibilities; our functions; our concepts of education; our role in university education; our intercollege interests, activities, cooperation and responsibilities; our interdepartmental business, cooperation and relationships; our current and better methods of pedagogy, including audiovisual techniques and other aids; our public image; and the significance of the physical plant design of the new complex as to the effect of the above in the implementation of new concepts, innovations, new research, new diagnostic techniques and new educational services such as continuing education and extension, new ideas on graduate education, expanded undergraduate instruction from 75 to 120 students per class and the veterinary curriculum in the new veterinary physical plant.

**The New Facility**

The detailed planning of the veterinary facility reflects active participation of staff members of each department of our college. It was concluded that departments should be constructed around a hub of central education-oriented facilities such as the library, biomedical communications, student services, locker rooms and classrooms. The undergraduate teaching laboratories are near lecture rooms and the central hub. The research laboratories in each department are located more peripherally and away from student traffic. The departmental administrative offices and conference rooms are located near the center of their respective departments. This permits integration of college functions, provides easy accessibility of students to respective departments and will
provide for optimal use of departmental conference rooms.

Detailed studies of interdepartmental functions, faculty interests, teaching and research responsibilities, cooperative endeavors and physical plant relationships were thoroughly studied, and careful consideration was given to them (Fig. 8). Provision for future physical expansion of every department has been made in the planning.

The proposed project calls for the construction of new facilities for the College of Veterinary Medicine at a site located east of the present Veterinary Medical Research Institute buildings (Fig. 7). Four separate buildings are planned: (1) the Veterinary Medicine Building, (2) a power plant for the Veterinary Medicine Building, (3) a Veterinary Medical Research Institute building and (4) a small all-college isolation building.

The Veterinary Medicine Building will be constructed on a hillside location so that ground-level entrances can be on two floors of the building. Parking areas will surround the first level. The structure will consist of wings emanating from a central area that will include the offices of the central administration, the extension offices, the veterinary medicine library, biomedical communication, student services, lecture and locker rooms and a courtyard or plaza.

The Physiology-Anatomy wing will house the Department of Veterinary Physiology and Pharmacology on the first and second floors and the Department of Veterinary Anatomy on the third floor.

The Microbiology-Biomedical Engineering wing will have an unexcavated first floor, the offices and laboratories of the Department of Veterinary Microbiology and Preventive Medicine on the second floor and those of the Biomedical Engineering department on the third floor.

The Pathology wing will consist of two floors, with the first floor being contiguous with the Veterinary Clinic and the Diagnostic Laboratory and the second floor housing offices and laboratories of the Department of Veterinary Pathology. The clinical pathology and clinical microbiology laborato-
clinic housing areas on one side and small animal housing areas on the other side of the core area. Clinical necropsy facilities assigned to the Department of Veterinary Pathology are adjacent to the Veterinary Clinic.

An all-college incinerator capable of handling the volume of biological waste materials associated with the operation of a veterinary medical college is located on the first floor in such a manner as to permit ready access to it from the Veterinary Pathology clinical necropsy room, from the post-mortem room of the Veterinary Diagnostic Laboratory, from other parts of the building via a large central hallway and from the exterior of the building.

We trust that we have done realistic planning and that it will culminate in the successful completion of our proposed veterinary physical plant (Fig. 9). We further trust that this will bring about the realization of effective functioning of our College of Veterinary Medicine in meeting its state, national and international responsibilities in the future.

Figure 9. Architect's plan of the proposed new veterinary medicine facility.