

History of Early Veterinary Colleges in California: Part 1 University of California Veterinary Department, 1895–1899

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During the late 1800s, the need for educated and trained veterinarians was increasing in America. As a result, a number of veterinary schools, many of which were private, were founded across the country. Two of those early colleges were located west of the Rocky Mountains in the San Francisco Bay area. These short-lived schools were the University of California Veterinary Department (also referred to as the California Veterinary College) in operation from 1895 to 1899, followed by the San Francisco Veterinary College from 1899 to 1918.^{1,2,3,4}

It would be another 30 years before perseverance coupled with demand culminated in the opening of a third veterinary college on the University of California campus at Davis in 1948.

NEED FOR VETERINARY EDUCATION

Horses featured prominently in the development of American cities in the nineteenth century. In San Francisco, for example, horses enabled movement of the growing population and supported commerce by providing living power to operate street railway cars, pull carriages for leisure, and move wagons with goods and merchandise along with fire apparatus. McShane and Tarr indicate that “large nineteenth century cities averaged roughly one horse for every twenty people, although the ratio of humans to horses varied widely.” In 1900, they estimated 20.1 humans per horse in San Francisco compared with 17.5 in St. Louis and 26.4 in New York.⁵

Robichaud points out, “Although exact numbers of horses are hard to determine, the number of businesses devoted to the horse economy in San Francisco expanded greatly over the last decades of the nineteenth century. The number of shops listed as ‘Harness and Saddlery’ in San Francisco grew by more than 35 percent, from 45 to 63 between 1869 and 1900. ‘Hay and Grain’ retailers increased at a faster rate, from 40 in 1869 to 100 in 1900. Most telling, perhaps, was the number of ‘stables,’ which rose from 41 in 1860 to 121 in 1910. By 1900 the city had at least 107 ‘horseshoers.’ These figures offer some measurement of the rise in the number of urban horses in San Francisco—a trend common in most American cities at the time.”⁶

In support of the large horse population, San Francisco was not alone in needing veterinarians (known as veterinary surgeons at the time) to provide medical support for these working animals. For a population of 342,782 people in 1900, there were 27 listings for veterinary surgeons and hospitals in the 1900 San Francisco City Directory.⁷ With only a few

private veterinary schools in the US, primarily in New York, Chicago, and Kansas City, most of the early graduate practitioners settling in the Bay area were educated in the eastern United States, Canada, or Europe, especially in Edinburgh and London.

The California Veterinary Medical Association had been organized in San Francisco on January 11, 1888, by “a handful of the most progressive veterinary practitioners in Northern California.” It was the first such association west of the Mississippi. In the late 1880s, there were reported to be “about a hundred practitioners of whom not over ten in Northern California and perhaps three in Southern California were qualified, college trained men. The others were self-styled horse doctors...It must be remembered that at this time there were only a few veterinary colleges in this country and those were located in the East.”⁸

The first legislative bill passed in March 1893 regulating the practice of veterinary medicine and surgery in California was a compromise in the struggle between graduate and non-graduate veterinarians. Thereafter, a Board of Medical Examiners was established to further advance and raise standards for the profession by requiring a diploma and/or examination.⁹ Regulations would be strengthened with the subsequent passage of the Practice Act of 1907, which repealed and replaced the original Veterinary Practice Act of 1893 and the 1903 amendment.¹⁰

Concerning veterinary history on the West Coast, Jensen notes “not that the idea of educating veterinarians within California hadn’t been considered. As far back as 1876, a veterinarian had been recruited to teach veterinary medicine at Chaffee Agricultural College, in Chino. Unfortunately, no record remains of who he was, or how long such a position was maintained.”¹¹

By the 1890s, efforts were seriously underway to start a veterinary school in California. At an 1892 meeting of the California Veterinary Medical Association, Chairman William F. Egan “announced a veterinary college was to be established in this city in the near future, and that the project was one of considerable importance.”¹²

In addition to the local need for more practitioners, several national developments may have been factors influencing consideration of a veterinary school in California. In particular, the US Veterinary Medical Association (later, the American

Veterinary Medical Association) had passed a resolution that only graduates of recognized veterinary colleges could qualify for membership after January 1, 1893. Moreover, in a joint 1894 ruling, the US Department of Agriculture and the Civil Service Commission would only examine qualified graduate veterinarians for employment by the federal Bureau of Animal Industry as meat and other inspectors.¹³

UNIVERSITY OF CALIFORNIA VETERINARY DEPARTMENT, 1895–1899

In late 1894, a Special Committee submitted an application for affiliation of the California Veterinary College with the University of California at San Francisco. To avoid future misunderstanding, the application was revised to insert a provision for the Regents to confer degrees on recommended graduates at their discretion.¹⁴ On December 11, 1894, the Board of Regents approved the amended application. In doing so, it was reported, “The committee finds that there are excellent precedents for the affiliation of the Veterinary College with the University, in the connection of similar colleges with several of the great universities of this country, and is of the opinion that this State and coast furnish excellent field and opportunities for such a department of the University.” (Fig. 1) Officially, it was to be known as the Veterinary Department of the University of California.

The December 1894 issue of the *Journal of Comparative Medicine and Veterinary Archives* announced,¹⁵ “California, in January next, will open a new Veterinary School, which will be in some way associated with the California State University [sic], though the funds necessary for its establishment have been raised by private subscription. It is announced that no less than fifty students will enter at the opening of the session. This should be a good field for a Veterinary School, but it should be on a very high standard, and it is hoped they will not start with a curriculum of less than three years of six months each.”...“They expect to commence their initial work on the 7th of January, 1895, after which the sessions will regularly convene in October. Associated with the enterprise are Drs. Bowhill, Buzard, Egan, Nief and Skaife, well known Veterinarians of the Pacific Coast. The adjunct faculty has not yet been announced. The degree of Doctor of Veterinary Science will be conferred. A curriculum of three years of six months each will be required for the course.”¹⁶

Veterinary surgery.
SAN FRANCISCO, Dec. 11.—At the monthly meeting of the Board of Regents of the University of California, held today, the board decided favorably for the admission of the San Francisco Veterinary College to the University, and hereafter veterinary surgery will be one of the studies at this college.

Figure 1. Veterinary surgery. *Sacramento Daily Union*. 88:2, 1894 Dec 12. GenealogyBank.

Following that news notice, editors of the *American Veterinary Review* had also been alerted in January 1895 to the possible establishment of a new veterinary college under the name of the San Francisco College of Veterinary Surgeons, and “feared that a good object was going to be used for personal benefit.”¹⁷ But, “our anxiety has quieted in seeing the first official circular for the California Veterinary College, in which we find the names of several gentlemen reported as millionaires and ready to back up the Board of Faculty, in which we find the names of four veterinarians, three of English and one of American graduation.” It was reassuring that “the requirement for graduation will be three years attendance and a term of NINE months, and we are informed by private notes just at hand is accepted and is a branch of the University of California.”

Organized in 1894, the California Veterinary College became the first veterinary school to open its doors west of the Rockies in 1895. It was located in downtown San Francisco on the northeast corner of Post and Fillmore Streets.^{18,19} This short-lived school was one of four health sciences colleges in San Francisco, along with medicine, dentistry, and pharmacy. While affiliated with the University of California, these colleges were intended to be supported entirely by student fees and private contributions.

Under that arrangement with the University of California, the veterinary school was responsible to a Board of Trustees that included two veterinarians (William F. Egan (Figs. 2 and 3) and Frank W. Skaife), two physicians (W. F. McNutt and Winslow Anderson), and ten leading citizens. The University’s Regents provided overall supervision and approved all faculty appointments.²⁰

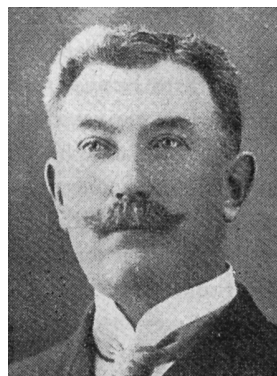


Figure 2. William F. Egan, MRCVSL (’88 Edinburgh) (1864–1935). Source: Arburua. p. 267.



Figure 3. Advertisement. *Breeder and Sportsman*. 54:42, Feb 27, 1909. *Internet Archive*, <https://archive.org/stream/breedersportsma-541909sanf/breedersportsma541909sanf#mode/1up>

Arburua notes, “It was mainly through Dr. Egan’s efforts that this was done and he was appointed the dean and was the principal teacher.”²¹ Dr. Egan’s practice had become the largest in San Francisco with two branches and a stable in Oakland. In addition to practice and teaching, he worked for the Police Department as well as served as veterinarian for the Fire Department from 1894 to 1921.²²

Deans and Teaching Faculty

When established, Major [or Captain] Thomas Bowhill, MBE, FRCVS, FRPS (1857–1925), an 1886 graduate of the New Veterinary College, Edinburgh, Scotland, who was instrumental in founding the school, served as the school’s first dean until the end of the first term in June 1895.^{23,24,25,26,27} Prior to that appointment, he had been a special lecturer in bacteriology in the medical college for 3 years. He also maintained a practice on Cedar Street in San Francisco.

Arburua speculates that along with Dr. Egan, Major Bowhill may have been a chief influence in arranging the cooperation with the medical school and “certain veterinary practitioners” which resulted in the founding of a veterinary college. Moreover, “the fact that two of the three physicians and three of the veterinarians on the faculty were Edinburgh graduates may also have been an integrating factor.”²⁸ He further suggested that Major Bowhill “left so soon that one is led to suspect that he foresaw early failure and was unwilling or financially unable to continue teaching without a salary.” Trustee and professor Frank W. Scaife, DVS (‘88 Montreal), MRCVS (‘90 London), succeeded him as dean from 1897 to 1899.

The faculty consisted of six veterinary professors and lecturers along with five physicians who taught in both the veterinary and medical departments. With their strong credentials, the faculty “were as a group probably unequaled in many American veterinary colleges in existence at the time.” Interestingly, “the entire veterinary faculty served without pay, and many of them contributed money to help defray expenses.”²⁹ This was possible because most maintained their own private veterinary practices and hospitals in the city and surrounding area.

For the academic year 1895, among the first six veterinary faculty members were:³⁰

Major Thomas Bowhill, MBE, FRCVS, FRPS (‘68 Edinburgh) (1857-1925), Professor of Veterinary Surgery, Pathology, and Bacteriology; dispensary House Surgeon

Dr. William Francis Egan, MRCVS (‘88 Edinburgh) (1864-1935), Professor of Bovine Pathology and Veterinary Obstetrics (1895-1897); Professor of Equine Medicine and Veterinary Surgery (1897-1901); maintained a veterinary hospital at 1117 Golden Gate Avenue and two branch offices at 1525 California Street and 1529 Howard Street, a large yard at Webster and Chestnut Streets, and a stable in Oakland.

Dr. Thomas Maclay, MRCVS (‘83 London) (1859-1945), Professor of Veterinary Surgery (1895-1897); Professor of Bovine Medicine, Obstetrics and Veterinary

Sanitary Science (1897-1898); he may have commuted to San Francisco where he had developed “a good practice” in Petaluma as well as having successful banking and land companies.

Dr. Frank W. Skaife, DVS (‘88 Montreal), MRCVS (‘90 London) (1861-1947), Professor of Canine Pathology (1895-1897), Professor of Canine Medicine and Surgery and Dermatology (1897-1901); in charge of canine patients in the dispensary; maintained his own private practice at 18 Cedar Street

Dr. K. O[liver] Steers, VS (‘91 OVC) (b. 1860), Professor of Principles and Practice of Equine Medicine (1895-1897); Lecturer in Botany and Therapeutics; Professor of Therapeutics and Botany and Lecturer in Obstetrics and Materia Medica (1897-1900); Secretary of the College (October 1895-December 1900); had an active practice in San Francisco until the earthquake and fire of 1906; was the “first veterinarian in California to maintain a hospital and practice devoted exclusively to pets.”

Dr. Joseph A. Welsh (class of 1897), Lecturer in Anatomy, Comparative Anatomy, and Bovine Medicine and Contagious Diseases of Animals (1897-1899); maintained a private practice at 1215 Golden Gate Avenue.

Veterinarians I. Jacobson, DVM, was a special lecturer in medicine and F.W. Scott, DVM, and Robert Darling, DVS, were house surgeons in the dispensary. Dr. A.E. Buzard, MRCVS, may also have been involved as Professor of the Principles and Practice of Equine Medicine and Dermatology, but records are unclear as he also maintained a busy private practice.

In addition to teaching and maintaining their private practices, the veterinarians on the faculty were active in developing the profession. They participated in meetings of the California State Veterinary Medical Association, which were often held at the Baldwin Hotel in San Francisco or the lecture room of the California Veterinary College, and many held offices in that organization. Students of the Veterinary Department were reported to frequently attend those meetings with their professors. At early meetings, new members of the Association were nominated and approved. However, at one particular session on December 11, 1895, Dr. E.J. Creely had been elected in opposition, but his membership was rescinded and no certificate was issued because it was said he failed to abide by the Code of Ethics as stated in the By-Laws and was delinquent in payment of the initiation fee and dues.³¹

For the non-clinical veterinary subjects, a number of university physicians from the medical department provided instruction and contributed lectures in physiology, histology, chemistry, toxicology, natural history, and zoology.^{32,33} Among them were W.F. McNutt, MD, MRCS, LRCP (principles of medicine); S. J. Fraser, MD (physiology and histology); F.F. Knorp, MD (physiology and histology); Frank T. Green, PhD (chemistry and toxicology); William Watt Kerr, MA, MD (clinical medicine), Joseph LeConte, MA, MD, LLD (natural history); and William E. Ritter, MA (zoology).

For the academic year 1897-1898, Veterinary Department faculty included:³⁴

W.F. Egan, MRCVS, Professor of Principles and Practice of Veterinary Surgery and Equine Medicine

F.A. Nief, RSc, DVS, Professor of Comparative Anatomy

A. Auchie Cunningham, FCS, FI Inst, etc. Secretary, Professor of Chemistry, Materia Medica and Toxicology

S.J. Fraser BA, MD, Professor of Physiology and Histology

Frank W. Skaife, DVS, MRCVS, Dean, Professor of Helminthology, Canine Medicine and Surgery and Dermatology

K.O. Steers, VS, Professor of Therapeutics and Botany

Thomas Maclay, MRCVS, Professor of Bovine Medicine and Obstetrics, and Veterinary Sanitary Science

Henry R.A. Kugeler, MD, Lecturer on Pathology and Bacteriology

Special Lecturers

W.F. McNutt, MD, LRCS, LRCP, Edin., Professor of the Principles and Practice of Medicine

William Watt Kerr, MA, MD, Edin., Professor of Clinical Medicine

Joseph LeConte, AM, MD, LLD, Professor of Geology and Natural History

W. Ritter, MA, Assistant Professor of Biology

College Dispensary, House Surgeons

W.F. Egan, MRCVS, Horses, Cattle, etc.

F.W. Skaife, DVS, MRCVS, Dogs, etc.

Course of Study

The course of study in the Veterinary Department constituted a 3-year curriculum. Tuition was \$100 per year.³⁵ For the academic year 1897-1898,³⁶ the Course of Study in veterinary medicine was described as:

“The Curriculum of this College comprises the Fundamental Sciences, and covers a period of three Winter Sessions of over six months each, commencing on the 1st day of October of each year and extending to the end of March of the following year. The Theoretical Instruction will be by didactic lectures, class demonstrations and recitations. The facilities for instruction are equal to any in this country, and the courses extend from the first elements of Medicine to the latest researches in the Veterinary Sciences, at home and abroad. The student will be trained under the special guidance of Professors in all the practical and technical details of the profession.”

Studies for students in 1897-1898 were:

FIRST YEAR: Chemistry and Materia Medica; Elements of Physiology and Histology; Anatomy; Dissection; and Botany.

SECOND YEAR: Physiology and Comparative Physiology; Anatomy of the Domesticated Animals and Com-

parative Anatomy; Principles and Practice of Veterinary Surgery; Principles and Practice of Equine Medicine; Principles and Practice of Bovine Medicine; Materia Medica; Analytical and Organic Chemistry; Toxicology; Dissection; Clinical Instruction; and Therapeutics.

THIRD YEAR: Principles and Practice of Veterinary Surgery; Principles and Practice of Equine Medicine and Dermatology; Principles and Practice of Canine Medicine and Helminthology; Veterinary Obstetrics; Bacteriology; Pathological Anatomy; Veterinary Hygiene; Clinical Instruction; and Therapeutics.

The second- and third-year students, besides attending the clinics, were required to serve as aids in the Hospital Dispensary, and the third year they were placed in charge of sick animals and required to perform autopsies.

Final Examinations in 1897

With its 3-year course of study, this college offered high standards for the time. However, members of the California State Veterinary Medical Association had become concerned that “final examinations should be conducted by parties not connected with said veterinary college.” Consequently, a resolution was introduced and adopted for the appointment of a 3-member committee to communicate with the faculty of the Veterinary Department of the University of California. That committee would request the College appoint a five-member board of examiners not associated with the College to conduct examinations so that graduating students in 1897 would be “capable of passing said examinations in a credible manner.”³⁷

However, when this matter was taken up by the Regents,³⁸ they found the charges to be “unfounded” and therefore denied the request made by the Association for the appointment of a separate Board of Examiners.

Graduates

Being in operation for only 5 years at low enrollment, the Veterinary Department graduated only 10 students with Doctor of Veterinary Science (DVS) degrees. They included:³⁹

Charles F. Keane, DVS '97

James J. Summerfield, DVS '97

Joseph A. Welch, DVS '97

Louis C. Hoffman, DVS '98

J. Otis Jacobs, DVS '98

George H. Locke, DVS '98

Arthur C. Rosenberger, DVS '98

Thomas Edward Carroll, DVS '99

James Michael Murry, DVS '99

George Donnelly, DVS '01

New Building Never Occupied

In order to consolidate the four affiliated schools [or departments] (medicine, dentistry, pharmacy, and veterinary medicine) that were scattered around the city of San Francisco into one center, the State Legislature appropriated \$250,000 in 1895. (Fig. 4) This funding enabled the construction of four

buildings on land donated by Adolph Sutro, an ex-Mayor of San Francisco, which is now the site of the University of California Medical Center on Parnassus Avenue between First and Fifth Avenues. These buildings were dedicated on October 22, 1898.

“At the time it was said that the design was superior to that of any veterinary college in America.”⁴⁰ (Fig. 5) However, the Veterinary Department was never able to move into its more modern facilities. As Secretary of the Faculty Dr. K.O. Steers explained in his annual report of October 28, 1898:⁴¹

“The new [veterinary] college building is now about to be completed, but under our lease we cannot leave the building at Post and Fillmore for a year to come (November 1899). It would be useless as we stand today to

enter our new building. Our equipment, even in a moderate way, would cost some five to ten thousand dollars. We might, if we could get some four or five thousand dollars, fit up class rooms and a dissecting room and hospital, and by making arrangements in the Medical Department for the use of their rooms for bacteriology, pathology and chemistry, we could gradually equip our other rooms. Some such arrangement will be necessary before we shall be able to occupy our new building. Our present equipment is make-shift, at best, and is quite inadequate for our wants.”

After UC San Francisco’s Veterinary Department closed in 1899, the building constructed and dedicated in 1898 to house veterinary instruction remained vacant until assigned to the Hooper Foundation as a medical research institute in 1913.



Figure 4. Buildings of the Affiliated Colleges, University of California under construction, July 6, 1897. “College of Veterinary Science” is in lower right. Source: Calisphere, UC San Francisco, Library, University Archives, <https://calisphere.org/item/8b2c879f-56d4-4a53-b6f9-4b73c054a1cd/>

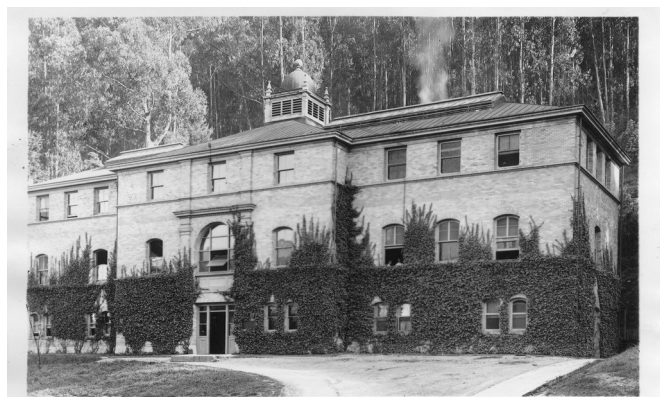


Figure 5. Building originally constructed in 1898 for the Veterinary Department that was later occupied by Hooper Foundation for Medical Research, date unknown. Source: San Francisco Public Library, San Francisco Historical Photograph Collection, 1939 June 17. Calisphere, <https://calisphere.org/item/c17335c783c68a24dc454d69d14ef830/>

HOOPER FOUNDATION CONNECTION

In addition to the animal disease-related studies conducted at the UC Berkeley Veterinary Science Division, another institution contributed significantly to public health and veterinary medicine not only for California but internationally.⁴² From property left to the Regents of the University of California at San Francisco by Sophronia Hooper in 1913, a Foundation was established in memory of her husband, George Williams Hooper. Income from the Foundation’s endowment created an institute for medical research for investigations in medicine and surgery, as well as causes of disease and methods of prevention and treatment.

When the Foundation was founded in 1913, it was assigned the vacant building originally constructed as a modern veterinary college on the San Francisco medical campus. The facilities were enlarged in 1938 with special laboratory facilities for plague research, along with replacing the old animal care quarters with a 4-story annex adjacent to the original building.

Following George H. Whipple, MD as its first director, the Hooper Foundation came under the direction of Karl F. “K.F.” Meyer (1884-1974) DVM, DSc, MD, LL.D, director from 1924 until his retirement in 1954.⁴³ In 1915, he left his faculty position at Berkeley for an appointment at the Hooper as professor of tropical medicine in charge of infectious diseases and immunology. Over the years, the Foundation “conducted much noteworthy research, often directly or indirectly applicable to veterinary medicine. Among the wide-ranging projects the greatest accomplishments have been in the fields of botulism, plague, brucellosis, ornithosis, and equine encephalomyelitis.”⁴⁴ In addition to their pioneering research on botulism that benefited the canning industry, Jensen noted, “studies sponsored by the Hooper Foundation have contributed significantly to the progress of veterinary medicine, and the foundation has gained world renowned for its research on animal diseases transmissible to man.”⁴⁵

Lack of Funds and Students

When the affiliated colleges were established, it had been intended that all of them, including the Veterinary Department, would be supported entirely by student fees and private contributions.^{46,47,48} In veterinary medicine, fees were nearly the same as those charged students in the university's other medical departments and were no higher than the average annual tuition of most other private 2-year veterinary schools across the country at the time. However, at \$100 tuition per year with a matriculation, graduation and laboratory fee of \$55, the total expenditure was \$355 per student for the 3-year program.

Yet, few students applied to the college. It has been speculated that the chief reason for the lack of students may have been the relatively high entrance requirement coupled with a broader and more demanding curriculum. Students were required to have graduated from high school or taken a written examination corresponding to those requirements which "was at least twice as high as demanded by most other veterinary colleges." Arburua pointed out that most of the founders were foreign graduates who "equated veterinary medicine with human medicine – which American schools of the day did not."⁴⁹

In relation to occupying the new building, College secretary Steers' 1898 Annual Report stated: "From fees the department hardly does more than pay its rent and a few running expenses. It leaves nothing for the teaching staff or for advertising. During 1897 we received a benefit from the Ingleside Race Club of a day's racing. This put the College on a somewhat better footing financially and allowed us to pay off all our over-due debts. So the faculty continued to struggle along at Post and Fillmore streets until it finally closed its doors in March, 1900."^{50,51}

Closing of the College

According to Arburua, "The ultimate reason for the closing of the college was lack of funds, and the penultimate was lack of students, as the chief source of income was student fees."^{52,53} At closing in 1900, the school had 4 Professors, 1 Adjunct Professor, 1 Lecturer, and 6-12 Special Lecturers.⁵⁴ Only two students were enrolled that last year, while a third would finish his course work by special arrangement one year later in 1901

after returning from service with the US Army Quartermaster Corps in the Philippine Islands.⁵⁵

In further explaining the decision of the Veterinary Department, Secretary of the Faculty, K.O. Steers wrote to the President of the University:⁵⁶

"It is with considerable regret that I have to report to you the desire of the different members of the faculty to close this department. The cause is lack of funds to enable us to enter our new building and not only furnish it properly, but advertise it thoroughly, both by [printing and distributing a] catalogue and by other means... The different members of the faculty having been called upon for money every year since the College began, are now unwilling to give further aid."

It seems the faculty were proud of their profession but felt very discouraged by having given both time and money over a period of five years only to close the department. Yet, they recognized that "without some endowment to furnish thoroughly the new building, and to allow of advertising the College as it should be done, we shall be forced to resign. At present we have no quarters to lecture in, and we have no students on the roll."^{57,58}

Jensen speculates that another reason for the early demise of the underfunded Veterinary Department was looming competition from the San Francisco Veterinary College, a second school chartered in 1898 by Dr. E.J. Creely.⁵⁹

Summary

The early history of veterinary education in California prior to 1918 focuses on its first two colleges, the short-lived University of California Veterinary Department (California Veterinary College) from 1895 to 1899 and the private San Francisco Veterinary College founded by Dr. E. J. Creely from 1899 to 1918. From its inception, the Veterinary Department offered significant potential given its high standards, academic affiliation with the University of California at San Francisco, and connection with the medical college. Unfortunately, a lack of students and self-sufficient funding model were inadequate, forcing the school to close at the turn of the century before becoming firmly established.

Evolution of Early Veterinary Colleges in California 1895–1918, TIMELINE

YEAR	EVENT	DEAN AND/OR FOUNDER
1888	California State Veterinary Medical Association founded in San Francisco	
1895	University of California San Francisco Veterinary Department founded	Thomas Bowhill, MBE, FRCVS, FRPS, first dean
1899	University of California San Francisco Veterinary Department closes	
1899	San Francisco Veterinary College founded	Edward J. Creely, DVS, dean and president
1913	University of California Veterinary Department vacant building assigned to the newly established Hooper Foundation for medical research	George H. Whipple, MD, director
1918	San Francisco Veterinary College closes	

REFERENCES

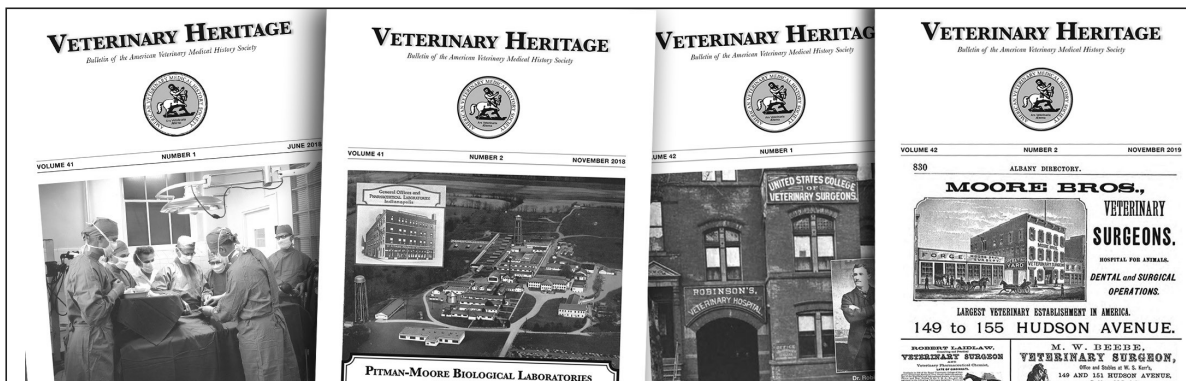
1. Foster JP. [Chart of the veterinary colleges of North America.] Professional veterinary medicine. *Survey of land grant Colleges and universities Section of Bulletin*. vol. 2, part V. Washington, DC: Govt. Printing Office, 1930; p. 327.
2. Christensen GC. Veterinary medical education—a rapid revolution. In: Smithcors JF. *The American Veterinary Profession: Its Background and Development*. Ames, IA: Iowa State University Press, 1963; pp. 641-665.
3. Miller EB. Private veterinary colleges in the United States, 1852–1927. *J Am Vet Med Assoc*. 178(6):583–593, 1981.
4. Former veterinary medical institutions in the United States. America. 2008-2009 *AVMA Directory and Resource Manual*. Schaumburg, IL: American Veterinary Medical Association, 2008; p. 84. Also, accessible at: https://www.avma.org/sites/default/files/resources/former_us_vet_schools.pdf
5. McShane C, Tarr JA. *The Horse in the City: Living Machines in the Nineteenth Century*. Baltimore: Johns Hopkins University Press, 2007; p. 16.
6. Robichaud AA. *Animal City: The Domestication of America*. Cambridge, MA: Harvard University Press, 2019; p. 98.
7. Veterinary surgeons. 1900 *Crocker-Langley San Francisco Directory*. San Francisco: H.S. Langley, 1900; p. 2144. Internet Archive, <https://archive.org/details/crockerlangleysa1900sanf/mode/2up>
8. Arburua JM. Historical review of the California State Veterinary Medical Association [part 1]. *Calif Vet*. 1(6):30-31, 1948 Jul Aug.
9. The California Association states her case. *Am Vet Rev*. 13:43, 1889. *HathiTrust Digital Library*, <https://hdl.handle.net/2027/wu.89047270145>
10. Arburua JM. History of the California State Veterinary Medical Association [part 6]. *Calif Vet*. 2(6):22-23, 1949 Jul-Aug.
11. Jensen M. *A Caring Profession: The Story of Veterinary Medicine in California*. Sacramento: California Veterinary Medical Association, 2003; p. 154.
12. Veterinarians' Society. *Pacific Rural Press*, XLIII(13):293, 1892 Mar 26. *HathiTrust Digital Library*, <https://hdl.handle.net/2027/uiuo.ark:/13960/t5m931v4j>
13. Miller EB. Nonacademic influences on education of the veterinarian in the United States, 1887-1921. *J Am Vet Med Assoc*. 175(10):1106-1110, 1979 Nov 15.
14. Transactions of the Board. Affiliation of the California Veterinary College. *Annual Report of the Secretary of the Board of Regents of the University of California for the year ending June 30, 1895*. Sacramento: A.J. Johnston, 1895; pp. 3-4. *HathiTrust Digital Library*, <https://hdl.handle.net/2027/mdp.39015073241443>
15. College notes. California. *J Comp Med Vet Arch*. 15(7):479-480, 1894 Dec. *HathiTrust Digital Library*, <https://hdl.handle.net/2027/mdp.39015070491058>
16. College notes. The preliminary announcement of the California Veterinary College. *J Comp Med Vet Arch*. 15(7):480, 1894 Dec. *HathiTrust Digital Library*, <https://hdl.handle.net/2027/mdp.39015070491058>
17. Editorial: Another veterinary college. *Am Vet Rev*. 18:658-659, 1895 Jan. *HathiTrust Digital Library*, <https://hdl.handle.net/2027/osu.32435052936580>
18. Bierer BW. Private veterinary schools connected with universities. *American Veterinary Medicine*. Baltimore, MD: The Author; reprinted by Carl Olson, 1940; p. 51, 84.
19. Haring CM. History of the California Veterinary College, 1895-1900. *Calif Vet*. 3(4):20-23, 1950 Mar-Apr.
20. Arburua (Ref. 10), p. 23.
21. Arburua (Ref. 8), p. 31.
22. Jensen (Ref. 11), p. 20.
23. Report of Secretary to Board of Regents. 12. Resignations [Thomas Bowhill]. *Appendix to the Journals of the Senate and Assembly of the Thirty-Second Session of the Legislature of the State of California*, vol. IV. Sacramento: A.J. Johnston, 1897; p. 37. *HathiTrust Digital Library*, <https://hdl.handle.net/2027/chi.74624443>
24. Haring (Ref. 19), pp. 20-21.
25. Plug C. Bowhill, Thomas. *S2A3 Biographical Database of the Southern African Science*. Accessed 2020 Feb 15. https://www.s2a3.org.za/bio/Biograph_final.php?serial=318
26. Resignations. *Annual Report of the Secretary of the Board of Regents of the University of California for the year ending June 30, 1896*. Sacramento: A.J. Johnston, 1896; p. 37. *HathiTrust Digital Library*, <https://hdl.handle.net/2027/mdp.39015073241302>
27. Oates WGR. Additional notes on Captain Bowhill. *Calif Vet*. 4(1):21 1950 Sep-Oct.
28. Arburua JM. Education and research. *Narrative of the Veterinary Profession in California*. San Francisco: Joseph M. Arburua, 1966; pp. 178-232.
29. *Ibid*, p. 199.
30. Haring (Ref. 19), pp. 20-22.
31. Maclay T. Society meetings. California Veterinary Medical Association. [Membership of E.J. Creely]. *Am Vet Rev*. 19:725-730, 1896 Feb. *HathiTrust Digital Library*, <https://hdl.handle.net/2027/uc1.31175024411830>
32. Arburua (Ref. 28), pp. 200-201.
33. Haring (Ref. 19), p. 20.
34. Veterinary Department. *Announcement of the Thirty-fifth Annual Course of Lectures of the Medical Department of the University of California...1897-98*. San Francisco: W.A. Woodward, 1897; pp. 64. *HathiTrust Digital Library*, <https://hdl.handle.net/2027/uc1.31378007785804>
35. CVMA125 – 125 years of organized veterinary medicine. *Calif. Vet*. 67:8-9, 2013 May/June.
36. Veterinary (Ref. 34)
37. Society meetings. California State Veterinary Medical Association. *Am Vet Rev*. 20:802, 1896. *HathiTrust Digital Library*, <https://hdl.handle.net/2027/osu.32435052939204>
38. Veterinary Department. *Annual Report of the Secretary of the Board of Regents of the University of California for the year ending June 30, 1897*. Berkeley: the University Press, 1898; p. 64. *HathiTrust Digital Library*, <https://hdl.handle.net/2027/mdp.39015073241450>
39. Haring (Ref. 19), pp. 22-23.
40. Arburua (Ref. 28), p. 198.
41. *Ibid*.
42. Arburua JM. Education and research. *Narrative of the Veterinary Profession in California*. San Francisco: Joseph M. Arburua, 1966; pp. 192-193.
43. Jasper DE. A layman with vision battles for a dream. *Calif Vet*. 17(1):13-21, 1963 Jan-Feb.
44. Arburua JM. Education and research. *Narrative of the Veterinary Profession in California*. San Francisco: Joseph M. Arburua, 1966; pp. 194-195.
45. Jensen M. *A Caring Profession: The Story of Veterinary Medicine in California*. Sacramento: California Veterinary Medical Association, 2003; p. 90.
46. Arburua (Ref. 29), pp. 197-198.
47. Haring (Ref. 19), p. 23.

48. CVMA125 (Ref. 35), p. 8.
 49. Jasper (Ref. 43), p. 13.
 50. Arburua (Ref. 28), p. 198.
 51. Haring (Ref. 19), p. 23.
 52. Arburua (Ref. 28), p. 202.
 53. Haring (Ref. 19), p. 23.
 54. Report of Superintendent of Public Education. Summary of officers. *Appendix to the Journals of the Senate and Assembly of the Thirty-Fourth Session of the Legislature of the State of California*, vol. I. Sacramento: A.J. Johnston, 1901; p. 176. *HathiTrust Digital Library*, <https://hdl.handle.net/2027/nyp.33433008712261>
 55. Jensen (Ref. 11), p. 155.
 56. Arburua (Ref. 28), p. 203.
 57. *Ibid.*

58. Haring (Ref. 19), p. 23.
 59. Jensen (Ref. 11), p. 156.

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BOOK – Dunlop RH, Williams DJ. *Veterinary Medicine: An Illustrated History*. St. Louis: Mosby, 1996; p. 7. For more than two authors (book or journal article) use first two authors and *et al.*

Ibid. pp. 220-221. (Used for second citation of same

source, if immediately following.) If other citations intervene, use author, reference number, and paging, e.g.: Dunlop, Williams (Ref. 1) p. 104.

BOOK CHAPTER – Miller EB. Military veterinary medicine. In: Smithcors JF. *The American Veterinary Profession: Its Background and Development*. Ames: Iowa State Univ Press, 1963; p. 668.

JOURNAL ARTICLE – Steele JH. A personal history of veterinary public health. *Vet Herit.* 19: 38-44, 1996.

NOTE – Missouri farmers' actions coincided with the practice of trail driving from Texas.

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