Compared to the great changes that would occur in the last thirty years of the first century of the School of Veterinary Medicine, the period 1910-1952 was one of slow evolution. The quadrangle building, begun in 1907, was completed in 1913, and with the exception of the acquisition of Bolton Farm in 1937, and the addition of a third floor to the quadrangle in 1947, this would comprise the physical plant of the School until 1952. There were some changes in the educational programs and admission policies which were prerequisites for major alterations that would come later. The financial situation during this period was never bright and, in fact, gradually deteriorated. With a few notable exceptions there was little original research until the late 1940's. This period was marked by two world wars and a major depression, all of which had some bearing on the growth and stability of the institution. Like some of the earlier years in the School’s history, the faculty, administration, and student body were forced to “hang on,” and on occasion, to exhibit exceptional fortitude. Two great strengths of the School during these years were a loyal faculty and a concerned body of alumni.

Overview

The death of Dean Leonard Pearson in 1909 deprived the School of Veterinary Medicine of an influential and energetic leader. One can speculate that if Dr. Pearson had lived, the School would have continued to build a base of financial support from the Commonwealth of Pennsylvania and other sources. Instead, these important relationships were left more or less undeveloped for many years. As a private institution the Veterinary School is in a
"non-preferred" category, meaning that the Commonwealth has no legal responsibility to support it through direct aid such as that received by various state institutions of higher education, including Pennsylvania State University. The School of Veterinary Medicine has always depended upon the legislature and the governor to approve an annual or semiannual appropriation, upon request. The request for this support is not difficult to justify since the School of Veterinary Medicine is the only such school in the Commonwealth and, therefore, is the source of vital services to the agricultural industry and animal owners. Approximately seventy percent of the veterinary practitioners in Pennsylvania are graduates of this school. Most of the Veterinary School buildings have been constructed and are maintained through private funds and a large share of research funds have come from the private sector. The School of Veterinary Medicine is, and has always been, a good investment for the Commonwealth of Pennsylvania.

It would appear that Dean Pearson had carried this message in an effective manner. In doing so he had the backing of agricultural groups and individuals who were friends of the School. He was able to obtain funds to construct the quadrangle building beginning in 1907 and had secured some money for research on horses and farm animals. With his death this auspicious beginning faded, and over the next four decades was never effectively rekindled. Among other problems the School did not strengthen its ties with important Pennsylvania agricultural associations and had lost their favor by the 1950s. In addition, the University was always somewhat reluctant to fully support separate requests on the part of the Veterinary School to the state government. This matter was compounded by the fact that the stature of the school in the University community declined. For much of this period the School was unable to attract any sizable amount of research funding and the physical plant became antiquated. The faculty remained small, inbred, and lacked the training necessary to build an outstanding school. Because of the poor financial situation and the deficiency in physical accommodations, it became difficult to attract individuals from other institutions to the faculty. With the urbanization of the Philadelphia area there was a growing problem of being able to attract sufficient horses and farm animals to meet teaching needs in the clinics. This situation eventually jeopardized the School's accreditation and the problem was not resolved until the development of the rural campus, New Bolton Center, in 1953.

The serious plight of the School was described, in 1932, in a detailed report by Dr. Clarence J. Marshall, professor of veterinary medicine, to the Veterinary Medical Alumni Society. In this document, Dr. Marshall cited the fact that the School was weak in research and graduate instruction, and pointed out that as much as $36,000 to $46,000 was being spent yearly on research, by some other veterinary schools, whereas in 1931 this School had received $500. (Apparently this amount was received from University funds). In 1932 the total income from tuition and hospital fees was $50,000, but the expenses of the School were double this amount; the additional money was provided by the University. At this time, despite the fact that it sorely needed money, the School continued to operate a free-clinic, in the Hospital, which saw about 13,000 cases annually. Dr. Marshall stated that in 1925 the University had initiated a major campaign to raise 45 million dollars but that the Veterinary School was not included in this plan, and in fact, had been advised and authorized to solicit its own funds. In 1932 the School had an endowment of $179,243, most of which came from bequests by Mr. Joshua Lippincott and Mr. Joseph Gillingham, two early supporters of the School. In 1932 the Veterinary Medical Alumni Society and the faculty of the Veterinary School were interested in raising an endowment of two million dollars, a sum that would allow the School to become self-sufficient. This ambitious plan never succeeded; in fact, many of Dean George A. Dick's annual reports indicated that the budget of the School had been cut still further.

These matters were of great concern to faculty and alumni. The deans during the period 1910 to 1945 were Dr. Louis A. Klein and Dr. George A. Dick, both of whom served the School in a tireless, unselfish manner. However, neither of
Dr. George A. Dick, fifth dean, 1931—1945.

these individuals nor the faculty or alumni society were able to develop an effective plan for improving the financial outlook. The seriousness of the situation is evident in the report of a survey conducted in 1959, in which the past history of the School was reviewed. This was an exhaustive University-wide study and the portion having to do with the Veterinary School was supervised by Dr. Henrik J. Stafseth, who was professor of microbiology and public health at Michigan State University. The survey culminated with the publication of an extensive report sometimes referred to as the “Stafseth Report.” The report stated that “the Veterinary School reached its highest point of efficiency during Dean Leonard Pearson’s administration. Following his death in 1909 there was a return to indifference and neglect on the part of the University Administration and the School has never regained its prominence among American veterinary colleges.” It must be said here that this statement did not take into account the fact that by 1959 the School was making considerable progress in its renaissance program.

With the appointment of Dr. Raymond Kelser as dean, in 1946, the financial situation showed some signs of improvement. When Dr. Kelser came to this position the University pledged to increase its support for the School, both in direct contributions and in support for increased appropriations from the Commonwealth. For the biennium 1945 to 1947, Dean Kelser reported that the Commonwealth appropriated $360,000. For 1947-1949 this was increased to about $400,000; in 1949-1951 it reached $448,000. Dean Kelser also reported that in 1948 the Trustees of the University had earmarked $25,000 for construction of new laboratories at Bolton Farm.

In this rather gloomy picture of the School of Veterinary Medicine during the period 1910-1952, there were some bright spots. For example, some very worthwhile changes occurred in the curriculum, admissions policies, and there were a few key faculty appointments. The faculty, while small and undeveloped, was extremely loyal and the educational program provided Pennsylvania and the country with a body of good practitioners. In this sense the history of the Veterinary School parallels that of the Medical School, allowing for a forty to fifty-year gap in time. During the nineteenth century, the Medical School ranked as one of the best in the country and was known especially for its outstanding teachers in clinical subjects. However, by 1910 it was considered to be in serious

Students and clinical staff in the quadrangle, c. 1910.
difficulty because of the lack of a solid research program, especially in basic sciences. In the Medical School this problem was resolved by bringing in some younger faculty who were research-oriented, which, in turn, led to attraction of research funds. The first sixty or more years in the history of the Veterinary School were marked by the training of good clinicians and the lack of an imaginative research program or the development of basic sciences. Beginning in the 1940s a group of young men with research interests began to appear on the faculty. These individuals formed the nucleus of the major research effort which exists today.

The direction of the Veterinary School for many of these years is perhaps best capitulated by the remarks of Dean Louis A. Klein to the Veterinary Medical Alumni Society in 1920: "Our School has been devoting most of its time to educational work, while others have been doing research work."

In 1910 the Veterinary School changed its name from the Veterinary Department to the School of Veterinary Medicine. This was a change that took place in all departments of the University.

On June 8, 1915 the faculty adopted a resolution to increase the course from three to four years, beginning with the academic year 1916-1917. At the same time admission requirements were changed so that applicants were required to have "at least a four-year high-school course or at least fifteen standard high-school units or its equivalent." These changes, and some other factors, had an immediate effect on enrollment. In 1916 only eighteen students enrolled and over the next six years this figure continued to fall. In 1920-1921 there were only four students in the freshman class and total enrollment had shrunk to thirty. There were only three graduates in the class of 1919. The decrease in enrollment was a national phenomenon; in 1915-1916 the total enrollment in twenty-one veterinary schools in the United States was 2,992 with 1,233 freshman; in 1918-1919 there were only seventeen schools with a total of 1,114 students, including 264 freshman. Dean Louis A. Klein attributed this serious situation to the lure of lucrative jobs in the war industry and the fact that many prospective veterinary students were concerned about the horse being replaced by the motor transport. The lengthening of the course to four years and the more demanding admission requirements probably played some role. During most of the "roaring twenties" total enrollment in the School of Veterinary Medicine remained at a low ebb, but by 1930 it had risen to 110. However, even in 1933 the number of applications for admission to the School was small. In this year a class of fifty was admitted from an applicant pool of about eighty.

It was not until 1932 that a formal Admissions Committee was established and at the same time the faculty voted to restrict admissions to fifty students per year. In 1933, for the first time, a woman, Miss Connie E. Johnstone, was admitted. Miss Johnstone did not complete the four-year course. The first woman to earn a V.M.D. degree was Dr. M. Josephine Deubler who graduated in 1938. From 1938 until 1952, fourteen other women graduated from the School.

Prior to 1931 the School had no formal departmental structure. In 1931 the following departments were established: Anatomy, Physiology and Pharmacology, Pathology and Parasitology, Hygiene, Animal Industry, Medicine, Surgery, and Obstetrics. From 1931 to 1951 there was some rearrangement of this structure. A Department of Biochemistry and a separate Department of Parasitology were established. What had been the Department of Hygiene was designated as the Department of Bacteriology, Immunology, and Hygiene, and the Department of Surgery and Obstetrics was expanded to include Radiology.

In 1933 admission requirements were changed to include two years of high-school algebra or one year of plane geometry, a
During the years 1910 to 1952 there were few major changes in teaching methods or curriculum. For the most part, teaching was conducted in the old Germanic, didactic style. The material to be learned, mainly by memorization, was presented in an inflexible, lock-step fashion, there was little opportunity for students to pursue individual career goals or to develop self-study habits. Actually, during most of this time, opportunities for graduate veterinarians were limited. A very high percentage of graduates went into some type of practice; few engaged in research, academic work, or other activities. For all of these years the attrition rate for academic failures was high, sometimes fifteen percent or more, and students were under unusual pressure to maintain passing grades, especially in such courses as physiological chemistry, histopathology, and parasitology. Beginning in the late 1940s, with the appointment of some younger men to the faculty, teaching began to change. There was less emphasis on verbatim memorization of material and more encouragement for students to engage in some self-education.

A few courses were added to the curriculum and with the gradual build-up and refinement of information there was some rearrangement of material under new headings. In 1910 there were eighteen major course headings and by 1952 this had increased to twenty-two.

In 1910 chemistry was taught by Dr. John Marshall who had previously served as dean and was a member of the Medical School faculty. The course included general chemistry, physiological chemistry, and pathological chemistry. In 1925 it was divided into inorganic and organic chemistry under the direction of Dr. D. Wright Wilson, assisted by Dr. James H. Jones. In 1940 the course name was changed to physiological chemistry and inorganic chemistry now became a prerequisite. Dr. Jones continued to teach for forty-five years, and in 1947 when the department of biochemistry was created in the Veterinary School, he became its first head. This was the first veterinary school to have a
Dr. Roger S. Amadon, professor of veterinary physiology and pharmacology, 1925—1944.

Separate department of biochemistry.

Dr. Edward Lodholz, a physician, was responsible for teaching physiology from 1910 until 1926, when Dr. Roger S. Amadon joined the faculty as professor of veterinary physiology. At this time pharmacology was taught by Dr. Louis A. Klein. In 1935 physiology and pharmacology were combined into a teaching unit with Dr. Amadon being responsible for both subjects. In 1942 Dr. David K. Detweiler joined the faculty and, upon the retirement of Dr. Amadon in 1945, became acting head of this area. This situation continued until 1947 when Dr. F. Harold McCutcheon was appointed professor of physiology and assumed overall responsibility for the teaching of physiology, pharmacology, therapeutics, and pharmacy. In 1948, with the retirement of Dr. Louis Klein, Dr. Detweiler and Dr. John E. Martin took over the teaching of pharmacotherapeutics. Dr. Frank E. Lentz taught the course in pharmacy from 1914 until his retirement in 1954.

In 1910 pathology was taught by Dr. Allan J. Smith, a member of the Medical School faculty. He was succeeded in 1911 by Dr. Karl F. Meyer who had come from South Africa where he had worked with Sir Arnold Theiler. Dr. Meyer left in 1914 and from that time until 1921 pathology was taught by his assistant, Dr. Walter J. Crocker. In 1921, Dr. Benjamin M. Underhill took charge of teaching not only pathology but also zoology and parasitology. In 1927 Dr. Evan L. Stubbs joined the staff and by 1931 he was professor of pathology. In 1931 pathology and parasitology were combined into a single unit and in 1932 Dr. Harry M. Martin assumed the main responsibility for teaching parasitology. This arrangement continued until 1947 when parasitology became a separate department and was taught by Dr. Martin and Dr. George Graham. Dr. Stubbs continued as head of the department of pathology, which by 1952 included Dr. Baldwin Lucke and Dr. Morton McCutcheon, both from the Medical School, Dr. John Mills, Dr. M. Josephine Deubler, and Dr. John T. McGrath.

Dr. Simon J.J. Harger, who had taught anatomy from 1887, died in 1910 and was succeeded by Dr. William J. Lentz.

Assisting Dr. Lentz was Dr. Elias T. Booth who had started to teach immediately upon graduation in 1909. These two individuals carried almost the entire teaching load in gross anatomy and histology until 1938 when they were joined by Dr. Donald G. Lee. Dr. Lentz retired in 1948, and Dr. Booth in 1949, at which time Dr. Lee assumed responsibility for teaching these subjects. He was assisted by Dr. Robert Way and Dr. John Graves.

Dr. David H. Ferrguy, a member of the Medical School faculty, was in charge of teaching bacteriology in 1910. From 1911 through 1913 the course was taught by Dr. Karl Meyer and beginning in 1914, by Dr. Walter J. Crocker, who also taught pathology. This continued until 1921 when Dr. Henry C. Campbell took over the teaching in bacteriology. Dr. Campbell continued to have the major responsibility for teaching this course until 1945. During most of these years bacteriology was listed in the Veterinary School Bulletin as part of the course in hygiene. In 1934 Dr. Israel Live joined the faculty and until 1946 he was primarily concerned with instruction in the clinical pathology laboratory. Beginning in 1937 Dr. Campbell was joined by Dr. John G. Hardenbergh. In 1941 Dr. David W. Grisman was appointed to the staff and in 1944 Mr. George Jaggard began to assist in teaching bacteriology. In 1946, when Dr. Raymond A. Kelser became dean, a separate department of bacteriology and immunology was created.

Dr. Evan L. Stubbs, professor of pathology, 1930—1960.
with Dr. Kelser as head. Dr. Kelser held this appointment until his death in 1952 and was assisted by Drs. Israel Live, Miklos Dreguss, David Crissman, M. Josephine Deubler, Charles Mootz, Ernest Witte, and Mr. George Jaggard.

Dr. John W. Adams had already achieved renown in the profession in 1910, when he was professor of veterinary surgery and obstetrics. Most of Dr. Adams' work was with horses. He was assisted in teaching surgery and obstetrics by Dr. William J. Lentz who worked primarily with small animals. For many years, beginning in 1913 and continuing until his retirement in 1948, Dr. Lentz had an appointment as professor of veterinary anatomy but he became best known as a small animal clinician and director of the small animal clinic. In 1913 Dr. William J. Lee joined Dr. Adams in surgery and went on to become one of the best known equine surgeons of his time Dr. Adams continued as head of surgery until his death in 1926. In 1928 Dr. Harold E. Bemis was appointed as professor of veterinary surgery and obstetrics and headed this department. Dr. Bemis became dean in 1930 but died suddenly in April, 1931. Dr. Mack Emmerson then became head of surgery and obstetrics and he and Dr. Lee carried most of the teaching load in this area until 1945 when Dr. Emerson resigned. Beginning in 1939 Dr. Emmerson also headed the newly established department of radiology. In 1945 Dr. Edwin A. Churchill joined the staff and in 1946 became head of radiology. Dr. Lee retired in 1947 and over the next five years the departments of surgery and obstetrics and radiology underwent considerable growth. Among the additions to the staff were Dr. Mark Allam, Dr. Arthur Bartenslager, Dr. Roger Maloney, Dr. Jacques Jenny, and Dr. James O'Connor. In 1951 Dr. Allam became head of the combined department of surgery, obstetrics and radiology and in 1952 was appointed acting dean.

Dr. Clarence J. Marshall joined the faculty in 1896 and by 1909 had become professor of medicine and continued to teach the course in veterinary medicine until his death in 1938. During these years he was assisted by numerous individuals. Dr. Alexander Glass, professor of canine medicine, lectured on diseases of the dog and cat from 1910 to 1934. Dr. Victor G. Kimball assisted in teaching medicine from 1910 to 1927 and also served as librarian. In 1930 Dr. John D. Beck joined the faculty as instructor in veterinary medicine and by 1939 had become professor of veterinary medicine and was responsible for teaching large animal medicine. Beginning in 1932 Dr. William J. Lentz assumed primary responsibility for teaching canine medicine. Others who participated in some phase of teaching medicine from 1940 to 1952 were: Drs. Harry K. Reyer, Raymond C. Snyder, Arthur H. Craig, William B. Boucher, David Coffin, Thomas DeMott, Walter LaGrange, James Mark, Frantisek Kral, and Joseph Skelley.

In 1916 an Ambulatory Clinic was established for the purpose of exposing students to problems encountered by practitioner in the field. Until 1922 this clinic functioned on a sporadic basis with various faculty members having the responsibility of taking groups of students to observe cases on neighboring farms. In 1922 Dr. C.J. Marshall was placed in charge of the Ambulatory Clinic and thereafter this phase of work became a definite part of the curriculum. After the death of Dr. Marshall in 1938, Dr. John Beck took the responsibility for this activity. In 1945 the name was changed from Ambulatory Clinic to Field Services and the unit was moved to Media, Pennsylvania, under the direction of Dr. William Boucher. In 1953 it would move to New Bolton Center. In addition

Dr. Elias T. Booth, member of the anatomy faculty, 1909-1949.

to the formal Ambulatory Clinic, Dr. William J. Lee, at his own expense, frequently took students with him to visit equine cases in the practice that he maintained in addition to his teaching duties.

A separate course in hygiene was given in 1910 and was taught by Dr. Louis A. Klein and Dr. Henry C. Campbell. Beginning in 1913, Dr. Thomas Castor joined in the teaching of this subject. The course included milk hygiene and meat hygiene and involved trips to dairies and slaughterhouses. In 1937 Dr. John G. Hardenbergh joined the staff and the course was broadened to include immunology. Dr. David Crisman and Mr. George Jaggard began teaching in 1943 and 1944, respectively, and Dr. Ernest Witte in 1947. In 1949 hygiene was discontinued as a separate course and its content, including immunology, was incorporated in the teaching of bacteriology.

Animal industry occupied a strong place in the curriculum in 1910 and continued as a separate course during this entire period of time. In 1910 the course was taught by Dr. Carl W. Gay and included material on feeding, breeding, market types, and stock judging. Dr. George A. Dick began teaching the course in 1918 and continued until 1949 when Dr. A. Gordon Danks assumed responsibility. Dr. Danks remained for only three years and in 1951 Dr. Thomas DeMott took over the teaching of animal industry. A number of individuals assisted in teaching various aspects of this course. These included: Dr. Thomas Gasser, Dr. Milton Stoudt, Mr. George Van Der Noot, Dr. Phineas W. Whiting, and Mr. George Shaw. Poultry husbandry and genetics were taught as part of animal industry.

A course in veterinary jurisprudence, ethics, and business methods was offered and from 1910 to 1915 was taught by Dr. W. Horace Hoskins. From 1910 to 1926 Dr. John Adams was in charge, assisted by Dr. William J. Lee and Mr. George P. Williams, Jr., who was a lawyer. Dr. Lee and Mr. Williams continued to have primary responsibility for this course until 1947, assisted at times by Dr. Clarence J. Marshall. In 1946 Mr. Williams' son, George P. Williams, III, succeeded his father and, until 1952, taught the course along with Dr. Edwin Churchill, Dr. Roger Maloney and Dr. James O'Connor.

In 1898 Dr. John Adams brought Mr. J.E. Frank Enge to this country from the veterinary school in Dresden, Germany. Mr. Enge was appointed demonstrator of horseshoeing and forging and later became instructor in horseshoeing, followed in 1928 by his promotion to assistant professor of animal podology. Until his death in 1928, Mr. Enge not only gave instruction on horseshoeing and diseases of the foot but operated a public farriery in the School. Following his death a course in podology was included as part of instruction in surgery and obstetrics under the direction of Dr. William Lee. For a number of years Dr. Lee was assisted by Mr. Joseph Whitehouse who operated the farriery.

A course in botany was offered during the entire period, 1910-1952. Originally, and until 1929, this course was taught by Dr. John W. Harshberger who was one of the nation's foremost naturalists. The course included consideration of the anatomy and physiology of plants, with an emphasis on poisonous plants. Dr. Rodney H. True taught botany from 1930 until 1940 when he was succeeded by Dr. Walter D. Stockbeek who continued until 1952.

Zoology was part of the curriculum in 1910, and in 1913 it was combined with parasitology with Dr. Benjamin A. Underhill teaching both courses. This arrangement continued until 1931 when parasitology was combined with pathology and Dr. Herbert C. Kribs took over the teaching of zoology.
teaching of zoology. In 1937 zoology was dropped from the curriculum and became part of the pre-veterinary requirements.

In addition to attending lectures and laboratory sessions, students spent time in the hospital and clinics where they were assigned to various services, including the pharmacy and the post-mortem room. In 1910 clinical work was under the direction of Dr. John Adams who was followed by Dr. Clarence Marshall (1927), Dr. William Lentz (1939), and Dr. John Beck (1949). Instruction was given by all of the clinicians in medicine, surgery, obstetrics, and radiology. In addition, Dr. Frank E. Lentz supervised students who were assigned to pharmacy duty and Dr. Harry Martin was primarily responsible for instruction in the post-mortem room. Small groups of students were also assigned to the clinical pathology laboratory, on a rotating basis, for training in conducting diagnostic tests. This laboratory was begun in 1928 as a part of the department of pathology. Until 1952 all hospital and clinical facilities, with the exception of the ambulatory clinic, were located in Philadelphia. The clinical staff was divided into a large animal and a small animal sections.

Although graduate work in bacteriology and pathology were first offered in the academic year 1927-1928, it was not until 1934 that a veterinarian was registered for this work. At this time Dr. Evan L. Stubbs, professor of veterinary pathology, had a young instructor in his department who wished to take graduate studies. This was Dr. Israel Live (V'34) and following arrangements, made by Dr. Stubbs and Dr. Edwin B. Krumbhaar, professor of pathology in the medical school, he was admitted to the Graduate School of Arts and Sciences which, at that time, administered graduate work. At the same time Dr. Stubbs became a member of the faculty of the Graduate School of Arts and Sciences. Dr. Live became the first veterinarian in this school to obtain a graduate degree. In 1936 he was awarded an M.A. degree for his work, “Studies on Aggression,” and in 1940 received a Ph.D. degree. Dr. M. Josephine Deubler (V'38) was the second to achieve this distinction when she was awarded an M.S. degree in 1937 for her work on periodic ophthalmia in horses. In 1941 Dr. Deubler was granted a Ph.D. degree.

In 1949 Dean Raymond Kelser announced that the Graduate School of Arts and Sciences had approved the following
departments in the veterinary school to offer graduate work leading to either an M.S. or Ph.D. degree: bacteriology and immunology, biochemistry, parasitology, pathology, physiology, and pharmacology. At this time twelve faculty of the veterinary school received joint appointments in the Graduate School of Arts and Sciences.

In 1929 Dean Klein announced that the school had concluded an agreement with Pennsylvania State University to offer a six-year combined course. Under this arrangement students who spent three years at Penn State and then three years at the Veterinary School would receive a B.S. degree in agriculture and then, at the end of the veterinary course, a V.M.D. In 1930 a similar arrangement was adopted with Rutgers University and the University of Maryland.

In 1910 the total faculty numbered twenty-nine, with thirteen individuals coming from the Medical Department or other departments in the University. Of the remaining sixteen members who had veterinary degrees, all but three were graduates of this School. Thus, the trend of in-breeding was already established and would continue for many years.

By 1935, when the School began its second half-century, there had been only a slight increase in faculty; it now had thirty-three members. The number of individuals having veterinary degrees had increased to twenty-two; three of these came from veterinary schools other than the University of Pennsylvania.

In 1951 the faculty had grown to fifty-six and there were several notable changes in its makeup. Most important, a nucleus of younger faculty was developing and many of these instructors would play key roles in the renaissance of the school. The percentage of total faculty coming from the Medical School or other departments within the University had decreased and the number of faculty coming from other institutions had increased.

Louis A. Klein, V.M.D. became dean in 1910 after the death of Dr. Leonard Pearson. He was the fourth dean.

A graduate of the class of 1897, Dr. Klein had a varied career before returning to the School in 1909. He had practiced for one year in Lewistown, Pennsylvania, served as veterinarian for the Vanderbilt Estate in North Carolina, worked with the Federal Bureau of Animal Industry, and had served brief periods on the faculty of the Veterinary Division, Iowa State College and Clemson Agricultural College. In these positions Dr. Klein worked on eradication of Texas fever and control of calf scours. He helped develop a crude oil dip which was effective in eradicating ticks from cattle. In 1907 Dr. Klein came to Pennsylvania and served as Deputy State Veterinarian under Dr. Leonard Pearson. In 1909 a professorship of pharmacology and veterinary hygiene was created in the Veterinary Department and Dr. Klein was appointed to this position; in 1910 he became dean.

In 1914 Dr. Klein translated from German, Frohner's "Textbook of General Therapeutics for Veterinarians", a standard at that time, and in 1917 he published "Principles and Practice of Milk Hygiene" (J.B. Lippincott Co., Philadelphia, 1917). In 1917, shortly after the United States entered World War I, Dr.
Klein was appointed to the Army Veterinary Advisory Board by the Surgeon General. This board prepared regulations and a table of organization for the Veterinary Corps of the U.S. Army. When the work of the Board was finished, Dr. Klein was commissioned as a Major in the Veterinary Corps and took a leave of absence from the Veterinary School. He served in France and was responsible for writing regulations for meat and dairy hygiene. During his absence Dr. William J. Lents served as dean, pro tem. Dr. Klein returned in February 1919 and was dean until 1930, when he resigned. In his career Dr. Klein had a continuing interest in milk hygiene, and especially in the control and treatment of mastitis.

In 1935 Dr. Klein was awarded an honorary Doctor of Science degree by the University and in 1951 he received the Borden Award of the AVMA for "his outstanding work contributing to the control of dairy cattle diseases."

Dr. Klein was a quiet, austere individual but he was not unkindly. Those close to him report that during all of his years on the faculty he was never in robust health. He was meticulous and delivered lectures in a low monotone, often reading from his notes. Dr. Klein's conservative nature may have been responsible for his inability to improve the School's financial situation during his twenty years as Dean.

Harold E. Bemis, D.V.M., succeeded to the deanship in July 1930, upon the retirement of Dr. Klein. Dr. Bemis served only until April 1931, when he died. He came to the University of Pennsylvania from the Veterinary Division at Iowa State College, Ames, Iowa. Dr. Bemis graduated from Iowa State with a D.V.M. degree in 1900, and after a short time with the Federal Bureau of Animal Industry he returned to Ames to teach veterinary surgery and obstetrics. He developed a special interest in diseases of the reproductive system and built a reputation as a skillful surgeon; by 1927 he had advanced to the rank of professor of veterinary surgery and obstetrics and vice dean. In July of 1927 he came to the University of Pennsylvania as professor of veterinary surgery and obstetrics, succeeding Dr. John Adams. In 1928 Dr. Bemis was chairman of the AVMA Committee on Education and received a grant from the Rockefeller Education Fund to study veterinary education in the United States and Canada.

George A. Dick, B.S., V.M.D., became the sixth dean of the School, in July 1931. He was born at Cheapside, Ontario, Canada, of American parents and then spent his early childhood in Port Allegheny, Pennsylvania. He was able to attend only one year of high school since fire destroyed the school building. As a young man he worked in his father's shop where wagons were built and horses were shod. In 1896, at the age of eighteen, he joined a group of men that were enticed to Alaska by the news of the Klondike gold rush. In Alaska young Dick found hard going. First, there was no gold, and then he was stranded by a group of older men with whom he worked. In order to obtain train fare home he worked as a blacksmith, finally arriving home in 1900. At this time he enrolled in the Ontario Veterinary College, Guelph, Canada. After one year he transferred to
Dr. Raymond A. Keiser, seventh dean, 1946–1952.

Dr. Raymond A. Keiser, seventh dean, 1946–1952.

the Veterinary Department, University of Pennsylvania where he graduated in 1904 at the age of twenty-seven. After graduation, Dr. Dick spent twelve years in Kane, Pennsylvania, where he conducted a practice in which much of the work was with horses that were used in logging camps. He also became interested in the breeding of Ayrshire cattle and carried out some experimental work on brucellosis and sterility in conjunction with the Pennsylvania State Livestock Sanitary Board.

In 1916 Dr. Dick returned to Penn and began to teach animal industry, succeeding Dr. Carl W. Gay. His initial appointment was as assistant professor of animal industry; in 1919 he became a professor. In 1921 Dr. Dick introduced a course in poultry husbandry and in the same year he assumed responsibility for extension work and the publication of the Veterinary Extension Quarterly. He continued as Extension Veterinarian until 1931, and taught animal husbandry during his entire career at the School.

Dr. Dick was a striking physical specimen with a gentle, retiring demeanor. Like his predecessor, Dr. Klein, Dean Dick was at the helm of a school that was in serious financial difficulties. In his annual reports Dr. Dick often had to indicate that the budget had been cut, or at best, that no new funds were available. He was obviously greatly concerned and attempted without any great success to develop plans to obtain funds. In this effort he received little help from the University.

Despite the grave situation during Dean Dick's tenure, the School made some progress in its internal affairs, and it continued to be known for its good educational program. Departments were reorganized, admission requirements were increased, Bolton Farm was acquired, and a small amount of money was obtained from the Federal B.A.I. and the Pennsylvania Department of Agriculture for research. At the close of his term of office, Dean Dick was able to obtain funds from the Commonwealth to add a third story to the north wing of the quadrangle building.

By the early 1940's much of the budgetary machinery and important administrative decisions of the School were taken over by the office of the vice president for medical affairs in the University. It was obvious that the University administration wished to make a change and at the same time some influential alumni were clamoring for a strengthening of the School in the financial and research areas. The time had come for Dr. Dick to step down, and according to individuals close to him, he was not reluctant to do so. He had served the School well during a difficult period of time.

In 1944 Dr. A. Newton Richards, vice president for medical affairs in the University, visited several other veterinary schools in order to become more familiar with their physical plans and programs and to begin a search for a new dean. He also consulted with an ad-hoc alumni committee headed by Dr. Samuel F. Scheidy and with Dr. John D. Gadd, president of the Veterinary Medical Alumni Society. At a faculty meeting on July 17, 1945, Dr. Richards informed the faculty that Dr. Dick had tendered a letter of resignation which would take effect as soon as a successor could be found.

Dr. Dick's successor as dean was Dr. Raymond A. Keiser, appointed in 1946. Dr. Keiser brought to the Deans Office an entirely different type of personality from those who had occupied it in the previous thirty-six years. First, he was a military man, having commanded the U.S. Army Veterinary Corps from 1938 until 1946, and he brought to the deanship a brusk, no-nonsense approach. Secondly, he had established a reputation as a scientist and a competent administrator, and these were qualities in which the University administration was interested. Dr. Keiser had earned his D.V.M. degree from George Washington University in 1914, and immediately joined H.K. Mulford Laboratories as bacteriologist. In 1917 he joined the U.S. Army Veterinary Corps and was responsible for organizing the first veterinary laboratory service. The first army laboratory was located at the School of Veterinary Medicine, University of Pennsylvania in 1917, and at this time Dr. Keiser formed a strong attachment to the School.

In 1922 Dr. Keiser earned his M.A. degree from American University and in 1923 received his Ph.D. degree from the same institution. During the years 1921 to 1925, and again from 1928 to 1933, he was
in charge of the Veterinary Laboratory Division of the Army Medical School, Washington, D.C. In the intervening years (1926-1927) he served in the Philippines as a member of the U.S. Medical Department Research Board. During the years 1935-1938 he was a research fellow in bacteriology in the Harvard Medical School under the noted scientist, Professor Hans Zinnser. In 1938 he became Chief of the Veterinary Division, U.S. Army, where he held the rank of Brigadier General.

An abrupt, authoritative person, Dr. Keiser quickly instituted some changes in the operation of the Deans Office. First, all departmental budgets were held in the Deans Office and Dr. Keiser's approval was needed for the expenditure of any funds. Secondly, he established a policy that financial support would depend upon proven performance by an individual. Also, Dr. Keiser made it plain that henceforth the faculty would take a one month vacation only, rather than the entire summer. All of these changes were so different from the modus operandi of the Deans Office during the previous years that they had a very disquieting effect on some older members of the faculty. On the other hand, younger faculty saw this approach as a challenge and an opportunity to improve matters at the School. Dr. David K. Detweiler cites an enlightening experience with Dean Keiser. Dr. Detweiler, who at the time was a young assistant professor of pharmacology, approached Dean Keiser to buy a $400 piece of equipment for his research in cardiology. Dean Keiser informed him that he would receive the money only after he had published a paper. He published a paper, and the funds were forthcoming.

With the appointment of Dr. Keiser as dean, there was an immediate improvement in the relationship of the Veterinary School with the University, and subsequently, with the Commonwealth. The budget was increased, a third floor added to the quadrangle building, and the departments of physiology and pharmacology and biochemistry were strengthened with the addition of new equipment. Most important, there were some significant additions to the faculty. Dr. Mark Allam became assistant professor of veterinary surgery in 1946 and quickly began to rejuvenate that department. In the same year Dr. James Mark joined the faculty as assistant professor of veterinary medicine and brought sorely-needed help to the small animal clinical staff. The appointment of Dr. Frederick McGutchon as professor of physiology in 1947, and Dr. Frantisek Kral as associate in veterinary medicine were important steps in strengthening the department of physiology and pharmacology and the department of medicine. Lastly, some young individuals, who would play important roles in the School's future, joined the faculty. These included Drs. John McGrath, Robert Schwartzman, Robert Way, Joseph Skelley, Jacques Jenny, John Martin, and Monica Reynolds.

At a faculty meeting on March 10, 1952, just one month prior to his death, Dean Keiser announced that the University had purchased a 221-acre farm in Chester County. This was to become New Bolton Center.

Even though he "ruffled the feathers" of some faculty and alumni, Dr. Keiser introduced the type of administration that was needed by the School in 1946. During his relatively short term as dean, the School had begun to undergo a definite improvement in vitality and character.

**Faculty Members**

In 1910 the strength of the faculty resided in John Marshall, M.D., Nat. Sc. E., LL.D., John W. Adams, A.B., V.M.D., Edward Lodholz, M.D., William J. Lentz, V.M.D., Frank Enge, Alexander Glass, Henry C. Campbell, B.S., V.M.D., M.D., and Elias T. Booth, V.M.D. During the period 1910-1952 a few individuals joined this group and provided outstanding service to the School for many years. The careers of Dr. John Marshall and Dr. Adams have been briefly reviewed in an earlier chapter.

William J. Lentz, V.M.D., assumed the responsibility for teaching anatomy when Dr. Simon J.J. Harger died in 1910. Dr. Lentz graduated from the Veterinary
Department, University of Pennsylvania, in 1904 and prior to that had attended Temple College, and, for a short time, Jefferson Medical College in Philadelphia. After graduation he spent three years as a resident surgeon in the Veterinary Hospital. In 1907 he was appointed as demonstrator of anatomy and in 1908 as demonstrator of surgery. In 1910 he became assistant professor of veterinary surgery and in 1912 advanced to professor of veterinary anatomy and director of the small animal clinic. During the period 1917 to 1919 he served as dean, pro tem, in the absence of Dean Louis Klein. During the years 1931 to 1948 he was supervisor of veterinary extension and from 1927 until 1955 served on the Board of Managers of the Veterinary Hospital. Dr. Lentz lectured in anatomy but devoted much of his career to the small animal clinic. He established a reputation as one of the leading small animal clinicians in the country. As an aid to teaching the course in small animal medicine Dr. Lentz published a mimeographed set of notes entitled "Differential Diagnosis and Treatment of Diseases of Small Animals". A small, effervescent individual who delivered colorful lectures, Dr. Lentz had some expertise as a ventriloquist and was not abashed to use this talent to baffle clients in the clinic. Although he retained his appointment as professor of anatomy until he retired in 1948, he rarely appeared in the anatomy dissection laboratory, which was the province of Dr. Elias T. Booth. Dr. Lentz was emeritus professor of veterinary anatomy from 1949 until his death in 1963.

Karl F. Meyer, B.V.S., D.M.V. (Zurich), joined the faculty in 1910 as assistant professor of veterinary pathology. His appointment was the result of a search for an individual who was well-trained in veterinary pathology. Prior to 1910 pathology was taught by members of the medical faculty. Dr. Meyer's appointment was one of the few instances in which the school "reached out" to recruit a faculty member in these years. He had received his training in veterinary schools in Switzerland and Germany and then worked with Sir Arnold Theiler in South Africa. In 1911 Dr. Meyer became professor of veterinary pathology and bacteriology but in 1913 he resigned to become Director of the Hooper Research Foundation, California. In 1959, at a Convocation of a University Council to mark the Seventy-Fifth Anniversary of the School of Veterinary Medicine, Dr. Meyer was awarded an honorary D.Sc. degree by the University of Pennsylvania.

Walter J. Crocker, V.M.D., succeeded Dr. Meyer in 1914. Dr. Crocker graduated from the Veterinary Department in 1911. In 1914 he became assistant professor of veterinary pathology and in 1917, professor. Dr. Crocker resigned in 1921.

Benjamin M. Underhill, V.M.D., graduated from the Veterinary Department of the University of Pennsylvania in 1895 and until 1908 he conducted a practice in Media, Pennsylvania. In 1908 he was appointed instructor in zoology and parasitology and in 1916 was advanced to assistant professor of histology. In 1920 Dr. Underhill became professor of pathology and parasitology and continued to teach these subjects until his death in 1930.

Evan L. Stubbs, V.M.D., joined the faculty in 1927 as assistant professor of veterinary pathology. As a young man from a farm near Oxford, Pennsylvania, Dr. Stubbs had been granted a scholarship to
the Veterinary Department through the efforts of Dean Leonard Pearson. He graduated in 1911 and for two and a half years conducted a farm practice. In 1913 he went to the Experimental Farm of the Pennsylvania Bureau of Animal Industry, which was located in Marple Township, near Philadelphia. One of the main services of the farm was to produce hog-cholera serum and anti-anthrax serum. It was at the Farm that the intradermal tuberculin test was developed and standardized. In 1919 the Farm was discontinued and Dr. Stubbs transferred to State Laboratory of the Pennsylvania B.A.I. At this time, and until 1927, the laboratory was in the School of Veterinary Medicine. Dr. Stubbs became director of the Laboratory and while here he worked on the agglutination and complement fixation tests for bovine brucellosis. He became interested in poultry diseases, and while still associated with the Laboratory, began to teach a special course in poultry diseases to students of the Veterinary School. In 1927 the Laboratory was moved to Harrisburg, and Dr. Stubbs accepted a full-time position on the faculty as instructor in veterinary medicine. In 1928 he became assistant professor of veterinary pathology and in this same year spent four months visiting laboratories in various schools in Western Europe, England and Scotland. In 1930 Dr. Stubbs became professor of pathology and head of the newly created department of pathology. He was on close terms with Dr. John Mohler (V '96), chief of the Federal B.A.I., and part of his salary was contributed by this organization. In 1930 Dr. Stubbs went to the World Poultry Congress in Canada and then to the World Veterinary Congress in London. Through these and other meetings he became friendly with many of the leading figures in the veterinary profession. Early in his career at the Veterinary School Dr. Stubbs was associated with Dr. Jacob Furth of the Phipps Institute, a part of the University of Pennsylvania, and together they spent a number of years studying avian leukosis. This was during the period when few individuals in the Veterinary School faculty were doing original research. Later he conducted work with Dr. George F. Sperling and Dr. Alfred M. Wallbank on strain 13 sarcoma virus. In all, Dr. Stubbs was author or co-author of 161 published papers and attended four World Veterinary Congresses and eight World Poultry Congresses. In his long, busy career Dr. Stubbs was closely associated with or instituted a number of new developments at the Veterinary School. These included the clinical pathology course in 1928, graduate education in 1934, Bolton Farm in 1937, and the Sheep Blood Unit in 1940. Dr. Stubbs was a quiet, meticulous individual whose counsel was valued greatly by the faculty. He served the School in many ways; he conducted some good basic research at a time when little research was being done by the faculty; he was responsible for initiation of the graduate program and the courses in poultry pathology; he started the Sheep Blood Unit and served for many years as Extension Veterinarian. Dr. Stubbs was always very active in alumni affairs and served on many committees in the School. In recognition of his many years of service Dr. Stubbs received the Alumni Award of Merit from the University of Pennsylvania General Alumni Society on Founders Day 1961. He retired in 1960 and became emeritus professor of veterinary pathology. Dr. Stubbs still maintains an active interest in the School.

Harry M. Martin, V.M.D., A.M., Ph.D., known to many classes of students at the School of Veterinary Medicine as "The Bull," spent thirty-one years on the faculty. During this time his primary teaching responsibilities were in the post-mortem laboratory, and the courses in histopathology, and parasitology. Dr. Martin's courses became well known as the source of many academic failures. In a
sense, he established himself as the standard-bearer for maintaining academic standards, but his approach to this often resulted in displeasure on the part of other faculty and fear by students. As a young man Dr. Martin was a blacksmith in York County, Pennsylvania, and later came to Philadelphia to shoe horses. His work was impressive and a benefactor provided him with a scholarship to the School of Veterinary Medicine. He graduated in 1916 and went west where he spent one year at the University of Wyoming. He then went to the University of Nebraska where he earned an M.A. degree in 1923 and a Ph.D. degree in 1927. He remained in Nebraska until 1930 when he returned to Pennsylvania to become Parasitologist for the Bureau of Animal Industry. In 1931 he was appointed assistant professor of veterinary pathology and parasitology and in 1943, professor. From 1931 to 1947 Dr. Martin had the sole responsibility for teaching parasitology and also taught histopathology and post-mortem pathology. Dr. Martin retired in 1962 and became emeritus professor. On two occasions, one in 1960 and the other after he became emeritus professor, Dr. Martin was awarded Fulbright Scholarships to study parasitic diseases in livestock, in Kenya, Africa. He died in 1979.

Harry C. Campbell, B.S., V.M.D., M.D., Ph.G., D.D.S., received his V.M.D. degree in 1902 and joined the faculty as demonstrator in milk hygiene in 1909. Between 1902 and 1908 he studied at Temple University and received his M.D. and Ph.G. degrees, and then, while on the faculty at the Veterinary School, he was granted a D.D.S. degree (1917) from the University of Pennsylvania. In 1913 Dr. Campbell became assistant professor of pharmacology and hygiene and in 1927 was appointed as professor of bacteriology. During all of his years on the faculty Dr. Campbell was on a part-time basis since he had outside interests. In 1918 he purchased part ownership of a laboratory in Philadelphia known as "The Dairy Laboratories." The laboratory, which later became known as Dalare Associates, at first confined itself to butter-fat testing of milk, but later expanded to conduct quality tests on all types of food materials and perform toxicological work. The laboratory was a member of the Association of Official Racing Chemists. Dr. Campbell retained a life-long interest in the laboratory; two other faculty members, Dr. David Crisman and Mr. George Jaggard, were also associated with it. Early in his career, from 1902 to 1919, Dr. Campbell also served with the State Livestock Sanitary Board of Pennsylvania. For most of Dr. Campbell's years at the Veterinary School he was in charge of teaching bacteriology. He was a rather rotund individual with a cherubic appearance and a quaint personality. Dr. Campbell was an astute businessman as well as being a good teacher. He retired in 1947 and died in 1962.

Edward Lodholz, M.D., a graduate of the Medical Department of the University of Pennsylvania in 1893, taught physiology from 1908 until 1925. He joined the faculty as a lecturer-demonstrator in 1908, advanced to assistant professor in 1909 and became professor of physiology in 1917. He was also on the faculty of the Medical School and taught both medical and dental students. Dr. Lodholz, an eminent physiologist, was Isaac Ott Professor of Physiology in the Graduate School of Medicine. He left the veterinary faculty in 1925 and retired from the University in 1946. Dr. Lodholz died in 1972 at the age of ninety-seven.

Roger Shirley Amadon, D.V.M., was an outstanding teacher and researcher and a cornerstone of the faculty from 1925 to 1944. He joined the faculty in 1925 as professor of veterinary physiology and pharmacology. Previous to this he had studied for two years at the North Dakota Agricultural College (1913-1914) and then completed his veterinary degree at Ohio State University in 1916. He spent two years in large animal practice in North Dakota and then went to the University of Chicago for graduate work in physiology. He then returned to the North Dakota Agriculture College where he was assistant
professor of physiology and pharmacology. It was while he was at this school that he carried out his original work on the ruminant stomach and along with Dr. A.F. Schalk published a classical paper, "Physiology of the Ruminant Stomach." This, along with subsequent work, established Dr. Amadon as a world authority on the function of the ruminant stomach and on the action of various drugs on this complex organ. While he was at North Dakota, Dr. Amadon also conceived the idea that hypocalcemia was the cause of milk fever in cows. Unfortunately, lack of funds prevented him from pursuing this theory and the correlation was later established by others. When he came to the University of Pennsylvania in 1925 he continued his work on ruminant physiology and pharmacology along with studies on the causes of bloat in cattle, blood typing and blood transfusions in the horse, ox, and dog, and the actions of various morphine derivatives and cannabis as sedatives in the horse. During his entire career in the Veterinary School, Dr. Amadon carried a heavy teaching load; with one assistant he taught the whole of physiology and pharmacology in the veterinary curriculum. In addition, he spent much time in working with clinicians on problems of diagnosis and therapy. Dr. Amadon was a studious but practical individual with a simple, yet enigmatic personality. He had a Lincolnesque quality that created a sense of awe and respect in others. The 1941 class yearbook, The Scalpel, cited him as having "an up-to-date knowledge of practically the whole veterinary field." In 1944 Dr. Amadon resigned abruptly to return to a rural life of farming, ranching and applied veterinary pursuits. It was a measure of his independent and resolute spirit that, having made this decision to leave academic work, he never looked back. He continued active work until his death, in 1980, at the age of ninety.

Clarence J. Marshall, V.M.D., was one of the leaders of the faculty from 1910 to 1938. His colleagues often sought his advice on problems and students revered him as a teacher. Dr. Marshall enhanced the reputation of the School by occupying various prestigious positions in government and in the profession. He graduated from the Veterinary Department of the University of Pennsylvania in 1894 and from 1896 to 1901 served on the faculty as demonstrator of veterinary medicine. In 1909 he was appointed professor of veterinary medicine and continued in this capacity until his death in 1938. From 1911 until 1920 Dr. Marshall was Pennsylvania State Veterinarian and served two terms as president of the American Veterinary Medical Association (1913-1915). In 1916 he went to France to study the organization and duties of veterinarians in the French and British armies during World War I. This was a private venture, made possible through a gift from a wealthy Philadelphia woman who was interested in the humane care of animals used by the military. The information obtained by Dr. Marshall was of great value to the Surgeon General's Office in organizing the Veterinary Corps of the U.S. Army. In 1917 Dr. Marshall was commissioned as Major and Assistant Director of the Veterinary Corps and in 1918 he was promoted to Lt. Colonel. He served in France in 1917-18 and was awarded the British D.S.O. by the King of England. Following the war, Dr. Marshall returned to the School to teach medicine and in 1922 took over the responsibility for the newly organized ambulatory clinic. He continued these duties until 1938. Dr. Marshall was a kindly man and had a reputation as a wild driver; students who accompanied him on the ambulatory clinic had some hair-raising experiences. When he died in 1938 he was succeeded by his protege, Dr. John D. Beck. Dr. Marshall's contributions to the Veterinary School were recognized by the naming of the library as the C.J. Marshall Memorial Library.

Mack A. Emmerson, D.V.M., M.S., Dr. Med. Vet. (Zurich), was appointed assistant professor of veterinary surgery and obstetrics in 1930. He came to Pennsylvania from Iowa State Veterinary College as an assistant to Dr. Harold Bemis,
who had also come from that school. When Dr. Bemis died in 1931, Dr. Emmerson assumed the responsibility for work in surgery and obstetrics. In 1939 he became head of the newly established department of radiology and in 1942 became professor of veterinary surgery and obstetrics. In 1938 the Veterinary School had received a large deep therapy x-ray unit as a gift from a client Dr. Joseph Vansant (V'02). With this machine Dr. Emmerson conducted some of the earliest x-ray therapy in this country. He was also responsible for organizing the diagnostic x-ray unit, including the development of satisfactory techniques for animals. Dr. Emmerson was one of the small group of faculty who conducted original research in the 1930s and the early 1940s. He was a large, easy-going individual with a natural curiosity about many things. His lectures were well organized but he delivered them in such a slow methodical fashion that he frequently fell behind in his lecture schedule. In 1945, Dr. Emmerson resigned to return to Iowa.

Dr. William J. Lee joined the faculty in 1912 as an assistant to Dr. John Adams, with the appointment of lecturer and instructor in veterinary surgery. In 1932 he became assistant professor of veterinary surgery, and in 1942, professor. Dr. Lee was an aggressive, "rough and tumble" individual whose great love was horses. His outward nature often hid a kind heart and he was well-liked by students, especially those who looked to a future in equine practice. His academic career was devoted almost entirely to equine surgery and the diagnosis and treatment of lameness. He perfected the "roaring" operation in horses and was an expert in the use of local anesthetics in diagnosing lameness. His constant companion in the clinic was Mr. Joseph Whitehouse, the farrier. During many of his years on the faculty, Dr. Lee maintained a private equine practice. He retired in 1947 and died ten years later.

Mr. J.E. Frank Enge gave the School thirty-five years of devoted service after joining the faculty in 1893 as demonstrator of forging and horseshoeing. He was recruited from the veterinary school of Dresden, Germany. At the time this was the only veterinary school in the world where horseshoeing was treated as a science. Mr. Enge was an excellent teacher who earned the love and respect of students. In 1926 he became instructor in forging and horseshoeing, and in 1928, the year in which he died, he was advanced to assistant professor. Mr. Enge's son, Edwin, C.F., graduated from the School in 1931.

Dr. Thomas Castor, V.M.D., was graduated from the Veterinary Department of the University of Pennsylvania in 1884 and immediately joined the federal Bureau of Animal Industry. He eventually became inspector-in-charge of the Philadelphia District of the Bureau and was appointed as instructor in meat hygiene in the Veterinary Department in 1906. Dr. Castor continued to teach methods of meat inspection until he retired in 1944. He was a vigorous man whom the students called "Two-gun Tommy." This was in reference to his experiences in the west during years when Federal inspectors often had to carry a gun to protect themselves from irate ranchers. Dr. Castor died in 1960.

Dr. Victor Kimball was one of the few faculty members, during this period of time, who was a graduate of another veterinary school. He graduated from the New York State Veterinary College at Cornell and joined the faculty as lecturer in veterinary medicine in 1911. In 1913 he became assistant professor of veterinary medicine and continued in this capacity un-
til he died in 1927. One of his main interests was the treatment of azoturia in horses. For ten years, in addition to his clinical and teaching duties, he served as part-time librarian for the Veterinary School.

W. Horace Hoskins, D.V.S., was appointed as lecturer on veterinary jurisprudence, ethics, and business methods in 1898. In 1910 he became assistant professor of veterinary jurisprudence and, in 1917, he advanced to professor. In the same year he resigned to become dean of the New York Veterinary College of the New York University. Dr. Hoskins served as dean until the school closed in 1922. This was formerly a private school known as the American Veterinary College, and Dr. Hoskins had graduated from it in 1881. During the entire time that he served on the faculty of the Veterinary Department of the University of Pennsylvania he carried on a large private practice in Philadelphia and became one of the best known veterinarians in America. At various times he was president of the American Veterinary Medical Association, the Pennsylvania State Veterinary Medical Association, and the Keystone Veterinary Medical Association. He was very active in developing legislation to regulate veterinary practice in Pennsylvania, and was the first president and secretary of the Pennsylvania State Veterinary Medical Examining Board.

Of all faculty members during this period, none became better known to students than Frank E. Lentz, Ph.G., V.M.D. "Dr. Frank", who was a brother of Dr. William J. Lentz, joined the faculty in 1913 as an instructor in pharmacy. He had received his V.M.D. degree in 1907 and then obtained a Ph.G. degree from the Philadelphia College of Pharmacy. In his final year as a student at the Veterinary School, Dr. Lentz became president of the newly formed Alpha Chapter of the Omega Tau Sigma Fraternity; he retained a close association with this group until he died in 1959.

In 1932 Dr. Lentz became assistant professor of materia medica and pharmacy, a position he retained until his retirement in 1955. During all of his years on the faculty he had a part-time appointment since he had outside business interests. Up until 1950 Dr. Lentz had the responsibility for both lectures and laboratory in the pharmacy course. He compiled a set of printed notes for teaching since there were no textbooks on veterinary pharmacy. In addition, Dr. Lentz was in charge of the dispensing pharmacy in the hospital. Students, in their fourth year, were assigned to pharmacy duty on a rotating basis. Dr. Lentz was an individual whose contributions to the School must be measured largely in terms of the enduring relationships that he established with students and retained when they became alumni. He helped many students financially and later, when they became graduates, he assisted them in establishing a practice. Students and graduates constantly sought his advice on financial and business matters. Dr. Lentz was a very successful business man, having established a business for the sale of drugs and instruments to veterinarians. He was an inveterate cigar smoker and spoke in a soft, guttural voice. The hospital pharmacy was a favorite gathering spot for students and faculty because "Dr. Frank" not only supervised the preparation of drugs and dispensed advice but also offered for sale sundry items such as candy, chewing gum, cigarettes, and cigars. Dr. Lentz and his family were benefactors of the School. The pharmacy in the Veterinary Hospital of the University of Pennsylvania (VHUP), and a portion of Alumni House at New Bolton Center are dedicated in his name. His family also established a loan fund for students.

There were others who served on the faculty during these years and rendered important service to the School. Carl W. Gay, D.V.M., B.S.A., was Professor of Animal Industry from 1908 until 1916. D. Wright Wilson, M.S., Ph.D., a member of the medical faculty and Benjamin Rush Professor of Physiological Chemistry, taught physiological chemistry from 1923 to 1946. George P. Williams, Jr., A.B., LL.B., a genial Philadelphia lawyer, lectured on jurisprudence from 1918 until 1948. John W. Harshberger, Ph.D., a nationally known authority, taught botany from 1910 to 1929, and Rodney H. True, M.S., Ph.D., lectured in the same course from 1930 until 1940. Walter D. Steckbeck, Ph.D., a great favorite of his colleagues and students, was responsible for teaching
botany from 1941 until 1952. Herbert Fox, A.B., M.D., was professor of comparative pathology from 1931 until 1942. Dr. Fox was responsible for the health of animals in the Philadelphia Zoological Gardens.

Although not a member of the faculty, Miss Edna Teuter played an important role in many of the affairs of the School during these years. She came to the Veterinary School on October 16, 1911 as a clerk-stenographer and retired in 1952. In 1930 Miss Teuter was promoted to chief clerk but in reality she served these many years as "first assistant to the dean". Many graduates will recall that it was Miss Teuter who provided the answers (and the directives!) to academic problems, schedules, fees and the like.

Research and Publications

Research at the Veterinary School during these years was limited in quantity and scope. There are several explanations for the lack of productivity. First, with some exceptions, the faculty was not research-oriented, a situation not unique to the University of Pennsylvania. The veterinary profession and its educational institutions had not yet established a solid research approach to investigating problems and there was a scarcity of individuals with special training. It was not until after World War II that most veterinary schools began to place a high priority on advanced degrees for their faculties. Clinical specialties had not yet come into being and the practice of medicine was largely on an empirical basis. Secondly, there was the matter of money. Prior to World War II the many sources of government, industrial, foundation, and private funds that exist today were not available. Much of the federal money available for research on animal disease went to experiment stations at land-grant institutions. Dr. George Poppensiek (V'42), former dean of the New York College of Veterinary Medicine at Cornell University, points out that when land-grant institutions were established through the Morrill Act, in 1863, a funding mechanism was created in the U.S. Department of Agriculture to provide research monies for these schools. The funds were allocated to directors of experiment stations and veterinary medicine was not included in the appropriations. Dr. Poppensiek makes the point that in most cases veterinary schools were considered as teaching institutions only and were held in rather low esteem by colleges of agriculture. Unique among veterinary schools was the New York State Veterinary College which did receive funds from the State of New York. The School of Veterinary Medicine at the University of Pennsylvania, being a private school, did not qualify for the types of funds provided to land-grant institutions, but at various times it did receive small amounts of money for research from the Federal Bureau of Animal Industry and the Pennsylvania Bureau of Animal Industry. In 1932 there was only $300 available for research and even by 1952, when the financial situation had improved, annual research funds at Penn were only $50,000.

The presence of the Pennsylvania State Livestock Sanitary Board at the School, from 1896 until 1927, aided in the early research effort. This was the first such state laboratory in the United States and up until the time when it was moved to Harrisburg, Pennsylvania, all clinical laboratory tests for the Veterinary School were done in this laboratory. The Livestock Sanitary Board was the forerunner of the Pennsylvania Bureau of Animal Industry and the location of its laboratory at the School had come about through the efforts of Dr. Leonard Pearson. Dr. Pearson had also persuaded the Commonwealth to purchase a 200-acre farm on the outskirts of Philadelphia in Marple Township, Pennsylvania. The farm, referred to as the Experimental Farm, was used for research on diseases of horses and farm animals. During it existence from 1898 to 1919 studies were conducted on tuberculosis, forage poisoning, Johne's disease, anthrax, and hog cholera. In 1907 Dr. Pearson sent Dr. Ezra Deubler (V'05) to Ames, Iowa, to learn about production of hog cholera serum and virus. These immunizing agents, along with tuberculin and malicein, were distributed free to veterinarians in Pennsylvania. The
Experimental Farm in cooperation with a prominent local practitioner, Dr. Ernest C. Deubler (V’11), was instrumental in establishing the first brucellosis-free herd of cattle in the United States on January 22, 1921. This herd belonged to Colonel R.L. Montgomery of Iman, Pennsylvania. Dr. Evan L. Stubbs went to the Farm in 1913, and "acted as a troubleshooter," going to the scene of various disease outbreaks in Pennsylvania and advising and assisting practitioners in diagnosis, treatment, and control measures. While at the Experimental Farm, Dr. Stubbs did the first work on the use of the complement fixation test for the diagnosis of brucellosis. When the Farm was sold, in 1919, Dr. Stubbs became director of the Laboratory and he began to specialize in poultry diseases. During 1924-1925 there was a severe outbreak of fowl plague in Pennsylvania and the United States. Dr. Stubbs published a series of papers about this incident and stated that the outbreak alerted the veterinary profession to the need of devoting more attention to poultry diseases. In 1928 the Laboratory was moved to Harrisburg, Pennsylvania, and Dr. Stubbs joined the faculty of the Veterinary School.

Most of the research reports emanating from the School of Veterinary Medicine at the University of Pennsylvania centered upon diagnosis, pathogenesis, and treatment of infectious diseases. Many of the publications were in the nature of case reports, observations, reviews, or conjectures about disease problems with strong emphasis on pathology and parasitology. There was a sprinkling of new information about clinical laboratory tests and some physiological and pharmacological data.

During these years it was common for the faculty to publish in the Veterinary Extension Quarterly rather than in national professional journals. For example, examination of the AVMA Journal for the years 1940 through 1944 reveals only three papers of a research nature published by the faculty; for the years 1942 and 1944 there were no publications except for short case reports or review articles.

The Veterinary Extension Quarterly was published by the School of Veterinary Medicine for the purpose of supplying new information to the practitioner. It was a
good publication but it did not have a national distribution and as a result some research reports and review papers by the faculty did not receive the attention that would have been forthcoming in other journals. A sampling of faculty contributions to the *Veterinary Extension Quarterly* from its inception in 1921 to 1930 reveals the following: “Vinegar, an Efficient Germicide for the Necrosis Bacillus,” (Dr. Louis A. Klein); “Treatment for Tapeworms in Dogs,” (Dr. William J. Lentz); “Synovitis of Shoulder or of Hip of the Horse Allayed by Deep Hypodermic Irritation,” (Dr. John W. Adams); “Some Causes of Injury in Intestinal Helminthiasis,” (Dr. Benjamin M. Underhill); “Prodromal Symptoms of Abortion,” (Dr. George A. Dick); “Johne’s Disease,” (Dr. Clarence J. Marshall); “White Diarrhea of Chicks,” (Dr. Victor G. Kimball); “Swine Tuberculosis,” (Dr. Harry M. Martin); “Ruminatoric Drugs (An Experimental Study),” (Dr. Roger S. Amadon). With the exception of the publications of Dr. Roger Amadon, none of these papers reflected any original work. During the next decade there was some upswing in publications resulting from original research. Dr. Evan L. Stubbs began a series of papers on leukemia in chickens. Actually, this work originated in 1928 when Dr. Stubbs became associated with Dr. Jacob Furth of the Henry Phipps Institute of Philadelphia. As a result of their investigations a strain of avian leukemia virus, called Strain 13, was isolated. This virus produced both leukemia and sarcoma, and efforts to isolate a separate leukemia virus were unsuccessful. During this same period of time, Dr. Mack A. Emmerson published the first report on trichomoniasis in Pennsylvania. There was considerable interest in periodic ophthalmia in horses and Drs. E.L. Stubbs and James M. Murphy reported on this disease. The sulfonamides had come into use and Drs. Louis A. Klein, Albert L. Kleckner, and Samuel F. Scheidy described the use of sulfanilamide in mastitis. Dr. Roger Amadon, along with Dr. A.H. Craige, published on the actions of morphine and its derivatives in the horse, and later Dr. Amadon reported on the use of transfusions in the horse and cow. It is interesting to note that during this period of time a graduate of the University of Pennsylvania was doing some of the earliest work on artificial insemination in cows. Dr. Alfred Kissieff, (V’33) a practitioner in Flourtown, Pennsylvania, in April of 1937, was successful in producing a calf through artificial insemination, the first in Pennsylvania.

From 1940 to 1952 the quantity of publications remained about the same but some newer faculty were beginning to contribute and indications of change were in the air. Dr. Stubbs reported on the first outbreak of Newcastle disease in poultry in Pennsylvania and along with Drs. Israel Live and F. George Sperling published on brucellosis. Dr. Stubbs also returned to his work on Strain 13 chicken sarcoma virus. The virus was reactivated after being held in a dessicated condition for a number of years. Dr. Stubbs and Dr. Alfred Wallbank received a grant from the U.S. Cancer Research Institute to work with this virus and published a series of eighteen papers. A team headed by Dr. Raymond Kelser had received a grant from the Grayson Foundation to work on equine infectious anemia with initial reports being made by Drs. Miklos Dregus and Arnold Gilman. Dr. Mark Allam of the surgery department was engaged in comparative research with individuals from the Hospital of the University of Pennsylvania and published on paralysed of peripheral nerves. Dr. Jacques Jenny, also of the department of surgery, was beginning his work on the use of pinning devices for fractures and Dr. Mack Emmerson contributed on rupture of the precubic tendon in cattle. Drs. David K. Detweiler and John Martin received a grant from the Army Chemical Center to study atropine in horses and made an initial report in 1952. Most significantly, Dr. Detweiler and Dr. John T. McGrath were beginning to develop their specialties in cardiology and neuropathology respectively. In 1943 Dr. Detweiler had begun to
build a series of electrocardiographs taken on dogs in the Veterinary Hospital. This was the prelude to a major research effort that would develop in the late 1950s. During the period 1943 to 1952 Dr. Detweiler contributed three outstanding reviews, one on sex hormones, and the other two on the use of fluids in shock and heart disease in dogs. All of these were published in the *Veterinary Extension Quarterly*.

It was obvious, that by 1952, the School of Veterinary Medicine was beginning to develop a faculty that would engage in research. Money was still scarce but there were now some individuals who were willing to make the personal sacrifices necessary to develop a research career. Dean Raymond Kelser contributed to this new atmosphere and his successor, Dr. Mark W. Altam, would play an essential role in bringing the School to a top-flight research position.

### The Hospital

During the period 1910 to 1952 the Veterinary Hospital was located in the southwest and southern wings of the quadrangle building. The small animal section occupied most of the first and second floors of the southwest section, fronting on Thirty-ninth Street while the large animal portion occupied the first floor of the long wing extending along Woodland Avenue. A stately archway allowed the passage of vehicles from Thirty-ninth Street into the quadrangle courtyard and a doorway opening off the passageway opened into the reception area for small animals and the business office. The small animal area consisted of some small examination rooms on the first floor, and a large examining room, a surgery suite, and four large wards for dogs on the second floor. For many years one ward (Ward D) was reserved for distemper cases. A small room was available for cats and there was an inside run and washing area. The large animal area provided a large examining room with some box stalls on the first floor of the southwest corner of the building and four wards with standing and box stalls extending along Woodland Avenue. The farrier shop was in the southeast corner. The only area for exercising large animals was the courtyard which was small and unsatisfactory for this purpose.

Beginning in 1890 and continuing through 1952 a free clinic was provided for both large and small animals. This clinic provided free examination and treatment for about two hours each morning. A small charge was made for drugs dispensed and in later years there was a registration fee of one dollar or less. Up until the advent of the automobile the hospital provided two horse-drawn ambulances for picking-up animals, one for large animals and the other for small animals.

Beginning in 1915 a detailed listing of cases seen in the hospital was published annually in the Veterinary School Bulletin. In 1915 a total of 2,235 large animal cases were presented of which 1,608 were seen in the free clinic. In this same year there were 2,820 small animal cases, 1,522 of these appearing in the free clinic. Among the large animal cases the common types of diagnosis were fistulous withers, chronic peri-arthritis, quittor, azoturia, colic, influenza, contracted hoofs, and various dental problems. Among dogs and cats distemper, eczema, helminthiasis, rabies, and fractures were common. A total of 455 castrations and 89 oophorectomies were performed. Although the ambulatory clinic did not become a formal part of teaching until 1921, faculty members did take students to nearby farms in the years prior to this. In 1915 a total of 85 cases were seen by the ambulatory clinic.

Up until 1935 the total number of cases seen in the hospital increased each year, reaching a peak of 13,927. With the growth of Philadelphia, urbanization of surrounding areas, and the decreased use of horses, there was a steady decline in the number of large animals presented. By 1935 only 401 large animals were seen, but the number of small animals had increased to 13,526 with 10,744 appearing in the free clinic. The number of cases seen by the ambulatory clinic had increased to 2,413.
Following 1935, and until 1952, there was a gradual decrease in the total number of hospital cases. Surprisingly, during these years there was an increase in large animal cases and a decrease in small animals. In 1952, a total of 1,599 large animals were seen and 6,321 small animals. The ambulatory clinic was now known as the field services and this unit reported a total of 3,432 diagnoses.

Beginning in 1889 and continuing through 1952 there was a Board of Managers of the Veterinary Hospital. This group, never totalling more than thirteen, dealt with the business aspects and operating policies of the Hospital. Its original composition called for the Board to be made up of representatives from the University Trustees, the community, and the faculty. From 1910 to 1940 the president and treasurer of the Board was Mr. J. Bertram Lippincott, son of Joshua B. Lippincott, an early benefactor of the Veterinary School. From 1910 until 1940 Mr. J. Bertram Lippincott, son of J. Bertram Lippincott, served as president, and then continued as a member through 1952. From 1943 until 1952 Mr. Edward Woolman was president. The dean of the Veterinary School served as director of the Hospital and was a member of the Board along with several members of the clinical faculty. At various times the vice president for medical affairs of the University served on the Board of Managers. Beginning in 1936 there was a Ladies Committee for the Hospital. At times this group, which was discontinued in 1948, numbered almost fifty. There is no written record of the function of the Ladies Committee, but presumably its purpose was to raise funds for the Hospital.

Up until 1935 the Hospital staff never numbered more than eight, with some of these being part-time. In 1910 there were four staff members: Drs. John W. Adams and C.J. Marshall in the Large Animal Clinic and Drs. William J. Lentz and Stephen Locket in the Small Animal Clinic. Dr. Adams continued in this capacity until his death in 1926, and Dr. Marshall until he died in 1938. Dr. Marshall was also director of the Ambulatory Clinic. Dr. Adams was mainly concerned with horses, while Dr. Marshall devoted his time to farm animals. Beginning in 1913, Dr. Adams was assisted, on part-time basis, by Dr. William J. Lee who served until 1948. Beginning in 1914 and continuing until 1948, Dr. Lentz was in charge of the Small Animal Clinic. Others who served on the Hospital staff up until 1935 were Drs. Mack Emerson, John D. Beck, Frank E. Lentz, Willard P. Boyer, Lester R. Barto, Edwin C.F. Enge, Samuel F. Scheidy, H. Edwards Bemis, William E. Martindale, Victor G. Kimball, William E. Scheckler, James W. Crouse, P.S. Shannon, H.B. Balthasar, A.A. Feist, and F. Chandler.

From 1935 until 1952 the Hospital staff grew slowly in numbers, reaching a total of seventeen in 1952. With the death of Dr. C.J. Marshall in 1937, Dr. John D. Beck assumed the major responsibility for farm animals in the Large Animal Clinic, and was director of the Ambulatory Clinic. Until he retired in 1948, Dr. William J. Lee specialized in surgery and in the diagnosis and treatment of lameness in the horse. Dr. Mack Emerson developed radiology and specialized in reproductive diseases of large animals. In 1945, Dr. Edwin A. Churchill joined the staff in the Large Animal Clinic and assumed responsibility for radiology. With the retirement of Dr. Lee in 1948, Dr. Churchill took over his work with horses. Dr. Churchill was assisted at various times by Drs. Roger Maloney, James T. O'Connor, Charles W. Raker, and Arthur J. Blaney. Those responsible for farm animals in the Large Animal Clinic, under Dr. John Beck, included Drs. Meridith R. Gardiner, Thomas De Mott, Walter E. La Grange, William B. Boucher, Frantisek Kral, and Dr. Arthur Bartsinger. There were several important additions to the staff in the Small Animal Clinic. Dr. James H. Mark succeeded Dr. S.F. Scheidy as chief resident in 1943. Dr. Mark W. Alman joined the staff in surgery in 1945 and was followed by Dr. Jacques Jenny in 1949 and Dr. Robert S. Brodey in 1952. This group formed the nucleus of what was to be a strong department of surgery. Dr. Robert Schwarzmann, who would develop a distinguished career in dermatology, joined the staff in 1947 and in 1949 Dr. Joseph Skelley became resident veterinarian.

During this period the pharmacy was a rather special place in that it not only functioned as a vital service to the Hospital but
also served as a social center. Until after World War II a great many of the drugs used in the Hospital or dispensed were compounded under the direction of Dr. Frank E. Lentz who was in charge of the pharmacy from 1913 until 1955. Small groups of students were assigned to pharmacy detail as a part of their clinical training and had the responsibility of preparing drug mixtures as well as performing various other duties. In the earliest years the efficacy of a preparation was often judged, in part, on the number of individual drugs it contained, and therefore the pharmacy was a very busy place, filled with a variety of odors ranging from fragrant to repugnant. Following World War II increasing numbers of commercially prepared drugs became available for use so that the compounding of preparations diminished.

During this period the Hospital was always seriously understaffed and with the passage of time the facilities became woefully inadequate and unsightly. The small staff was faced with the problem of providing service for an unrealistically large case load and at the same time providing clinical instruction and lecturing in clinical courses. There was little time for research or even to devote some special attention to interesting or unusual cases. An inefficient record system led to difficulty in retrieving information for disease surveys. Special tribute is due three individuals who contended with the almost impossible situation in the Small Animal Hospital and yet continued to provide good service: Drs. Samuel F. Scheidy, James H. Mark, and Joseph F. Skelley.

Bolton Farm

In 1937 the heirs of Mr. Effingham B. Morris gave the University a farm of about 400 acres. This was known as Bolton Farm and was located near Falsington, Bucks County, Pennsylvania. Bolton Farm had a rich history, dating back to the days of William Penn, when it had been deeded to Phineas Pemberton, a Quaker emigre' and a forebearer of the Morris family. The farm had been named after the ancestral home of Mr. Pemberton, Bolton, England.

The University designated the Veterinary School to administer Bolton Farm which housed a purebred herd of Guernsey cattle, purebred Berkshire hogs, and several flocks of chickens. It was the hope of Dean George A. Dick and the vice president for medical affairs, Dr. Alfred Stengel, that the site could be developed into a School of Animal Pathology. This was to be a unit in which comparative medical research would be fostered and would serve all of biomedical components of the University. An appropriation of $50,000 was obtained from the Commonwealth to provide for laboratories and salaries. This was a good start but no further funds were forthcoming and with the death of Dr. Stengel the dreams for the School of Animal Pathology never became a reality. The Veterinary School Bulletin continued to list a description of this School from 1939 to 1952 but it never became a functional entity. A small amount of money was obtained for research and a few faculty of the Veterinary School carried-out some work within the framework of the School of Animal Pathology. Drs. Evan L. Stubbs and Dr. Robert O. Biltz worked on fowl paralysis, fowl leukosis, and brucellosis in cattle and Dr. Louis A. Klein and Dr. Albert L. Kleckner carried out some studies on catarrhal mastitis.

It was also hoped that Bolton Farm could be used for clinical training, but while groups of senior students did visit the farm this never developed into a full-fledged program.

When the University obtained Bolton Farm in 1937 the farm manager was Mr. Charles Bruce, who had managed the farm for a number of years for the Morris family. Mr. Bruce continued in this capacity until he died in 1951. He was aided and advised by Dr. Ernest Deubler (V'11) a prominent local practitioner who acted as Dean George Dick's liaison to the farm. Funds were so short that it was necessary to sell some of the Guernsey cattle to obtain operating funds; Dr. Deubler supervised this operation and others that were
essential to the survival of the farm. When Mr. Bruce died, his son, Leroy, was appointed as manager. He held this position until 1952, when the farm was sold, and then moved to New Bolton Center as manager of the new facility.

In the late 1940s United States Steel decided to build its Fairless Hills plant in the vicinity of Bolton Farm and the area soon became urbanized. By 1952 it was no longer practical to operate the farm and it reverted to the Morris family who sold it and used the proceeds to purchase the site of the present New Bolton Center.

Activities

In 1935 a History of the School of Veterinary Medicine was published by the Veterinary Alumni Society to mark the Fiftieth Anniversary of the School. This was written by seven different members of the faculty and covers the history of the Veterinary School in a chronological fashion from 1884 to 1935. It also contains sections on the ambulatory clinic, the hospital, the farriery, and the pharmacy. It lists, in alphabetical order, the 152 individuals who served on the faculty during this period. Including the class which graduated in 1934, there were 1,014 graduates; these are listed in alphabetical order with the year of graduation, and there is also a listing by class. The largest class to graduate was in 1912, with fifty-eight graduates, and the smallest was in 1919 with three graduates.

The History contains some delightful photographs of the old buildings, important faculty, and a few early graduates, and brief biographical sketches of many faculty. Unfortunately it is not indexed.

Annual Conference

The Annual Conferences for Veterinarians, begun by Dean Leonard Pearson in 1900, continued to be held each January. Up until 1948 these were held in the Veterinary School; from 1948 until 1952 the scene was the University Museum. For many years, up through 1938, the program chairman was Dr. C.J. Marshall; from 1938 to 1951 Dr. John D. Beck was chairman. These were two-day affairs; up until 1945 the first day began with an afternoon session followed by an evening program; after this time all sessions were held during the day.

In the early years speakers for the conferences were drawn largely from the faculty, but by the 1920s program participants were coming from other schools and government agencies. When the conferences were held at the School there was often a practical demonstration of some clinical problem as well as presented papers.