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## Establishing the European Medical Tradition in California

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### **Jeremy M. Norman**

The historical collections of the Lane Medical Library originated with the foundations of Stanford Medical School in the mid-19th century. Containing rare books and manuscripts from the 13th through 20th centuries, they are the first library of medical history formed in the western United States. These collections, which include rare books and manuscripts of great historical importance, rarity and beauty, provide invaluable resources for research not only on medical history, but in interdisciplinary fields such as art history, philosophy, classics, and the history of printing. The Lane historical collections are also a tangible Lane Medical Library as the first major medical library west of record of the nineteenth century origins of Stanford Medical School in the Medical Department of the College of the Pacific and Cooper Medical College, and reminders of the historic role of the Chicago. In discussing the historical collections as a whole we need to consider how they were formed.

### **History of the Formation of the Historical Collections at Lane Medical Library**

Lane Library's historical collections were formed in the second half of the nineteenth century and during the first three decades of the twentieth century by four scholar-physicians. The group included Dr. Levi Cooper Lane (1828-1902), founder of Stanford Medical School and the Lane Medical Library, Dr. Adolph Barkan (1845-1935), the Stanford physician who was most responsible for building the historical collections, Dr. Karl Sudhoff (1853-1938), a German physician, historian of medicine, and bibliographer who advised Barkan, and Dr. Ernst Seidel, a German physician and collector of Persian and Arabic medicine and culture, whose library Barkan purchased for Stanford. In creating this pioneering library of medical history "out West" Lane, Barkan, and Sudhoff intended to bring the ancient and rich heritage of European medicine to the young medical frontier of California.

### **Elias Samuel Cooper and Levi Cooper Lane**

Dr. Levi Cooper Lane (1828-1902), and his uncle, Dr. Elias Samuel Cooper (1820-1862), founded the medical schools that would evolve into the Stanford University School of Medicine. Lane graduated from Jefferson Medical College in Philadelphia in 1851. As an assistant surgeon in the U. S. Navy from 1855-59, Dr. Lane traveled all over the world. He became proficient in Greek and Latin and other languages, and collected a library that eventually included numerous early medical books, including works published in classical languages.

Prior to Dr. Lane's arrival in San Francisco, Dr. Lane's uncle, the controversial and extremely enterprising surgeon, Elias Samuel Cooper (1820-1862), established himself in medical practice in San Francisco. Cooper received his M.D. from the University of St. Louis in 1841, and established a highly controversial practice of medicine in Danville, Illinois. There he lectured on anatomy, and was accused of robbing graves to obtain cadavers for dissection. After Cooper's enemies circulated handbills reading, "Rally to the rescue of the graves of your friends," Cooper decided leave Illinois for points west. However, Cooper also had many supporters. When he left Danville for the west coast the town's newspaper editorialized, "We know few men of his profession more worthy of the high reputation he has acquired by his ability. We congratulate our friends of Oregon and California at the happy advantage they have of receiving among them a medical man of such capacity."(1) In 1854, prior to his arrival in the Golden State, Cooper wrote to his friend Hugh Keenan expressing his ambition to found a medical school.

When Cooper reached San Francisco in 1855, only a few years after the gold rush, San Francisco was, of course, still very much a frontier community. Its population was 56,000, and the population the entire state was 360,000. In San Francisco Cooper established Dr. Cooper's Eye, Ear and Feet Clinic, which he advertised extensively. He built up a very successful medical practice, and incurred the animosity of certain other physicians.(2) A year later Cooper was offering to free lectures in anatomy and surgery.

On September 22, 1858 Cooper formed the first medical school on the Pacific Coast, calling it the Medical Department of the College of the Pacific.(3) The first course of lectures at the new school in San Francisco commenced in May, 1859.

While his uncle was pioneering the development of medical education in San Francisco, Dr. Lane continued his education in Europe.

Following his resignation from the Navy, and in order to prepare himself for professorial duties in the Medical Department of the University of the Pacific, Lane spent over a year in Europe. At the University of Göttingen in Germany he took a Special Course of Vivisections with Rudolph Wagner;

and also a Practical Course of Physiological and Toxicological Chemistry in the Laboratory there, under the supervision of Professors Boedeker and Woehler. At Paris, besides attending some of the principal hospitals, he attended a Course of Vivisections with Flourens; and also a Course of Chemical Lectures by Fremy and Chevreul.(4)

Upon returning to the United States in 1861, Dr. Lane traveled to San Francisco to join his uncle on the faculty of the Medical Department of the University of the Pacific as professor of physiology. We have no evidence that this first California medical school owned a significant library but Dr. Cooper rapidly became involved with publishing, helping to finance the Pacific Medical & Surgical Journal when it was first issued in 1858. After his relationship with that journal became controversial Dr. Cooper established and edited the San Francisco Medical Press, the first issue of which appeared in 1860.

Tragically, Elias Cooper died in 1862, probably from renal failure, at the age of only 42. In his short life Cooper had not only trained a lot of physicians but had written numerous significant medical papers and numerous editorials. Upon Cooper's death Lane inherited Cooper's lucrative surgical practice and also succeeded him as editor of the San Francisco Medical Press, publishing an outstanding eulogy of his uncle in that pioneering journal in 1862. Lane, who had assisted his uncle in many operations, reminded his readers that even though Cooper was largely self-taught as a surgeon, Cooper's surgical skills were extraordinary:

As an operator, he manifested, in a pre-eminent degree, that cool daring, that deliberate self-possession, - which the most untoward circumstance, so far from disturbing, seemed only to increase, - that instant comprehension of the difficulties which happen to arise during an operation, and that intuitive readiness to surmount them, which are the essential elements of great and original surgical genius. Not only was he self-possessed himself, but his manner was such as to thoroughly inspire his patient with the most perfect confidence that he was wholly secure in his hands; and of his spectator, no one who saw with what perfect ease the chisel and drill moved in his hand during his exsections, and the use of the silver ligature for ununited fractures, or with what rapidity, at one bold sweep, he deeply divided the structures of those regions of the body which most surgeons approach with caution, but who, in the one case, were thoroughly impressed with the superiority of his mechanical talent, and in the other, that his daring celerity could only be founded upon that accuracy of anatomical knowledge, which rendered the tissues, as it were, transparent under his eye. I think that no one, who ever stood by his side at such a time, feared for a moment, that the operation would not end successfully.(5)

But after the death of Cooper in 1862, the Medical Department of the College of the Pacific "languished." Historians have provided no explanation for this; perhaps it was because Dr. Lane was too young to assume responsibility for administration. In any event, the school was re-organized in November 1864 as the Toland Medical School under the direction of Dr. Hugh Huger Toland. From 1865 to 1870 Toland's school was the only medical school in California.

In 1870 Dr. Lane and several of the original faculty of Toland Medical School resigned from the Toland Medical School and opened their own school on Stockton Street south of Geary in San Francisco, calling it the Medical College of the Pacific. About the same time the University of California approached Dr. Toland concerning the transfer of the Toland Medical School to the University of California. This was accomplished in 1872.

Like his deceased uncle, Dr. Lane became professor of surgery at the new Medical College of the Pacific.

In 1882 Dr. Lane, who had by this time built up a significant fortune by investing in real estate, paid for the construction of a spectacular new building to house the Medical College of the Pacific at the corner of Sacramento and Webster Streets in San Francisco. The entire fourth floor was devoted to the library, periodical room, and museum. That building remained in continuous use as a medical school for 76 years (1883-1959). At this time the name of the medical school was changed to Cooper Medical College in honor of Dr. Lane's uncle.

The relationship between Dr. Lane and Dr. Cooper was extraordinarily close.

According to Wilson, As a token of high regard for his uncle, Dr. Lane arranged for Dr. Cooper's brain and heart each to be preserved in a separate glass jar. The jars were then mounted side by side in a sturdy framework that allowed for clear display of the organs. . . . These were originally kept in an inner sanctum of the college museum.(6)

In 1890 Cooper Medical College expanded when Dr. Lane paid for a second building of equal size for lecture halls and laboratories. When Lane Hospital was constructed during 1893 and 1894 at Clay and Webster Streets adjacent to the medical school the major contributor was again Dr. Lane, who also the Lane Hospital Training School for Nurses at this time. By 1890 the library at Cooper Medical College contained 776 volumes, of which 413 were in locked cases and 320 were on open shelves.

In addition to his surgical practice Dr. Lane taught extensively and wrote numerous erudite and scholarly papers. To augment his medical education received at Jefferson Medical College Dr. and

Mrs. Lane spent the years 1874 through 1876 in England, France, and Germany. In England Dr. Lane was examined concerning his medical knowledge and elected to the Royal College of Surgeons. In France Dr. Lane kept his notes in French, in which he was fluent. In Germany Lane entered the medical school at Wilhelms Universität of Berlin. His principle faculty advisor was Bernhard von Langenbeck, and he also studied under Rudolf Virchow. Lane, who was also fluent in German, received the degree of Doctor of Medicine and Surgery, magna cum laude, from Berlin University on March 7, 1876.(7)

Wilson quotes Dr. Lane's assistant surgeon, Dr. Rixford, concerning Dr. Lane's intellectual attainments and unusual habits of study:

Dr. Lane was a highly educated man. With a fair preliminary education, he continued to be a student throughout his long life. Never robust, it was by sheer force of will and self-discipline, and by dividing his sleep, that he formed the habit of using six or seven hours in the middle of the night for study. Six nights in the week he read medicine and did his writing, the seventh night he read in general literature. Thus he was widely read, especially in the literature of surgery in the nineteenth century. He was fond of the classics, read Greek and Latin, also French, German and Spanish. He translated Billroth's Surgical Pathology for his students, laboriously writing it out in longhand in blank books, finishing this or that chapter at three or four in the morning. He read Hippocrates once a year in the Greek.(8)

In 1896 Dr. Lane published a large surgical textbook on the Surgery of the Head and Neck. This was the first textbook on the subject published in the United States. Lane had intended this to be part of a three-volume encyclopedia of surgery; however, he did not live to complete it. For his reading, study and research Dr. Lane also collected a library of about 2000 volumes, including many early and classic works in Latin and Greek which he was fond of reading. This library would become the core of the Lane Medical Library.

Upon the deaths of Dr. and Mrs. Lane in 1902 one third of the Lane estate went toward purchase of land and construction of a building for a Lane Medical Library to be built in Dr. Lane's honor. The Cooper Medical College trustees purchased a building site and established a Lane Medical Library Fund, but did not initially break ground for a new library building. At this time the historical collections received their foundation from the donation of Dr. Lane's library of about 2000 books. Various rare volumes from Dr. Lane's original donation remain in the historical collections. As his friend Dr. Adolph Barkan would write in 1923,

The very first book treasures. . . came to Stanford. . . after the death of that never yet sufficiently appreciated scholar, surgeon and staunch upholder of medical honor: Dr. Levi C. Lane. They were a goodly number of old medical classics: Hippocrates, Galen, Celsus and other with which the founder of Cooper Medical College had studied and annotated diligently and intelligently.

## **Adolph Barkan and the Development of Lane's Historical Collections**

The second and the most important founder of the historical collections was Dr. Adolph Barkan, who was born in Eperjes, Hungary in 1845.(9) Dr. Barkan received his education at Vienna under the famous Carl Ferdinand von Arlt (1812-1887), graduating M.D. in 1866. During 1877 he was an assistant to the chair of Physiology at the University of Graz. 1868 Barkan returned to Vienna as the youngest assistant in the ophthalmic clinic of the legendary Professor Eduard von Jaeger (1818-1884). Later that year Barkan decided to emigrate to the United States, becoming a Resident at the Maryland Eye and Ear Infirmary in Baltimore. The following year he arrived in San Francisco to practice medicine. By 1872 Barkan was Professor of Ophthalmology and Otology at the Medical College of the Pacific where he undoubtedly came into regular contact with Dr. Lane. Lane Library records show that Dr. Barkan began supporting the library as early as 1895 when he began contributing toward the cost of journal subscriptions.

Though Dr. and Mrs. Lane left funds for the construction of a library building, the library was not formally dedicated until August 26, 1906. At this time the library held about 10,000 volumes, including various classics by Harvey, Albinus, Eustachius, Vesalius and Morgagni.(10)

In the same year the opportunity came to quadruple the size of the library at bargain price, through the purchase for \$6000 of the 28,000 volumes that resulted from the merger of New York Hospital Library with the New York Academy of Medicine. This included many complete runs of rare early journals and other medical classics. With this major acquisition the Lane Medical Library became the largest medical library west of Chicago. By 1907 its holdings included about 35,000 volumes.

The year 1908 marked the acceptance of Cooper Medical College as the Medical Department of Stanford University. Lane Medical Library would be formally transferred to Stanford in 1910, though it and Stanford Medical School would remain in San Francisco until 1959.

In 1911 the Board of Trustees of Stanford University and the directors of Cooper Medical College undertook construction of a new Lane Medical Library Building. For many years the new Lane Library was the only fireproof library building in San Francisco. About the same time Dr. Adolph Barkan seems to have begun to take increased interest in the new library with the donation of a \$5000

endowment fund for books on his medical specialty—ophthalmology and otology. Dr. Barkan retired from teaching at Stanford in 1912.

Though he had spent most of his career in California, Dr. Barkan remained culturally a European, and upon retirement, he returned to Europe where he resided for most of the remainder of his life. Though he had not previously concentrated on the history of medicine, and was not a bibliophile, perhaps as a result of his European education, and the opportunity for reflection afforded by retirement, his interest in medical history seems to have increased. By 1920 or 1921 he wrote a letter to dean of Stanford's medical school, Dr. William Ophüls, stating that he had first considered adding an historical section to the section on ophthalmology at the Lane Library, but after consultation with Dr. Karl Sudhoff, then the leading historian of medicine in Europe, Barkan wanted to collect on a wider scale with the eventual plan of establishing an institute for the history of medicine at Stanford Medical School.(11)

Dr. Sudhoff (1853-1938) was Director of the Institute of the History of Medicine at the University of Leipzig. He had practiced general medicine in Bergen, near Frankfurt, from 1878 to 1905, before he could devote himself full time to medical history. Sudhoff was a prolific writer, and editor of numerous early manuscripts as well as several important periodicals on the history of medicine.(12)

In response to Barkan's initial letter, Sudhoff responded as follows: "I am willing to help your undertaking, this, to take the direction of the historical part of your library if I can do so without having my name mentioned in the matter. As an equivalent for my services I would like to receive for the library of the Institute of the History of Medicine of the University of Leipzig, American historical literature, that is, new American publications on the history of medicine and also important, epochal works of the American literature on medicine since the awakening of the scientific life in America"(13)

Having gained Sudhoff's support, Barkan wrote back to the medical school stating that he would be willing to contribute \$1000 per year for three years if the Stanford would match those funds. Stanford complied. With money in hand, Barkan turned to Sudhoff for direction of the project, and the two men traveled throughout Europe visiting booksellers together.

Not long after the collaboration began, Dr. Sudhoff recommended purchasing the private library containing 4500 volumes formed on the history of Middle Eastern medicine including Arabic, Persian, and Jewish physicians assembled by Dr. Ernest Seidel. Upon visiting Seidel at his home in Saxony and viewing Dr. Seidel's remarkable library, Dr. Barkan was determined to purchase the collection, since the funds were available. A letter from the antiquarian bookseller, Otto Harrassowitz of Leipzig,

written to the Stanford University Library on June 15, 1921 describes the riches of Seidel's collection. Harrassowitz wrote:

The library is the life-work of Prof. Dr. Ernst Seidel, a well-known and distinguished physician living now a private life in Oberspaar near Meissen, Saxony. Advanced age and poor health compelled him to renounce the continuance of his practice as well as his private studies and so he determined to part with his books upon the collection of which he had spent all his care and energy during forty years of his life.

In his youth Dr. Seidel made his first journey to the east and during the following thirty years spent a good deal of his time traveling in the countries of the near east and India. This constant contact with the east did not fail to awaken his keen interest in eastern history and culture, causing him to bring together a very representative collection of books treating all questions and problems connected with the east. As a matter of course in the selection of literature his guiding view-point was the acquisition of books in this selection of the library (about 1000 volumes) in some way and to some extent have something to do with the history of medicine.

In order to become more closely familiar with the spirit of the east, Dr. Seidel undertook the study of the eastern languages, chiefly Arabic, Turkish and Persian. He became highly proficient in his knowledge, his name now being well-known as that of an orientalist, and as the author of several useful grammars and linguistic guides. More than 300 philological works (grammars, dictionaries, etc.) about various eastern languages make the apparatus for these specific studies, to which are to be added about 300-400 books of fiction and literature mostly in the Arabic and Turkish languages, the reading of which enabled him to get his intimate knowledge of the individuality and spirit of eastern men, which provided of the highest value for his further studies of eastern medicine. . .

It is only natural that this close contact with east awakened Dr. Seidel's interest in the history of eastern medicine, and the more he advanced this field of study, the more he became convinced that eastern, primarily Arabic, medicine, is the basis on which all medical knowledge of western peoples is based. Dr. Seidel's collection of books treating of the medicine of the east, either represented by original texts or translations of treatises and commentaries in European languages, is one of the most valuable sections of the whole library (about 1000 volumes). Dr. Seidel spent all his skill upon bringing together all well-known works treating this subject and hardly any important author is missing. There are very old editions and about thirty Arabic manuscripts, most of which are of very old date.

Equal in value to this portion of the library is that containing the ancient medical authors of the west. The works of the famous physicians of the 16th and 16th centuries are represented parting very rare originals editions, the Greek and Roman classics of medicine are to be found without exception. . . (14)

After this and other acquisitions, by 1923 the Lane Medical Library held about 60,000 volumes. To provide a rationale for collecting and to promote use of the library Dr. Barkan published an article in the Stanford Illustrated Review in 1923(15) pointing out that:

A revival of the study of the history of medicine had taken place, not only in the old medical centers of Europe, but also in the seats of learning in our eastern metropolises, through the efforts of Osler, Garrison, Cushing, Packard, Klebs, and others. This was a study which until very recently had been rather neglected in our western universities and medical societies.(16)

With Sudhoff as his advisor, Dr, Barkan continued to purchase rare books with library funds, and to contribute from personal funds rare medical and scientific books to the library, making donations in 1924, 1926, and 1927, and endowing the historical collections with a \$10,000 fund in 1927. Dr. Sudhoff would continue to advise Dr. Barkan on the acquisition of rare medical books until 1934.

By the death of Adolph Barkan in 1935 the historical collections of the Lane Medical Library, the first library of rare books and manuscripts collected on the west coast, had achieved major significance as a rare book collection. The historical collections, formed by four physicians, whose backgrounds, educations, and life experiences had occurred for the most part in the nineteenth century, included great classics and rare and remarkable books on most aspects of the history of medicine and related sciences from the Middle Ages and Renaissance through the nineteenth century. For examples see the descriptions of various individual highlights of the library which I wrote for Lane Library. Along with Lane Medical Library these rare books and historical collections would remain in San Francisco until 1959 when the Lane Medical Library and Stanford University School of Medicine moved to the Stanford campus. In the years to follow the collection continued to grow through library acquisitions and gifts.

## **Endnotes**

1. One of the best early accounts of Cooper and Lane is Hans Barkan, Cooper Medical College, Founded by Levi Cooper Lane. An Historical Sketch. Stanford Medical Bulletin 12 (1954) 145-184. Barkan, the son of Adolph Barkan, traced his recollections of the personalities involved back to 1873. The quote is from p.176.

2. Another standard source is Henry Harris, California's Medical Story. San Francisco: Stacey, 1932. This was finely printed by The Grabhorn Press.
  3. The medical school was associated with the University of the Pacific, a Methodist-Episcopalian college founded in 1851 and located in San Jose.
  4. [Stanford University School of Medicine and the Predecessor Schools: An Historical Perspective Part I. Background History & E.S. Cooper's Midwestern Years. Chapter 4. Elias Cooper & Medical Schools West of the Alleghenies.](#)
  5. [Stanford University School of Medicine and the Predecessor Schools: An Historical Perspective Part I. Background History & E.S. Cooper's Midwestern Years. Chapter 18. Professor Elias S. Cooper, University Surgeon.](#)
  6. [Stanford University School of Medicine and the Predecessor Schools: An Historical Perspective Part I. Background History & E.S. Cooper's Midwestern Years. Chapter 19. The Last Days of Elias Samuel Cooper.](#)
  7. [Stanford University School of Medicine and the Predecessor Schools: An Historical Perspective Part I. Background History & E.S. Cooper's Midwestern Years. Chapter 23. Educational Reform at Medical College of the Pacific 1872-1882](#)
  8. C.D. O'Malley, op. cit., 147.
  9. O'Malley op. cit., 148. O'Malley does not date the letter.
  10. [http://de.wikipedia.org/wiki/Karl\\_Sudhoff](http://de.wikipedia.org/wiki/Karl_Sudhoff)  
This site contains links to portraits of Sudhoff online.
  11. Translated by O'Malley, p. 148.
  12. Quoted by O'Malley, op. cit., 154.
  13. Barkan, Adolph, Library of the History of Medicine is Notable Addition to Stanford Medical School, Stanford Illustrated Review (1923) 294-96, 321.
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14. Barkan may be referring to the work of Fielding H. Garrison in establishing a list of classic medical books that would become the basis for the historical collections at the Library of the Surgeon General's Office. At the suggestion of Sir William Osler, Garrison compiled a list published in the Index-Catalogue of the Library of the Surgeon General's Office, Volume XVII, Second Series. This was also issued separately as Texts Illustrating the History of Medicine in the Library of the Surgeon General's Office, U.S. Army (Washington: Government Printing Office, 1912). The following year Garrison would publish the first edition of his very influential and bibliographical, An Introduction to the History of Medicine (1913). Because of his European background Barkan was probably more influenced in his book selection by Sudhoff than by Garrison's work, but Barkan was undoubtedly aware of it, and the Lane Library contains a impressive number of Garrison's selections, and those made in Garrison's expanded edition of 1933, and in Leslie Morton's, A Medical Bibliography based upon Garrison's listings. Morton's book underwent five revisions and expansions. The last of these, published in 1991, was my work.