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Legends & Lore

Jefferson Medical College

Chapter 4

Alumni Who Founded Medical Colleges
Jefferson Alumni and the Founding of New Medical Schools

Medical education in the United States in the early years of statehood was tentative and primitive. Only two medical schools had been established during the Colonial period, that of the University of Pennsylvania (1765) and Kings College (1767) which became the College of Physicians and Surgeons of Columbia University. After statehood, Harvard (1782) and Dartmouth (1797) were the only ones founded before 1800. Educational standards were slow to develop and requirements for the practice of medicine were minimal. In addition to the few who held foreign degrees, many practitioners worked with only preceptorial training and some with none at all. Government licensure was slow to develop but after a time medical societies made efforts to control quackery by providing their own licensing programs. In many areas, however, some form of teaching based on private schools of anatomy developed and often students began by taking such anatomy courses and then going on to the early schools of medicine. Furthermore, many physicians promoted their own courses, grouping of which then sometimes resulted in the formation of medical schools.

Early on, a need for clinical facilities was not recognized and many schools developed in semirural regions. An example was Fairfield Medical College, officially known as the College of Physicians and Surgeons of the Western District of the State of New York. Founded as a small literary academy in 1803, medical instruction began in 1809 and the school was chartered in 1812. The College enjoyed remarkable success, thanks apparently to a few outstanding physicians. In its twenty-seven years of existence it graduated 589 of its 3123 matriculants and many went on to other medical schools for their degrees. Four of its graduates were involved in the founding of five medical schools in and near Chicago, including Daniel Brainard (JMC, 1834). Dr. Nathan S. Davis, also a Fairfield graduate, became a principal founder of the American Medical Association (1847).

Many early schools were not as fortunate, failing to become established or being quickly combined with other institutions to improve teaching capabilities. During mid-century a number of “diploma mills” both rural and urban were operated for profit and enjoyed brief periods of success before succumbing to a well deserved fate. Much of the initiative for improvement of medical education came from the American Medical Association in the late nineteenth century even prior to the more widely publicized “Flexner Report” usually credited with creating the movement for closure of substandard medical schools.

A number of Jefferson Alumni were involved in the founding of medical schools in various parts of the United States. They are notable for their initiatives and abilities to adapt to unfamiliar and challenging conditions. If any common attribute can be detected it probably is the fact that almost without exception they had good basic education with a lifelong commitment to learning.
The atmosphere for the teaching of medicine and allied subjects was undergoing interesting evolutionary change during the middle decades of the nineteenth century, Jefferson itself having been one of the fruits of the urge to develop educational facilities. In addition to the numerous medical schools which sprang up near mid-century there were many private facilities which came and went, some of them bearing some relation to the medical schools, others independent. Thus, a number of able and even famous Jeffersonians participated in schools of anatomy. These schools for a time occupied buildings in the region of Jefferson and to some degree constituted a preparation of candidates for Jefferson professorships. One school founded in the 1820s involved famous names like John D. Godman, Isaac Hays and R.E. Griffith. These were not Jefferson persons but the same school was reopened in 1831 by Joseph Pancost, who in 1838 succeeded to Jefferson’s Chair of Surgery. Others followed him in a building at 8th and Walnut Streets and in 1838, James McClintock (JMC, 1829), already having savored teaching appointments, opened his own course in anatomy in the West Room of the same building. In 1841 he succeeded to the management of the whole school, then designated as the Philadelphia School of Anatomy and became its Professor of Anatomy. He had established a reputation for his brilliant anatomical demonstrations in his “Western Room”.

Dr. McClintock had gone through several teaching appointments including Washington College and Dickinson College but had also had an opportunity to develop skills as a surgeon. Nevertheless, he was still unsettled and in 1841 he became President of Castleton Medical College in Vermont but soon moved on to Professor of Anatomy at Berkshire Medical Institute. In 1843 he returned to Philadelphia, took charge of the “Western Room” and enlarged the curriculum of the School of Anatomy to encompass most medical disciplines. As a consequence in 1847 he secured a charter for the Philadelphia College of Medicine which opened with himself as Dean, Professor of General, Special and Surgical Anatomy and of Principles and Practice of Surgery.

The College prospered for a time and boasted some very able people on the faculty including Drs. Jesse R. Burden (later President pro tempore of Jefferson and Board of Trustees, 1873-75) and Thomas D. Mitchell (later Professor of Materia Medica at Jefferson, 1857-65). Following reorganization in 1854, other faculty members for a time were Drs. Henry Hartshorne, James L. Tyson, B. Howard Rand (JMC, 1848) (later Jefferson’s Professor of Chemistry), and James Aitken Meigs (JMC, 1851), later Jefferson’s Professor of the Institutes of Medicine. There were many medical teaching facilities in central Philadelphia during these years as the “diploma” schools came and went. In 1859 McClintock’s Philadelphia College merged with the Medical Department of Pennsylvania College (founded by George McClellan in 1839), and in 1861, financial problems and limited enrollment caused it to close.

Alumni Who Founded Medical Colleges

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Moses L. Knapp (JMC, 1826): Itinerant Founder

The progression of the “frontier” across the United States in the mid-nineteenth century gave rise to curious changes in locale for many physicians especially those interested in medical teaching. Not a few early Jefferson graduates began their studies with private teachers, especially of anatomy, then entered a medical school to obtain a degree. It is also noted that graduates with more than usual intellectual capacity were trying to promote medical progress through education. Dr. Moses L. Knapp of the first graduating class (1826) exemplified this principle (Fig. 1). Dr. Knapp, a native of New York, was a student of George McClellan at the time McClellan achieved the founding of Jefferson Medical College and participated in several similar efforts to develop medical schools. His graduation thesis, “Apocynum Cannabinum,” described the properties of Indian hemp. (Dunglison’s 1848 Medical Dictionary indicates that the plant possessed emetic, cathartic, and diuretic properties and was often prescribed for dropsy.) The thesis was the “first ever” published by the Jefferson Medical College.

Knapp settled in Illinois and became a major landowner. In 1837, however, the financial panic depressed land value and he was unable to meet property taxes. He accordingly moved to Chicago where in 1843 he joined Daniel Brainard’s (JMC, 1834) first faculty at Rush Medical College, as Professor of Obstetrics. After one year he resigned and in 1844 became a founder and a professor at the La Porte University Medical Department in Indiana, another “country” institution which lasted eight years and suffered the fate of many similar ones where clinical and anatomical facilities were inadequate. Knapp withdrew in 1847 and went on to another venture in 1848 when he and George Richards led a group in the founding of the Medical College of Wisconsin. This enabled him to organize a “branch” of that institution in Rock Island, Illinois, and no actual class was held in Madison. The Rock Island school also lasted only one year when an Iowa Charter was obtained and the faculty moved to Davenport with several other later changes of location. Knapp left the school in 1852 for reasons of health and moved his practice to Covington, Kentucky. The medical school ultimately became joined to the State University of Iowa.

Dr. Knapp was a popular teacher. After leaving Iowa he did a good deal of writing including a two-volume Pathology which recorded treatises on epidemic cholera, cholera infantum, nursing sore mouth, and the scurvy diathesis. He was one of the few graduates on record who catalogued attendance at the first free Dispensary of Jefferson Medical College, a facility which aided in setting the tone for Jefferson as a practical clinical medical school.

Dr. Knapp was a loyal Jeffersonian. In a letter received from him in 1873, he stated: “You will find my name in the list of graduates of the First Class, year 1826, and although not alphabetically first in order, I am technically the first graduate of the
school. My thesis was the first handed in to the Dean; I was the first examined, and was understood by the Professors and Class to be the first graduate.” He concluded the letter: “Faithful till death to the interests of my beloved Alma Mater.” At the time of his death in Cadereyta, Nuevo Leon, Mexico, in 1879 his daughter wrote: “Dr. Knapp was the third in order to receive his diploma in 1826, the first year of the existence of Jefferson Medical College. According to Dr. Knapp’s understanding, he was to have been the first graduate, but Dr. McClellan and another professor had each promised a student the same favor, so a compromise was made by accepting Dr. Knapp’s thesis first and awarding him his diploma third. All the names and vacancies in the diplomas awarded that year were filled in by Dr. Knapp, and none of the numerous graduates of dear old Jefferson ever cherished a more ardent affection for his Alma Mater than did our loved and honored father. A worthy son of Erin on applying to him for employment was brought to the notice of the professors, who forthwith appointed him janitor, and many years later, in 1857, when in Philadelphia Dr. Knapp on visiting the college was ushered in by the same faithful servant [the well-known janitor, William Watson. —ED.], who had grown gray in the service, and had married and reared a family on the simple salary allotted him. In 1857, whilst in Philadelphia publishing his work, known as Knapp’s Pathology, Dr. Knapp sustained a severe hemorrhage of the lungs, and was treated by his cherished old friend, Dr. Paul B. Goddard, who told him his time has not yet come, and succeeded in giving him relief. In 1862 he sought this congenial climate, and true to the principles set forth in his Pathology, prolonged his life for twenty-two years by a diet of succulents and fruits (goat’s milk, oranges, and sweet potatoes, especially), and paid his last tribute to Nature surrounded by two daughters, three granddaughters and loving friends, from an acute attack of pneumonia, on the 21st of November and the eightieth anniversary of his birth.”

Although not stated, the implication is that Knapp’s illness beginning in 1852 and the consequent 1857 hemorrhage was tuberculosis. His writings and the dietary management described suggest this especially in relation to its mid-nineteenth century timing.

All indications point toward a dedicated, compassionate, and intellectually capable physician, an appropriate “first graduate” to set a tone for a long list of successors.

Daniel Brainard (JMC, 1834):
Frontier Surgeon and Pioneer Educator

A number of the early graduates of Jefferson went on to careers in developing areas of the United States, often playing leading roles in regional affairs including medical education. Among these was Daniel Brainard (JMC, 1834) who was responsible for the founding of Rush Medical College in Chicago. Brainard arrived there in 1836 when its prominence as a commercial and agricultural center was just beginning. His dynamic leadership in developing medical education, clinical teaching and surgical research was widely acknowledged in spite of his early death from cholera in 1866 at age 54.

Daniel Brainard (Fig. 1) was born May 15, 1812, in Western, New York, a small town near Lake Oneida. At age 16, he was sure that he wanted to learn medicine so he enrolled at Fairfield Medical College in Herkimer County after serving a brief preceptorship with a local physician. Fairfield was a small town college but offered a more thorough teaching program than many similar medical schools of the early nineteenth century and many of its graduates went to frontier areas of Indiana, Illinois, and Michigan as the western expansion of
the United States progressed. Fairfield even made an effort at clinical teaching with a “hospital” as a facility but very few patients were attracted. Human anatomy, however, was offered after 1820. The faculty included well qualified people and was especially surgically oriented. It is not clear what motivated Brainard to pursue further medical education upon his graduation, but presumably his appetite had been whetted and he was attracted to Philadelphia as a leading city in the western world. He, in company with his classmates, particularly admired Professor George McClellan whose dynamic personality was a major factor in the developing success of Jefferson. Professor Granville Sharpe Pattison, the new Professor of Anatomy, was regarded as one of the best medical teachers of his time and influenced Brainard’s selection of Jefferson as opposed to the University of Pennsylvania.

Little is known about Brainard’s experiences while at Jefferson. Upon graduation, he returned home and began practice with Dr. R.S. Sykes but was restless. He added to his education with courses of Latin and French at the local academy and taught a course in anatomy and physiology there, but after two years almost abruptly decided to go West and look for greater fulfillment. He set off alone “with some remorse,” took a boat to Detroit where he bought a pony and plodded on to Chicago, arriving in 1836. Chicago’s population at the time was about 4,000 people, but its period of rapid growth was just ahead.

How the acquaintance was made is not known but Brainard promptly called on “his friend, J.D. Caton,” who had begun the practice of law, and arranged to share his office to practice medicine. He even slept in the office using his knapsack as a pillow. He found that with the rapid increase in Chicago’s population, an accompanying migration of physicians had occurred and his practice grew slowly. An incident occurred early in 1837 when he was called to see a laborer who had been working on the Illinois-Michigan Canal and had pain and swelling of his leg some months after a femoral fracture. A consultation of community doctors was held and Brainard was selected as the surgeon. An upper thigh amputation was planned but a tumor process was encountered which filled the cavity of the femur and a hip amputation was necessary. The patient made a surgical recovery but intra-abdominal extension was diagnosed. The patient died after 48 days and autopsy revealed extensive metastasis. This experience established Brainard as the leading surgeon of the area with the added satisfaction of the case report being accepted and published by the American Journal of the Medical Sciences in 1838.

Brainard’s practice was still not busy and he began tutoring some young men in anatomy while also writing for the Chicago Democrat. The tutoring was much to his liking and led to a thought of starting a medical school. In company with his friend, Dr. Goodhue, an Act of Incorporation for Rush Medical College was drawn up and on March 3, 1837, it was passed by the Illinois General Assembly. The Panic of 1837 intruded so the opening had to be deferred. Although his finances were still not robust, Brainard decided to go to Paris for postgraduate study, arriving in Autumn, 1839. The experience was revealing and rewarding both medically and culturally. He made the most of both and retained a lifelong fondness for Parisian life. He worked hard with dissection and investigation, attending clinics and lectures given by the leading
physicians during the height of French ascendancy in medicine. These experiences contributed greatly to his maturity in anatomy, pathology, and surgical techniques. After two years, he returned to Chicago in 1841, determined to put into practice the knowledge he had gained.

With economic recovery, the Rush Medical College was now actively planned. Some urgency developed with the news that three medical schools had already sprung up in the region, although not directly in Chicago. Brainard was successful in recruiting several prominent physicians as faculty and a board of trustees with prestige and political influence. Even the Governor of Illinois was named an ex-officio trustee. It is notable that the name Rush was selected with the unfulfilled hope of financial support from the heirs of Benjamin Rush, the Philadelphia physician of the Revolutionary War and early statehood fame.

The College opened December 4, 1843, but no building had been provided because of lack of funds. Austin Flint, Sr. had been recruited as Professor of Medicine but stayed only one year. Moses L. Knapp (JMC, 1826) accepted the Chair of Obstetrics but also left after one year. The College Building was dedicated December 18, 1844. Brainard was named President and Professor of Surgery. In addition to the lectures which were standard at schools of the period, Dr. Blaney, Professor of Chemistry and Pharmacy, opened a medical dispensary and in 1846 Dr. Brainard began a free surgical dispensary which enhanced the clinical training for the students. This was the beginning of the Brainard Clinic which had a long and distinguished career in clinical surgery and education.

Brainard’s practice increased but he also pursued research which was a new departure among area physicians. In 1844, Blaney and he founded the Illinois Medical and Surgical Journal, the first medical journal in Illinois. The Rush Library had grown to about 600 volumes by May, 1846. In 1850, two small hospitals came to be used in clinical teaching and in 1853 the facilities for teaching improved further with the opening of Mercy Hospital.

In 1849, Brainard was successful in attracting Dr. Nathan Smith Davis, from New York, as Professor of Physiology with the condition that he would be named Professor of Medicine when the chair became available. Dr. Davis soon became a favorite teacher with innovative pedagogic ideas. Although the medical school was growing and its facilities were improving, several faculty members led by Dr. Davis, became restless because of their perception of Brainard’s resistance to changes in educational policies. They especially wished to develop a graded lecture program and to extend the time of each annual course. They also wanted to raise admission standards and to include clinical facilities. Brainard proved resistant to these proposals and argued simply for efforts to improve the quality of medical lectures. The disagreements led to an impasse in 1857, when the plans for a new curriculum were rejected by Brainard and the Rush Trustees. In 1859, Davis and Dr. William H. Byford resigned and formed the Chicago Medical School which was destined to become the medical department of Northwestern University. Nathan S. Davis, in 1883, became editor of the Journal of the American Medical Association.

Rush Medical College lost some hospital facilities and other faculty members to the new college but carried on. The immediate effects were soon overcome but Rush would continue to experience several upheavals before finally taking its place as a potent force in American medicine.

Brainard, in 1852/53, made a second visit to Paris. He renewed acquaintances, attended clinics, and made contacts relevant to his research projects. In 1853, he read a paper before the Societe de Chirurgie de Paris, on the injection of iodine within the sac to cure spina bifida and was made a corresponding member of the society. He also published a paper “Memoire sur le traitement des fractures non-reunies et des difformites des os.”

Upon return, Brainard was faced with continuing controversies related to the Rush teaching curriculum but was unyielding in his commitment to his traditional model. Nevertheless, he pursued his research and increased his practice which was now more or less limited to surgery. His operative
treatment of ununited fractures achieved some degree of recognition and underlined his orthopaedic interests. During the 1850s, his controversies with Davis were at times vituperative but his surgical clinic became more effective and widely respected.

Following the separation of Davis’ group from Rush, the Civil War presented further problems in medical teaching and practice. Brainard had additional consulting duties but mainly devoted himself to teaching and practice. He was planning publication of an Atlas of Surgery but decided upon an extensive tour of Europe with his wife, son, and daughter early in 1866 with the thought of possibly working with Balliere, a Paris publisher of scientific works. Whether or not he was able to do so is not known but he did consult Trousseau about his own physical condition and was advised that he had a “functional derangement of the kidneys which should not interfere with his career.” The family spent time in Paris renewing old acquaintances, traveled through Italy and Switzerland, and returned to Paris in August. There the family remained while Brainard made a planned return to Chicago, arriving in September while the cholera epidemic was at its peak. He delivered his initial lecture in surgery on October 9 but the next day died suddenly following the early morning onset of symptoms of cholera.

Although his career turned largely upon his founding of Rush Medical College, Brainard definitively is remembered as a “deliberate, accurate, and successful surgeon,” one who at times was spoken of as deserving a place with the leading surgeons of the United States in mid-century. Furthermore, he was an able teacher whose lectures were disciplined by reading and observation. His research activities were notable for his time, having been stimulated by his foreign studies and contacts. Many papers were published, the majority in local journals including the one he founded in which he usually reported his surgical cases but often included new departures. His investigations on rattlesnake venom and treatment of snake bite evoked much comment. Brainard also published reviews of many articles, medical/legal books, and books by French authors. The Brainard Clinic which he founded is described in a memoir by Arthur Dean Bevan (Surgery, Gynecology and Obstetrics, 56, 123-126, 1933) as a lasting monument. Nicholas Senn, upon assuming the Chair of Surgery at Rush, years later paid special tribute to the founder as the first occupant of the Chair, describing him as a “great surgeon, a gifted teacher, and an original investigator.” It is a little curious that having had the experience of a clinical type of instruction at Jefferson and having adopted similar practical programs early in his experience at Rush, he would resist the changes in the curriculum which would have anticipated the future course of medical teaching. His acceptance of a few ideas would have prevented the need for the breakaway of the Chicago Medical College (Northwestern University College of Medicine) where admissions and curricular reforms were instituted. A rather cold and reserved personality may relate to his reluctance to accept change, as well as being responsible for his failure to join and participate in medical organizational meetings.

Jefferson may take pride in the accomplishments of this graduate who is responsible for the founding of a major American medical school.
Frontier medicine had its successful pioneers including especially the Jefferson graduates who contributed greatly to the development of medical education in the regions where they lived. In contrast to those whose skills were of the best and whose motives were of the highest, a member of the class of 1831 is remembered mainly for his scheming, acquisitiveness, competitiveness and vanity. Although not without redeeming qualities, Baker left a reputation in medical circles of Cincinnati for mainly negative ones.

Medical affairs in Cincinnati had the potential for great things - a key location on a major waterway, a burgeoning population, and especially a few medical persons of great ability and potential. Daniel Drake (1785-1852) was the outstanding physician of the midwestern United States of the nineteenth century who spent most of his effective years in Cincinnati but had difficulties with his colleagues in relation to medical education and hospital practice. His experience with competitive medical schools was only symptomatic of the confusing succession of medical schools of the entire Ohio Valley region. Drake’s changes from Cincinnati to Lexington to Cincinnati and Philadelphia, to Louisville and back to Cincinnati, indicate his search for stability which eluded him. Norwood (Wm. F.: Medical Education in the U.S. before the Civil War. Philadelphia, Univ. of Pennsylvania Press, 1941) notes that a “spirit of rugged individualism characterized medical education during this 40-year period” (1820-1860).

Enter Alvah H. Baker, a native of Chester County, Pennsylvania, who moved to Ohio with his family in 1820 and at age 18 opened a school where he taught to obtain funds for the study of medicine (Fig. 1). He also studied Latin and mathematics. Matriculating at Jefferson in 1830, he engaged Daniel Drake as one of his teachers. Baker began practice in rural Ohio but in 1846 moved to Cincinnati where several medical schools were struggling to become established and the Medical College of Ohio was just surviving. Baker failed in his attempt to obtain a faculty position at that school and in 1851 he tried to associate himself with the organizing Miami Medical College, again failing. Harboring a compelling desire to be a professor of surgery, he appealed to the Ohio Legislature for a Charter for a new school, the “Cincinnati College of Medicine and Surgery.” The Charter was granted in 1851 (Fig. 2). He recruited friends including Dr. Pliny M. Crume of Eaton, Ohio, and assumed the Deanship and Chair of Surgery. A building with hospital wards was acquired and six professors were named.

The school’s early years were almost chaotic with an “uninterrupted chain of internal and external trouble, largely attributable to the selfish and domineering manner of the founder.” A serious incident produced much adverse publicity in 1854 when a medical student, in response to a quarrel with another, set off a bomb in his adversary’s residence, killing the student and his wife.

Baker’s ambitious nature was given full oppor-
tunity and he proceeded to antagonize both his own colleagues and other physicians by dominating the school completely. His unwillingness to share financial proceeds with his associates led to frequent changes in personnel. His effort to obtain access to the Commercial Hospital, a state institution staffed by the Medical College of Ohio, generated a fight against the latter by Baker and the other local medical schools, resulting in permission being granted but to no one’s advantage. Students had to purchase tickets to use the hospital and Baker finally refused to permit them to do so. Further efforts to defeat competition included reducing student fees and finally even eliminating them while resorting to other unethical methods. His college, however, remained afloat and after Baker’s death in 1865 was able to improve its standards until finally closing in 1901.

It must be noted that in spite of his problems Baker recorded some accomplishments. He was regarded by his early colleagues as a skilled surgeon. He presided over the Medical Convention of Ohio in 1847 and had some responsibility for the publication of the Cincinnati Medical News, also serving as editor for the first year, 1858. He had some part in obtaining papers of incorporation for the Ohio State Medical Society. Some acquaintances even described his “energy and charm of personality” but agreed that he lacked polish as a teacher.

A final evaluation of the career of “Dr.” Baker would not be complete without resort to Jefferson’s archival records. Having been dubbed a Jefferson graduate of 1831 by several biographies and no other medical school degree having been described anywhere, it is now clear that Baker had no Jefferson M.D. He is listed as an 1830 matriculant at Jefferson but there is no evidence for his graduation. It must be assumed that his qualifications for practice had been accepted in Ohio without an actual diploma and after a period of years he developed his own momentum. The question probably never intruded, his forceful personality and aggressive behavior having served him well whether or not any deceit was involved. In any case Jefferson played a role in his medical career during the pioneer period when medical licensure and full educational qualifications were still a distant vision in American medicine.
The acquisition by the United States of the Louisiana territory by President Jefferson in 1803 introduced cultural and ethnic changes which were foreign to common English customs of evolving American society. New Orleans especially was influenced by French education and medical practices. Prior to 1834 there were no medical schools. The territory and New Orleans people were accustomed to physicians trained in Paris and Montpellier. French medicine at the time was less aggressive with treatment measures than was the practice in England and America. Bleeding and purging, although employed, were less drastic, the French inclining more toward allowing the illness to run its course with minimal intervention. General education facilities were also very limited in New Orleans, only one small college, the College of Louisiana, having been organized and enrolling merely 66 students in 1834. Medical practice except for the French-trained physicians was relatively primitive. There was even a Societe Medicale de la Nouvelle Orleans whose members had little communication with other Americans. By the 1830s the contact had improved, resulting in perception of a need for medical education locally, especially when many Americans began to move into the city. Among the founding groups of the Medical College of Louisiana (predecessor of Tulane University School of Medicine) was Dr. Charles Aloysius Luzenberg, (JMC, 1827) (Fig. 1).

Dr. Luzenberg was a complex character who appears almost skilled at creating confusion and controversy. In an age and place where affairs of honor were still frequent, he seems never to have met a man he would not like to challenge. The enemies he made caused him to be censured on account of his “mendacity, ignorance, presumption and ill-breeding.” These in spite of his “indefatigable quest for knowledge” and his ability to “inspire confidence and command respect.” One can easily visualize a very colorful personality.

Charles A. Luzenberg was born in Verona, Italy, July 31, 1805, of German parents, the family returning to Alsace where he grew up and received a classical education at the City College of Weissenberg. He came to Philadelphia in 1819 already showing interest in music and comparative anatomy. Entering Jefferson in 1825 he pursued its anatomy facilities vigorously and also came under the influence of Dr. Philip Syng Physick, perhaps the most admired surgeon and anatomist in the United States at the time. Their encounter at the Philadelphia Almshouse further stimulated Luzenberg’s interest in both surgery and anatomy. Following graduation (his thesis was on “Scrofula”) he served as a Demonstrator of Anatomy at Jefferson under Professor N.R. Smith for two years and developed his early career as a surgeon. In 1829 he moved to New Orleans with a letter to Dr. David C. Ker of Charity Hospital and was soon appointed as a surgeon there following demonstration of his skill with an amputation.

Luzenberg was promptly successful in practice. In 1832 he married a wealthy widow, Mary Fort, and then went abroad for two years of study. He

Fig. 1. Charles A. Luzenberg (JMC, 1827). Scholar, surgeon, and founder of the Medical College of Louisiana.
particularly admired Dupuytren at the Hotel Dieu but also spent time in the major cities of Europe including Göttingen. Upon return in 1834 he built his own hospital, the Franklin Infirmary, later the Luzenberg Hospital, designed along modern European lines with accommodations for 80 to 100 patients. This caused his fame to spread and his surgical experience increased. His complete extirpation of a parotid gland resulted in his election as a corresponding member of the Académie de Medicine de Paris when the case was reported in the Gazette Medicale de Paris in 1835. He also performed the unusual procedure of successful excision of six inches of necrosed ileum in a case of strangulated hernia. His concern for the poor was shown by the provision of wards in his hospital for their care. During a yellow fever epidemic in 1837 he treated all poor German immigrants without charge.

In 1834 a group of four physicians succeeded in gaining public acceptance of a plan to organize the Medical College of Louisiana. Luzenberg was named Professor of the Principles and Practice of Surgery and a short time later Dean. In spite of good publicity, contention soon developed perhaps fired largely by Luzenberg’s difficulties in getting along with his peers. In 1836 the faculty decided to revise Luzenberg’s course title to “surgical anatomy and operative surgery”, a change which he opposed. This and other altercations led to accusations against Luzenberg which went to the Supreme Court of Louisiana before he was acquitted, but he resigned his posts in January, 1837.

Luzenberg developed some influential support in the course of the medical school’s “growing pains”. He was a friend of the governor and many loyal friends had helped in gaining the support of the Legislature for erection of a building for the school. After his resignation he pursued his multiple interests in addition to devoting his basic time to his practice of surgery, the hospital, and a daily allotment of two hours for the care of the poor. He formed the Society of Natural History in 1839, ultimately leaving to it his own rich collection of specimens. In 1843 he was elected the first president of the Louisiana Medico-Chirurgical Society which held “brilliant meetings at which the French and English physicians of the state met to exchange views.” The Society under his leadership started the New Orleans Medical and Surgical Journal.

During the same year (1843) another bone of contention developed when Luzenberg advocated quarantine of the city for yellow fever, thus alienating business and legal establishments in New Orleans. His concern about relieving the appalling sanitary conditions in the city was the basis of his quarantine proposal but was also a part of his developing data about yellow fever which by the time of his death in 1848 amounted to “piles of manuscript and a fine collection of literature, old and new, on yellow fever.” The manuscripts were in Latin.

Whether or not Luzenberg’s deteriorating health related to the aggressive character traits which colored his professional and social relationships, he was forced to give up his practice in 1848. Precordial pain, dyspepsia, and paroxysms of palpitation totally incapacitated him and he began a leisurely trip to a health resort at Virginia’s Red Sulphur Springs but died at age 43 when passing through Cincinnati. His funeral, conducted in French, English, and German, brought together admiring representatives of the many groups with which he was connected including children from the Protestant Female Orphan Asylum following in the procession.

In his autobiography, Samuel D. Gross refers to his recollections about Charles A. Luzenberg. In a nostalgic visit to his widow, Mrs. Mary Fort Luzenberg in New Orleans in 1880, Gross wrote:

“I called on Mrs. Luzenberg a few days after my visit to Mrs. Stone. Mrs. Richardson and I entered a horsecar, or rather a mule-car, and after passing through a number of narrow, crooked streets in the old parts of the city near the river, reached the humble dwelling of this lady, now eighty years of age. For nearly thirty-two years she has been a widow. She was married to Dr. Luzenberg in 1832, when she was a young and wealthy widow of the name of Fort, the daughter of a New York banker. What a contrast between then and now! Her last husband left her a handsome fortune, much of it
the accumulations from his own extensive and lucrative practice. The war swept nearly all away. Notwithstanding that she is advanced in years, and withal partially blind, she seemed to be in good spirits, and conversed with animation and directness upon various topics. She frequently mentioned her husband, whom she idolized.... I reminded Mrs. Luzenberg of the pleasant breakfast which I took with her and her husband, in company with Dr. Harlan, the naturalist, at their beautiful residence in 1842, when her husband occupied so conspicuous a place in the profession of his adopted city, while she was one of the leading women in fashionable society.

"When I entered the Jefferson Medical College in 1826 Charles Aloysius Luzenberg served as Demonstrator of Anatomy under Professor N.R. Smith. Young as he was, he was a good talker, and an excellent anatomist and demonstrator. He took his degree the ensuing spring, passing a brilliant examination. He settled in Burlington, New Jersey, which place, however, he soon left, in consequence of some difficulty, the precise nature of which I never learned. It was thus that I lost sight of him until some years afterwards, when I was told that he had settled in New Orleans, and was rapidly attaining distinction as a surgeon and general practitioner. I had been but a short time in Cincinnati when I received a letter from him urging me to accept the Chair of Anatomy in the Medical College of Louisiana, at that time recently organized and now known as the University of Louisiana. My connection with the Medical College of Ohio induced me to decline the offer, and it was not until 1842 that I had the pleasure of meeting him again during a brief visit which I made to New Orleans.

"Dr. Luzenberg had a warm, positive, and impulsive temperament, and it is not improbable that he occasionally gave vent to expressions for which in his cooler moments he was sorry. However this may be, a hostile clique gathered around him, which disgusted him with his associates and induced him to devote himself exclusively to the practical duties of his calling.

"Luzenberg was a man of fine intellect and high culture. He had the advantages of a good classical education, of foreign travel, of extensive reading, and of large intercourse with the world. He was born in Verona, in Italy, July, 1805. He removed to the borders of France and Germany, and made himself master of the languages of these three countries - an accomplishment which was of vast use to him in New Orleans, whose population is made up of immigrants from all parts of the world. He was well versed in the Latin language, which he is said to have spoken with fluency. His library was large, and included the choicest editions of the works of the fathers of the profession. His collection of modern works was rich in the departments of natural history, zoology, and comparative anatomy."

It is apparent that Luzenberg brought to a relatively diverse society some new concepts which had great potential for benefit as well as energy for the multiple and varied interests which his talented personality required. To some degree his combativeness diluted his effectiveness but his accomplishments were many and significant.
James P. White (JMC, 1834): The Medical Department of the University of Buffalo

The Class of 1834 is notable for having graduated two medical school founders. Daniel Brainard (JMC, 1834), already described as a founder of Rush Medical College, was a native of Western, New York (later Westernville), and a graduate of Fairfield Medical College (The College of Physicians and Surgeons of the Western District, the State of New York). James Platt White, the second, was born March 14, 1811, at Austerlitz, Columbia County, New York, and became a founder of the Medical College of the University of Buffalo (Fig. 1). Curiously, White also attended Fairfield after a “fair” classical education and went on to Jefferson. Whether Brainard and White were acquainted prior to being Jefferson classmates is not known. White was of Puritan ancestry, a descendant of Peregrine White, the first white child born in the Plymouth Colony. In 1832, even before his Jefferson graduation, he had established his practice in Black Rock, a village later annexed to Buffalo, where a cholera epidemic was raging. His biographer regarded as highly commendable his willingness to serve there in spite of the major risks.

Buffalo, although a way-station to the west for many years, was a village of only about 1,500 in 1812 when it was burned by the British during the war. It recovered quickly and growth began, greatly accelerated by the completion of the Erie Canal in 1825. The western part of New York was served by Geneva Medical College founded in 1834, which was not far distant, but the lack of clinical facilities was perceived as limiting its potential in its small town location. The specific impetus for the founding of the Buffalo School is not clear but the growth of the city and the need for civic services no doubt provided the drive. In any case, James White was in the forefront of a small group planning for the medical school. The group included the (later) famous Austin Flint, Sr. and John C. Dalton who introduced animal experimentation. The original faculty included several Geneva professors as well as established Buffalo physicians providing a solid founding group. The school was chartered as the Medical Department of the University of Buffalo, the Legislature on May 11, 1846, having granted University status from the beginning, although for 40 years the institution was a university in name only, the Department of Medicine comprising its only college. Ultimately, in 1962 it became the State University of New York at Buffalo.

The status of medical education differed greatly in various parts of the United States with some regional peculiarities. There is real interest attaching to western New York in this context and Jefferson graduates played a significant role. Fairfield, east of Oneida Lake, was a remarkably successful medical school from its founding in 1812 almost until its closing in 1839/40. At the time, local and state medical societies wielded some influence in qualifying physicians for practice although there was no legal licensure. Fairfield had a series of graduates including Brainard and White who became prominent in medical so-
Geneva Medical College had opened in 1835 modeled after Fairfield and was then largely responsible along with the chartering of Albany Medical College for the decline of Fairfield. Geneva voluntarily moved to Syracuse in 1872 as a "foster" ancestor of the Syracuse University College of Medicine. The period of influence of the rural medical schools of western and northern New York was thus ended.

In spite of some opposition on the part of Buffalo citizens, stemming from their concerns about bringing in Geneva professors instead of Buffalo physicians, the new medical school had solid support. The governing body, called the Council, was headed by distinguished men and the honorary office of chancellor was held by Millard Fillmore, later President of the United States. The original faculty fortunately got along well, all first appointees remaining in place for five years. Gradually the acquisition of clinical facilities was perceived as an important asset contrasted with their lack at Geneva where the "hospital" had only one surgical and no medical case during an entire session. Sixty-seven students attended the first Buffalo session which ended in June, 1847, and eighteen graduated. The numbers of students were relatively small until the Civil War.

A remarkable accident occurred to Dr. White early in his career and threatened to end it. Riding in a stage coach he was thrown in such a way as to hit his head, fracturing his atlas. Spinal cord injury was apparently averted but his recovery was prolonged for months and resulted in permanent inability to rotate his head. The startling comment made in a memoir by Austin Flint in 1882 was that during recovery White "eventually expectorated an entire segment of the atlas."

Dr. White became Professor of Obstetrics and Gynecology in the new medical school and served for 35 years. He and his colleagues experienced "bitter opposition" locally in spite of the prestige of the Council. About 1850 he introduced, for the first time in the United States, direct observation of the course of labor and delivery for his students. The exposure to the class of the first obstetrical subject, an 18 year-old unmarried girl, brought severe criticism from both the medical people and laymen. Newspaper publicity caused White to sue for libel, which continued the controversy. He lost the case but in the process acquired important support which permitted the continuation and extension of his teaching methods. As the medical school prospered and built up hospital connections following the Civil War, these methods were more generally accepted.

In addition to his clinical and teaching activities, White became noted for his surgical skills, and he performed more than 100 ovariotomies. His restoration of an inverted uterus of 25 years was a widely publicized event. He was active in the local medical societies and later President of the Medical Society of New York State where in 1852 his presidential address was a succinct summary of progress in medicine. In it he referred to Jefferson Professors Samuel D. Gross and Charles D. Meigs. He was also a founder of the American Gynecology Society and was made an honorary associate of the New York Academy of Medicine. At the time of his death, White was President of the Council of the University of Buffalo. Among numerous published accolades and memoirs, he was described by the Buffalo Morning Express as the "most distinguished physician in Buffalo".

Alumni Who Founded Medical Colleges
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Versatile Surgeon

With the westward movement of population of the United States, medical schools were sure to follow. Having noted those of the midwest including the Chicago region with which Jefferson graduates were involved, another in the sequence benefited from the skills of a Jefferson Alumnus. In 1869, Victor H. Coffman became a founder and Professor of Obstetrics in the Omaha Medical College (Fig. 1). His accomplishments as an educator are difficult to document specifically but his career is definitely related to public service and innovative medical contributions. His progress in his own education and experience warrants brief notice.

Dr. Coffman was born in Ohio but grew up in Iowa. He graduated from Wesleyan College in 1859 and began a preceptorship and a course at Chicago Medical College but his progress was interrupted by Civil War service. There he gained respect for his surgical ability and moved upward in the medical corps ranks even though he had no medical degree. (That this was not unique is attested by the fact that W.W. Keen was a regimental surgeon in 1861 prior to his Jefferson graduation.) He was fully exposed to battle conditions and surgery in the field.

An incident occurred in a field hospital in which Coffman was watching a third surgeon attempting to amputate the upper extremity at the shoulder joint. Uncontrollable hemorrhage caused Coffman to quickly compress the subclavian artery with his thumb, permitting the surgeon to complete the operation. Coffman was immediately promoted to Chief of the operating staff. Another threatening incident was the ricochet of a shell which passed under the table at which he was operating. On one occasion at the siege of Mobile he operated for forty-eight hours without rest. In 1863 he was promoted to regimental surgeon (34th Iowa) and in 1865 brevetted Lieutenant Colonel. He went directly to Philadelphia and received his M.D. from Jefferson the following year.

Dr. Coffman settled in Omaha where in 1869 he was one of the founders of the Omaha Medical College. He was Professor of Obstetrics but was probably best known for his surgical skills. His reputation was later enhanced by the performance in the 1890s of a thyroid operation (described either as removal of a thyroid tumor or simply a thyroidectomy). This was stated to have been the first of its kind in the United States. Other achievements included the presidency of the Omaha Medical College and the presidency of the Nebraska Medical Society. He served as City Health Commissioner and as an organizer of the Omaha Pathology and Sanitary Society.

The College underwent the “growing pains” which were almost the rule with early medical colleges. It required ten years to reach full operation but did achieve success and survived until 1913 when it merged with the University of Nebraska. Another Jefferson alumnus, Dr. Jacob C. Denise (JMC, 1855) was fully involved with Coffman and helped draft the original articles for incorporation.
in 1869. He also became one of Nebraska’s most prominent physicians as a Founder and President of the Nebraska State Medical Society in 1869 and served as City Physician and County Physician for Douglas County.

The span of Coffman’s medical lifetime moved through primitive surgery, antiseptic surgery and aseptic surgery. Having begun in the worst of surgical conditions, he adapted well to the changes. It is curious to note that before the antiseptic era he wore flannel “sleevelets” over his shirt-sleeves, not to protect the patient but to keep his own sleeves clean. He was a leading surgeon for 40 years and his career was described as having left “an imprint on the record of Omaha medical annals that time cannot erase.”

Levi C. Lane (JMC, 1851):
Multitalented Scholar and Organizer

The frontier aspects of American medical education were subject to local peculiarities. No region was more varied than California, especially with its gold rush, railroad building and ocean commerce. Its sudden influx of settlers, adventurers, criminals, gamblers and camp followers, provided a challenge to orderly development. Medically there were many without any qualifications who offered services while a medical diploma, regardless of its source, was a real asset.

In spite of the need for progress in medicine, the first physician who thought in terms of organizing a medical school for the West Coast was a completely new arrival. Dr. Elias Samuel Cooper was about to settle in Portland, Oregon, to carry out his purpose when the ship stopped at San Francisco and a shipboard acquaintance persuaded him to leave there.

Dr. Cooper had acquired admiration for Dr. Daniel Brainard (JMC, 1831), founder of Rush Medical College, whom he had met in the Illinois State Medical Society, so this was the first Jefferson connection in San Francisco. Cooper, born in Ohio in 1822, began studying medicine at age 16 in Cincinnati but graduated from St. Louis University in 1840. His interest in anatomy and surgery was manifested during early practice in Peoria, Illinois, and he was among the first in the Mississippi Valley to use chloroform anesthesia following study in Europe. His arrival in San Francisco in 1855 was followed by his organization of a state medical society and the development of a busy practice.

In 1858, having gained the respect of the better practitioners of California, Cooper organized four physicians and one lawyer into a faculty of medicine, named the Medical Department of the Methodist University of the Pacific. As the school was developing, Dr. Cooper died in 1862 at age 46 and a complicated series of events followed.

Enter Levi Cooper Lane, nephew and admirer of Elias Samuel Cooper (Fig. 1). Dr. Lane was born in Ohio in 1829 and had college training at Farmer’s College in Cincinnati and at Union College, Schenectady, New York. He graduated from Jefferson in 1851, his thesis entitled "De Febrifus Miasmaticis in Illinois Septentrionali," having...
been written in Latin. He became a house officer at Ward’s Island, New York for four years, then joined the Medical Corps of the United States Navy in 1855. His record in the entrance examination was the highest in the navy examinations for many years. After sea duty with extensive medical (typhoid fever) and surgical experiences and his own serious illness with typhoid, he resigned in 1859 to join his uncle in San Francisco. His intellectual superiority was to stand him in good stead for his California career.

Levi Cooper Lane was immediately appointed Professor of Physiology in his uncle’s medical faculty in 1859. The school, however, never achieved success, a total of only 28 graduates listed when it closed in 1864. The same year a new medical school was formed by Dr. Hugh Hughes Toland, a swashbuckling entrepreneurial graduate of Transylvania University (1828) who answered the call of the gold fields in 1852 and became busy and wealthy. The Toland Medical College absorbed all the students of the Medical Department of the University of the Pacific and Levi Cooper Lane became Professor of Physiology at the request of the students, later also Professor of Surgery.

The medical school situation continued chaotic. In 1870 Dr. Lane and Professor of Medicine Gibbons resigned and reorganized the old school. The Toland School and its considerable property became the Medical Department of the University of California in 1873. Lane and Gibbons were able to recruit excellent teachers. Authority for granting degrees for the new school was developed by affiliation with University College, a Presbyterian College founded in 1854, but after a time the Lane school reverted to the old name - Medical College of the Pacific.

In 1882 Dr. Lane erected a new building for the medical school and in honor of his uncle, renamed it Cooper Medical College. A unique annual course of public medical lectures was instituted by Lane in a forward looking effort to educate lay people, and the series continued for decades after his death. In 1896 he founded a lecture series for physicians, bringing world class persons to San Francisco. These included Sir Clifford Allbut, Reginald Fitz, William H. Welch, Vittonio Putti and Sir Michael Foster. He also built Lane Hospital. In 1909 the Cooper Medical College was absorbed into Stanford University.

Dr. Lane was a man of many talents with both medical and surgical skills. He was stated to have had rare good judgment. He performed vaginal hysterectomy in 1878 without knowledge of its having been done previously. He also devised important changes in hare lip operations. He was said not to have operated on an important case without previously performing the operation on a cadaver. In his knowledge of anatomy and surgery there was probably no one his equal on the West Coast. In the middle seventies he took a two-year study period in Europe during which he became a member of the Royal College of Surgeons and acquired another M.D. in Berlin. He was awarded an LL.D. from Union College. He was essentially a student and organizer, but for 20 years he had “the cream of the surgical practice on the West Coast”, drawing patients from Alaska to Chile. His scholarship included full knowledge of Greek, Latin and Spanish, and he re-read Hippocrates’ writings in Greek annually. He projected a three-volume textbook of surgery but finished only the first.

Possessing many eccentricities, he was generous in his concern for the poor and spent a fortune in providing for the well being of the medical school and hospital. After his death in 1902 his estate funded a medical library said to have been the best one west of the Mississippi.

In each of the areas in which Jefferson graduates who pioneered in medical education resided, the challenges appeared insurmountable but in almost all instances the person on the scene possessed the capacity to move ahead. Some of the institutions they founded moved forward to definitive status. Others became incorporated into surviving ones and a few yielded their tenuous positions to changing economic or political fortunes. In most circumstances the effort to forward the cause of medical education included the principle of practical, clinical medicine taught at Jefferson.
In the 1940s, the founding of a medical school presented problems far different from those of pioneering days. Medical progress and population shifts as well as the perception of a need for more medical graduates were among the reasons for the attempts to establish a medical school in the state of Washington. Contrary to the events in California, however, opposition to early efforts arose in the medical community as well as from public and political objections. One early faculty failed because there were no interested students. Several other attempts in the State of Washington were aborted. The organized profession, especially in Seattle, was originally cool to a proposal to organize a medical school presumably because of the town-grown tensions experienced in other cities. A fairly powerful State Medical Society, however, in the early 1940s was able to agree that a medical school would be desirable. No doubt this initiative was supported by the population increase which occurred during World War II. The Society in 1945 established a committee to promote the process and Dr. David Metheny was appointed Chairman.

David Metheny (JMC, '23), born in Scotland but raised in Philadelphia, was a graduate of the University of Pennsylvania who had been awarded the Croix de Guerre for serving in France (1917-1919) (Fig. 1). He was a nephew of D. Gregg Metheny, M.D., L.R.C.P & S (Edinburgh), L.F.P.S. (Glasgow), Jefferson’s Assistant Professor of Systematic and Regional Anatomy. Matriculating at Jefferson, he manifested more maturity than was usual in earlier medical students, an attribute probably enhanced by his family medical heritage. He was President of the student society, “The Academy”, (composed of those with college degrees) and a member of other societies including the Keen Surgical Society.

He was appointed to Jefferson internship following which he served as Chief Resident Physician. Dr. Thaddeus L. Montgomery (JMC, '20) recalled Dr. Metheny as sharp, able, pleasant and personable who enjoyed close association with several of the young staff workers. He describes a farewell dinner tendered to Dr. Metheny at the University Club by a group known as “Revolutionaries”. It was attended by Drs. Montgomery, Burgess Gordon, Harold L. Jones, Lewis C. Scheffey and a few others.

At the dinner the discussion turned to research at Jefferson, providing the initiative for the organization of the Jefferson Society for Clinical Investigation. The group promptly communicated with Dean Patterson for approval and the Society was born.

Dr. Metheny went westward for a fellowship at the Mayo Clinic and on to Seattle for surgical practice. Promptly successful, he became a Fellow of the American College of Surgeons and before long Chief of the Surgical Services at King County Hos-

Fig. 1. David Metheny (JMC, ’23), founder of the Medical School of the University of Washington.
pital. As time went on he was President of the Puget Sound Surgical Society, President of the King County Medical Society and of the Washington Chapter of the American College of surgeons. His appointment as Chairman of the State Medical Society's committee for a medical school was a recognition of his academic proclivities and his success as a progressive surgeon.

The road to achievement turned rough almost at once as the heavy hand of politics intruded. The committee agreed on a plan to organize a medical school as a part of the University of Washington but the idea received a hostile reception by the University president and its senior professors. Next, the governor failed to support the effort but was defeated for re-election. Finally, enabling legislation was agreed upon as a bipartisan project but again the introduction of the measure was delayed by arguments as to which party should receive the credit. Metheny was embarrassed by the independent action of a member of his committee but was able to save the situation, and the legislation was adopted. The actual start up was just as difficult, complicated by opposition from Seattle physicians who regarded the medical school as a competitive intrusion into their own turf. Metheny maintained his enthusiasm and was able to enjoy the fruits of his efforts as the Medical School of the University of Washington was established. During his lifetime (he died in 1972), the School pursued a progressively successful course and near the end of the century may be regarded as one of the nation's leading medical schools.