
Appendix One

CHRONOLOGY OF TEXAS PATHOLOGY⁷⁹⁶

- 1756 First recorded autopsy. Frenchman Joseph Blancpain captured at Trinity River mouth and taken to Mexico City. Dies in prison. The autopsy is conducted in Mexico City, and the report states he had been "sick of malignant fever," had clots in the blood and "pleuro-pneumonia."
- 1808 Don Jayme Gurza, Royal surgeon at the Alamo hospital at San Antonio de Bexar, performs autopsy on murdered soldier, finding a hunting knife had wounded the lung, lacerated the diaphragm, and severed large nearby vessels.
- 1830-1831 When smallpox epidemic occurs in Texas, Coahuila government sends advice in a brochure by Citizen Miguel Muñoz of Mexico City outlining treatment and describing autopsy findings.
- 1836 Texas wins independence from Mexico, establishes Republic of Texas. Newspapers are main source of medical information; crude laboratory techniques might be used by physicians (tasting of urine to detect diabetes, etc.) but most attention is paid to physical diagnosis (palpation, pulse).
- 1838 First "medical text" in Texas. A pamphlet published by Dr. Theodore Leger, *Essay on the Particular Influence of Prejudices in Medicine, Over the Treatment of the Disease Most Common in Texas, Intermittent Fever*. Dr. Leger condemned his fellow medical practitioners and then retired to run the *Texas Planter*, a weekly 2,000-circulation newspaper at Brazoria. Houston doctors form the Medical and Surgical Society of Houston. Dr. Alexander Ewing is first president.
- 1839 First book of "great medical merit" published, Dr. Ashbel Smith's *An Account of the Yellow Fever Which Appeared in the City of Galveston, Republic of Texas, In the Autumn of 1839, With Cases and Dissections*. Dr. Smith, a Yale medical graduate, had arrived in Texas in 1837 to serve as surgeon-general of the Texas Army.
- 1840 Scarlet fever epidemic in Texas.
- 1845 Texas annexed into the United States. Dr. Anson Jones, last president of the Republic of Texas, declares, "The Republic of Texas is no more." Dispute over Southern Boundary leads to Mexican-American War.

- 1847 American Medical Association is established.
More medical texts begin to appear in Texas. Dr. Absalom C. Denson of Cherokee County publishes *The Southern and Western Waybill to Health*.
- 1848 Ashbel Smith leads group of Galveston physicians in seeking a state charter for the Galveston Medical and Surgical Society—which almost becomes a statewide society—but the entire effort bogs down in the state legislature and fails.
- 1850 Measles epidemic in Texas.
- 1852 Typhoid fever and dengue epidemics in Texas.
- 1853 Thirty-five Texas doctors form the Texas Medical Association in Austin. It would then form several county societies; however, the state society would lapse after two years. Among the members are Dr. Ashbel Smith, who would become president of The University of Texas, and Dr. J. W. Throckmorton, who would become governor of Texas.
- 1854 Dr. J. C. Massie publishes his *Treatise on Eclectic Southern Practice of Medicine*.
Dr. Ferdinand Ludwig von Herff, who had moved to San Antonio from Germany, uses chloroform for anesthesia. Herff would also identify hookworm as a cause of disease, predict the advent of antibiotics, and would use a fine ocular piece to detect foreign matter in water before performing surgery
- 1855 In Germany, Rudolf Virchow produces work on Cellular Pathology
- 1856 Methodist Episcopal Church establishes Soule University at Chappell Hill, and has plans for a medical school, but struggles for financial stability.
- 1857 Houston Medical Association is formed.
- 1858 State of Texas passes legislation to establish a university to include “instruction in surgery and medicine,” but there will be a long delay before implementation.
- 1860 Diphtheria epidemic strikes Texas.
- 1861 American Civil War breaks out. Physicians, others go to war. Soule University at Chappell Hill dissolves.
Out of the war would come the works of the Army Medical Museum, including a history and a collection of specimens of morbid anatomy.
- 1865 The American Civil War is over.
President Abraham Lincoln is assassinated, and pathologists at the Army Medical Museum perform the autopsy on April 15, 1865.
On June 19, General Gordon Granger arrives in Galveston, announcing that all slaves are free. Begins “Juneteenth” celebration.
Soule University opens medical department, the Galveston Medical College, in Galveston. Among faculty listed in the announcement for the first

session are Robert Fluellen, MD, professor of anatomy; W. H. Gantt, MD, professor of physiology and pathology, and N. H. Boring, MD, demonstrator of anatomy.

- 1866 Dr. Greensville Dowell joins Galveston Medical College during its second year as professor of anatomy and surgery, and would become dean. The school would operate seven years and be housed in Dr. Dowell's home at the corner of Avenue L and 22nd. He also leased the Island City Hospital, which had been built in 1845 on the same site as the future John Sealy Hospital, for clinical training.

Dr. Dowell begins publication of the first medical journal in Texas—*The Galveston Medical Journal* (1866-1871) and publishes two books, one on yellow fever (theorizing five years before Finlay of Cuba that yellow fever was spread by the mosquito) and one on hernia.

- 1867 Dr. J. W. Throckmorton is dismissed as governor of Texas by General Phil Sheridan. Reconstruction era begins.

- 1868 Isaac Lycurgus Van Zandt of Fort Worth reportedly brings the first microscope to Texas. (It is known that he moved from Marshall to Fort Worth in May 1868, bringing the microscope from Bellville.)

At the Texas State Medical Association meeting in Dallas, Dr. B. E. Hadra of San Antonio—who also would teach at Galveston Medical College and the Texas Medical College—reports “six cases of trichiniasis in which a microscope was used to identify the ‘threadlike, spiral and rounded worms’ in the uncooked pork which the patients had eaten.”

- 1869 Texas Medical Association reorganizes in Houston. Dr. Ashbel Smith is the only member who was in attendance at the original meeting in 1853.

- 1873 Dr. William Penny is head of the Department of Physiology and Pathology at the Texas Medical College, organized in 1873 in Galveston, and is considered the first professor of pathology in Texas.

- 1877 Texas physicians debate, and doubt, the existence of “germs” in infectious disease.

- 1881 President James A. Garfield is assassinated, and Army Medical Museum physicians conduct the autopsy.

Texas voters select Austin as the site of their Main University and Galveston for their Medical Department.

Carlos Finlay of Cuba announces his theory that mosquitoes are vectors in transmission of yellow fever, but is disregarded.⁷⁹⁷

- 1883 Main University—The University of Texas—opens in Austin, but funding for its Medical Department languishes.

- 1887 Autopsy of a child is reviewed at the annual meeting of the Texas Medical Association. (Nixon reports that “typhlitis” and “perityphlitis” were names given to inflammatory processes in the right lower abdomen at the time. After such an inflammation, the child had died, and an autopsy had been conducted.)⁷⁹⁸

- 1889 George Dock, MD, who had studied with William Osler at the University of Pennsylvania, arrives in Galveston to serve as chair of pathology at the reorganized Texas Medical College. His arrival marks the true beginning of the specialty of pathology in Texas.

Dr. Dock, with microscope in hand, demonstrates the various phases of the malarial parasite to physicians attending the Texas Medical Association annual meeting. He also demonstrates the making of blood films and the examination of fresh and stained specimens.

Ferdinand Herff, MD, praises the current advances in Texas medicine but laments the fact there is no laboratory in the state.

- 1890 John Sealy Hospital opens in Galveston.

- 1891 The University of Texas Medical Department (later The University of Texas Medical Branch at Galveston) opens its doors for classes in its new building (later to be called "Old Red").

Allen J. Smith, MD, arrives from the University of Pennsylvania to be chair of Pathology, Microscopy and Bacteriology at the school.

Dr. George Dock leaves for the University of Michigan as the Texas Medical College and Hospital closes its doors to make way for the new University of Texas Medical Department.

At the Texas Medical Association meeting in Waco, Dr. J. H. Wysong of Galveston reviews clinical examination of the urine, including naked-eye appearance, a description of the Fehling test for sugar and the heat and nitric acid test for albumen. He also demonstrates a comprehensive chart of "many laboratory methods of urinalysis."⁷⁹⁹

- 1892 The University of Texas Medical Department, Galveston, holds first graduation ceremonies with three students graduating.

First recorded autopsy at UTMB initiates current accession of autopsies—to present.

- 1893 Dr. Allen J. Smith "authoritatively" reviews cancer of the stomach at the Texas Medical Association annual meeting.

Microscopic examination apparently was being done in Austin. Doctors had posted a detailed fee schedule. Microscopic examination of urine cost from \$5 to \$10 and examination of pathological specimens was \$10 to \$25. In addition, examination of urine for albumen and sugar cost from \$2.50 to \$5. The fee for "venereal practice" was payable in advance and cost from \$5 to \$50. Consultation and written opinions ranged from \$5 to \$25.⁸⁰⁰

The Texas Medical Association forms the Section on Microscopy and Pathology. Dr. Allen J. Smith is chairman. Before, there had been no special section for pathology in conjunction with association meetings, but papers had been included in the Section on Practice of Medicine, *Materia Medica and Therapeutics*, "a depository for pathology." Under various names, the new section would meet uninterruptedly until 1918.

- 1893 Dr. Allen J. Smith in 1893 finds ova of hookworm in the general medical closet (or toilet), but is unable to identify the carrier.
- 1894 Dr. Ferdinand Herff at autopsy of patient finds hookworm parasite.
Fort Worth Medical School opens in Fort Worth as a department of a non-existent university. William Howard, MD, is the professor of pathology. (Various opening dates have been cited. Stout reports obtaining the date 1891 from Dr. T. C. Terrell in a personal communication, and notes a graduating class of five in 1895; W. H. Moursund in *A History of Baylor University College of Medicine 1900-1953* cites 1894. The Fort Worth school became a part of Texas Christian University in 1911, and in 1918 merged with Baylor University College of Medicine in Dallas.)
- 1895 Fort Worth Medical School graduates its first class.
- 1896 Wilhelm Roentgen announces discovery of x-ray; A. H. Becquerel, radio-activity.
Scientific experimentation brings charges of animal cruelty to Army Medical Museum.⁸⁰¹
- 1898 Yellow fever and dengue fever rage in Texas. Marine Hospital Service sends John Guitéras, MD, professor of pathology at the University of Pennsylvania, to Texas to help.
Spanish-American War brings epidemic of typhoid among American troops. Walter Reed of the Army Medical Museum heads a commission to study the problem, and reveals flies as carriers, dust and uncleanness as mechanisms facilitating the spread of the disease.
- 1899 Theobald Smith and others establish the tick as the vector in the transmission of Texas cattle fever.
- 1900 In September, 6,000 to 8,000 inhabitants of Galveston die in powerful hurricane (remaining in 1995 the nation's worst natural disaster). Along with nearly every building in town, "Old Red" and John Sealy Hospital are damaged, however The University of Texas Board of Regents insists on Medical Department classes starting this fall.
The University of Dallas Medical Department opens its doors in Dallas and would affiliate in 1903 with Baylor University at Waco to become Baylor University College of Medicine. Dallas Medical College also opens and would merge in 1904 with Baylor. For the next few years, a number of medical schools would open, many of them diploma mills.
- 1901 Spindletop, the great oil gusher, erupts in Beaumont, starting the development of major oil fields in Texas.
A second commission headed initially by Walter Reed of the Army Medical Museum announces the mosquito as the vector in transmission of yellow fever, confirming Carlos Finlay's (and Greenville Dowell's) earlier theories.
Speaking to the Texas Medical Association Section on Pathology, Dr. Allen J. Smith delivers beautiful, 4,000-word speech on the status of pathology.

Marie Charlotte Schaefer, MD, first UTMB woman faculty member and first woman listed as a speaker on a Texas Medical Association program, presents "Anchlostoma Duodenale in Texas," which arose from her work as an *interne* in Dr. Allen Smith's laboratory—where she had become interested in intestinal parasites and hookworm.

- 1902 Southwestern University Medical College, nominally tied to Southwestern University in Georgetown, opens in Dallas.

A dermatologist and professor at the original Southwestern University Medical College, J. B. Shelmire, MD, intrigued by the fields of mycology and histopathology, brings the first microscope to Dallas in 1902, and provides some clinical pathology services to colleagues.

- 1903 Dr. Allen J. Smith leaves The University of Texas Medical Department for the University of Pennsylvania. He is succeeded by A. E. Thayer, MD, of Meridian, Mississippi, as chairman of pathology. Dr. Thayer would leave in 1907, because of his wife's ill health, and in 1908, become a professor of pathology at Baylor University College of Medicine in Dallas, serving until 1912.

First recorded surgical pathology report initiates accessions—to present—at UTMB

- 1904 American Medical Association creates Council on Medical Education. A pathologist, William T. Councilman, MD, begins study of pathology education in the United States.

Beecher F. Stout, MD, establishes the state's first private laboratory for clinical pathology in San Antonio. In order to survive, he also provides anesthesiology services.

Others soon follow him, however, in opening private laboratories: In 1907, W. F. Thomson, MD, in Beaumont and J. H. Black, MD, in Dallas; in 1909, E. F. Cooke, MD, and in 1911, Martha A. Wood, MD, both in Houston; in 1912, J. E. Robinson, MD, in Temple; in 1913, Willis Waite, MD, in El Paso; in 1915, Truman C. Terrell, MD, in Fort Worth; and in 1917, W. W. Coulter, MD, at Southwestern State Hospital in San Antonio.

- 1905 Texas Medical Association launches the *Texas State Journal of Medicine* Pathology-related papers are published in the first issue.

- 1906 After eradicating mosquitoes from Cuba, William Crawford Gorgas, MD, also eradicates them from the Panama Canal Zone, permitting American Army engineers to complete construction of the Panama Canal.

Claudia Potter, MD, the sixth woman to graduate from UTMB, Galveston, becomes the pathologist at Temple Sanitarium (later Scott and White Hospital) in Temple, also performing multiple other tasks.

John T. Moore, MD, part-time pathologist, of Galveston, the Texas representative to the American Medical Association Council on Medical Education, pleads for better medical education in Texas.

In June 1906, Dr. Moore publishes an article, "The Laboratory of Clinical Pathology and Its Relation to the Practice of Medicine and Surgery," in

the *Texas State Journal of Medicine*. Other clinical pathology articles also are carried in this issue, a pattern that would continue routinely over the years.

After being ridiculed by the Texas Legislature, the Texas anatomical law, designed to obtain cadavers for education of first-year medical students in anatomy, is passed.⁸⁰²

- 1907 Texas passes its one-board medical practice act, and the resulting board would launch stringent efforts to improve the previously uncontrolled medical schools in the state.
- 1908 American Medical Association obtains services of Abraham Flexner and the Carnegie Foundation to study medical schools in the nation. Flexner would also focus heavily on pathology education, and his study would have a profound effect on medical education and the teaching of pathology.
- 1909 Flexner studies four Texas schools. Only one, The University of Texas Medical Department (later UTMB) meets Flexner's standards. Diploma schools would disappear; other schools would struggle financially and have difficulty with meeting the requirements.
- Typhoid vaccination is made compulsory for soldiers in Texas camps because of difficulties along the Mexican border (the Mexican revolt against Porfirio Diaz is under way). Only one death occurs from typhoid—that of a civilian who had not been vaccinated.
- 1910 John T. Moore, MD, Houston, sometime pathologist, is elected President, Texas Medical Association
- 1911 B. F. Stout, MD, performs the first complement-fixation in Texas. Others soon also take up the test.
- Walter H. Moursund, MD, joins Baylor University College of Medicine, Dallas, as an assistant professor of pathology.
- 1912 J. Harvey Black, MD, of Dallas becomes prominent in context of pathology education at Southern Methodist University Medical Department, Dallas (an extension of the earlier Southwestern University Medical Department).
- 1914 On March 11, 1914, a group of Houston pathologists form the Houston Pathological Society.
- 1915 Southern Methodist University trustees opt to close the Medical Department, and devote funds instead to liberal arts.
- 1900-1920 Glorious decades of the "Big Four" (Osler, Welch, Halsted, Kelly). Clinical pathology practiced only in medical schools and large hospitals, however, and formal training is available only in Europe. Those taking such training are in demand as teachers and in hospitals.
- Early 1900s Post-mortem work, according to Dr. B. F. Stout, is fraught with danger, "cold-eyed" gentlemen with rifles often present. Often, too, animal parts are sent in for autopsy.

- 1917 Texas Medical Association, after interesting discussion, votes to abolish its Section on Pathology beginning in 1918. Prominent Houston pathologist, E. F. Cooke, MD, is involved in the discussion and apparently supportive of the decision.
In April 1917, the United States enters World War I.
- 1918 Fort Worth School of Medicine affiliates with Baylor University College of Medicine, Dallas.
World War I ends, and would be followed by an economic boom in the United States.
The American College of Surgeons begins inspections of hospitals and requires that they have an adequately staffed and equipped laboratory.
- 1919 George T. Caldwell, MD, arrives in Texas as professor and chairman of pathology at Baylor University College of Medicine, Dallas. He is the first scientifically-trained and full-time pathologist to teach at the school. His wife, Janet Caldwell, MD, also a pathologist, assists him in the laboratory and would become director of the laboratory at Baylor University Hospital.
- 1920 W. H. Moursund, MD, is appointed acting dean of Baylor University College of Medicine and would become dean.
E. F. Cooke, MD, and the editor of the *Texas State Journal of Medicine*, Holman Taylor, MD, engage in a series of debates over advertising of clinical pathology services.
- 1921 Texas pathologists form the State Pathological Society of Texas (later the Texas Society of Pathologists) on May 9, 1921, during the meeting of the Texas Medical Association in Dallas.
- 1922 Texas physicians participate in the organization of the American Society of Clinical Pathologists (ASCP) in St. Louis.
- 1928 The Texas Medical Association Section on Clinical Pathology is reestablished, following a request from members of the Texas Society of Pathologists. The society would meet only as the section until 1934.
Paul Brindley, MD, becomes acting head of the department of pathology at The University of Texas Medical Branch in Galveston, and would become chairman in 1929.
- 1928-1929 Frank W. Hartman, MD, formerly of Temple, Texas, is president of the American Society of Clinical Pathologists.
- 1929-1930 J. Harvey Black, MD, of Dallas is president of the American Society of Clinical Pathologists.
- 1930-1931 Kenneth M. Lynch, MD, formerly of Texas, is president of the American Society of Clinical Pathologists.
- 1934 Texas Society of Pathologists resumes separate meetings.
- 1936 The American Board of Pathology is formed and begins its certification program. During the first year of examination, three Texas pathologists are certified. They are Douglas Randolph Venable, MD, then of Wichita

Falls; Elbert DeCoursey, MD, of San Antonio, and Charles B. Sanders, MD, then of Dallas.

Between 1936 and 1938, no separate meetings of the Texas Society of Pathologists are held, presumably because of the country's great economic depression. The Texas Medical Association Section on Clinical Pathology continues to meet.

- 1938 Following a called meeting in Fort Worth, the Texas Society of Pathologists is reorganized.
- 1939 In Dallas, experimental work by Joseph M. Hill, MD, and engineer David Pfeiffer in blood transfusion methods results in the design of a system (ADTEVAC) to preserve blood plasma by drying it from the frozen state. The Wadley Center in Dallas will become internationally recognized for work on Rh factor problems.
- 1940 Name of State Pathological Society of Texas is changed officially in the Constitution and Bylaws on January 28, 1940, to Texas Society of Pathologists.
- 1941 On December 7, Japan bombs Pearl Harbor, Honolulu, Hawaii, and on December 8, 1941, the United States declares war against Japan, and on December 11, against Germany and Italy. Medical schools will soon begin accelerated programs of education, shorter-term residency training, and most medical students will become involved in special military programs deferring their service until completion of undergraduate medical education.
- G. N. Papanicolaou and H. F. Trout demonstrate diagnostic usefulness of vaginal smears in cancer.
- Texas Legislature passes bill in May and Governor W. Lee O'Daniel in June signs legislation authorizing funding to establish a state cancer hospital, M.D. Anderson Hospital and Tumor Institute (later The University of Texas M.D. Anderson Cancer Center) in Houston. M.D. Anderson Foundation, a gift of Monroe Dunaway Anderson, a member of the family who started the leading cotton merchandising company Anderson Clayton & Company, matches the state funds, providing temporary housing and a site for the permanent quarters.⁸⁰³
- 1942 The University of Texas Medical Branch at Galveston lends five faculty members to M.D. Anderson Hospital and Tumor Institute. They are the only staff members.⁸⁰⁴
- 1943 Infantile paralysis epidemic occurs in the United States.
 Penicillin is first used in therapy.
 Baylor University College of Medicine moves to Houston; opens school in Sears warehouse.
 Southwestern Medical College of Southwestern Medical Foundation opens school in Dallas in Army barracks.
- 1945 President Franklin D. Roosevelt dies April 12, 1945, in Warm Springs, Georgia.

On August 6 atomic bomb is released over Hiroshima, Japan, and on August 9 over Nagasaki, Japan.⁸⁰⁵

World War II ends officially on September 2, 1945

Dr. Joseph M Hill and colleagues report technology on determining Rh factors of blood before transfusions. Baylor University Medical Center becomes the first hospital in-the world to have a routine blood typing service.⁸⁰⁶

- 1946 Many physicians returning from military duties seek residency training to supplement their accelerated education and training programs during World War II.

The number of approved residency positions at The University of Texas Medical Branch at Galveston increases to sixty-nine, whereas ten years earlier there were only four.⁸⁰⁷

College of American Pathologists is formed.

Following the war, many more formally-trained pathologists begin to fan out across Texas, moving into communities that formerly relied on "circuit-riding" pathologists. As had their predecessors in other cities, many pathologists established schools of medical technology and became involved in establishing blood banks.

The Texas Society of Pathologists initiates an advertising page in the *Texas State Journal of Medicine* to present views of pathologists on a wide variety of ethical, socioeconomic, and scientific issues. Individual members volunteer to pay for the page, a custom that would continue until 1951 when the expenditure was included in the Society budget. The page came to be known as "page 5" although it was published on other pages of the journal. It would be discontinued in 1961.

R. Lee Clark, MD, of M D. Anderson Hospital and Tumor Institute in Houston invites Texas Society of Pathologists to co-sponsor the establishment of a tumor registry in Texas. Much debate ensues. William O Russell, MD, the first pathologist at M D. Anderson, begins work to establish the program in Texas

Following World War II, federal funding of research programs accelerates

- 1947 On April 16, a French ship, the *Grandcamp*, in the harbor at Texas City, explodes, killing and injuring hundreds. Out of this disaster the American Association of Blood Banks is formed. Among the founders are Texans, Drs. E. E. Muirhead, Joseph M Hill, and Sol Haberman (PhD).

Texas Society of Pathologists names its award for scientific distinction the George T. Caldwell Award, following the death of Dr Caldwell.

- 1948 Texas doctors begin learning about smear diagnosis, and Dr. George N. Papanicolaou sends telegram to members of the Texas Society of Pathologists expressing his hope that physicians "would fully evaluate the procedure before passing an opinion as to its merit and also expressing belief in its usefulness as a diagnostic procedure "

- John L. Goforth, MD, of Dallas begins term (1948-1950) as governor of the College of American Pathologists.
- 1949 Houston physicians form the Houston Society of Clinical Pathologists on July 22, 1949.
- Texas Legislature passes the "Basic Science" bill setting certain minimum standards for all medical practitioners in various medical disciplines, including pathology.
- Southwestern Medical College, Dallas, becomes the second medical school in The University of Texas System.
- 1950 North Korea crosses into South Korea, provoking the Korean War. A physician draft becomes necessary.
- 1950s Texas pathologists implore Blue Cross-Blue Shield of Texas to recognize their fees under Blue Shield, which reimburses physicians, rather than under Blue Cross, which pays for hospital services.
- 1950-1951 F. William Sunderman, Sr., MD, of Houston serves as president of the American Society of Clinical Pathologists.
- 1952 Dr Truman C. Terrell of Fort Worth serves as president of the Texas Medical Association.
- 1953 Dr. George Turner of El Paso serves as president of the Texas Medical Association.
- Dr. B. F. Stout of San Antonio publishes brief history of pathology in the *Texas State Journal of Medicine*, and cites the integration of pathology during his lifetime.
- 1955 Texas Legislature passes bill (sponsored by Robert Baker, Houston) allowing county commissioners in four Texas locations—Dallas, Fort Worth, Houston, and San Antonio—to set up a medical examiner's system. The bill requires systems in those without a medical school. In June 1955, San Antonio becomes the first city to initiate a medical examiner's system in Texas.
- The first George T. Caldwell Award of the Texas Society of Pathologists is given posthumously to Dr Paul Brindley, long-time chairman of the department of pathology at UTMB, Galveston.
- 1956-1957 Dr. John L. Goforth of Dallas is president of the American Society of Clinical Pathologists.
- 1957 Texas Attorney General Will Wilson renders opinion declaring that whenever a corporation employs a licensed physician to treat patients and receives the fee, the corporation is unlawfully engaged in the practice of medicine and the licensed physician so employed is violating the provisions of Texas law and is subject to having his license to practice revoked.
- 1957 "Clinical" dropped from title of Texas Medical Association Section on Pathology.
- 1958 An inquiry regarding a trained but unlicensed physician working in a Texas

laboratory brings the opinion from the secretary of the Texas State Board of Medical Examiners that (1) if this individual comes to Texas and works in a laboratory and limits his work to diagnosis, he is practicing medicine and will have to have a license; (2) anyone who does pathology and makes a diagnosis is practicing medicine, and (3) no one can do pathology in Texas without a license.⁸⁰⁸

Louis S. Smith, MD, of Houston begins term as CAP governor (1958-1960).

1959 Nobel Prize for Medicine and Physiology given to Americans S. Ochoa and A. Kornberg for synthesis of RNA and DNA.

Frank M. Townsend, MD, of San Antonio is named director of the Armed Forces Institute of Pathology in Washington, DC.

Late 1950s NASA begins space development programs, leading to many technologic advances, including those in the laboratory.

1960 Dr. May Owen of Fort Worth is first woman to serve as president of the Texas Medical Association.

Automation of laboratory functions accelerate.

American Theodore Maiman demonstrates first laser.⁸⁰⁹

Molecular biology begins period of rapid development.

Early 1960s There is acceleration of the conflicts in Vietnam that had begun during the Truman era.

1960-1961 Dr. John J. Andujar, Fort Worth, serves as president of the American Society of Clinical Pathologists.

1963 On November 22, 1963, President John F. Kennedy is shot and killed in Dallas, and Texas Governor John B. Connally severely wounded. Physicians at Parkland Memorial Hospital provide care for them and later for the alleged assassin Lee Harvey Oswald of Dallas. Controversy ensues over the autopsies after Texas law is preempted and President Kennedy's body is flown to Bethesda, Maryland, where Navy pathologists conduct the autopsy.

1964 Texas Attorney General rules that pathology is the practice of medicine. In subsequent months, a mailing will be sent to members of the Texas Medical Association by the TMA Board of Councilors listing qualified Texas pathologists and the categories of laboratory tests offered.

1964-1965 Dr. William O. Russell of Houston serves as president of the American Society of Clinical Pathologists.

1965 In July, President Lyndon B. Johnson signs the Medicare law, an amendment to the Social Security Act, providing limited health insurance to elderly and disabled Americans.

College of American Pathologists supports concept of billing for the "professional component" of services.

American Society of Clinical Pathologists and others encourage automation of laboratories, regardless of size.

- 1965 Numerous requirements would be imposed on pathologists, and over the years include a variety of formulas and approaches for reimbursement for Medicare patients.
- 1966 Medicare/Medicaid go into effect.
 Charles J. Whitman shoots randomly from atop The University of Texas tower in Austin, killing sixteen and injuring thirty-one people on campus. A special blue ribbon committee, appointed by Governor John B Connally to study the incident, includes Texas pathologists.
 First students are admitted to The University of Texas Medical School at San Antonio.
- 1967 Amendments to Medicare law provide 100% reimbursement for inpatients to hospital-based physicians and hospital outpatient diagnostic services are transferred to "Part B" of Medicare.
 CLIA '67, or the Clinical Laboratory Improvement Act, establishes minimum quality requirements to participate in Medicare for clinical laboratories engaged in interstate commerce.
 Texas Medical Association adopts position that "Doctors of Osteopathy who practice scientific medicine on an ethical basis are not cultists."⁸¹⁰
 Dr. John J. Andujar, Fort Worth, is president of the American Board of Pathology.
- 1968 Senator Robert Kennedy is assassinated in Los Angeles, and a Texas physician, Kenneth M. Earle, MD, heading the neuropathology department at the Armed Forces Institute of Pathology, is among those conducting the autopsy.
 "Third generation" of computers based on integrated circuitry are introduced.
- 1969 NASA places man on moon
 Texas College of Osteopathic Medicine is formed in Fort Worth.
- Late 1960s More large commercial laboratories are founded, and will continue expansion over the next three decades.
- 1971 The University of Texas Medical School at Houston opens, becoming the second medical school in Houston.
 Carl J. Lind, Jr., MD, Houston, begins service (1971-1977) as CAP governor.
- 1972 More than 100 amendments to Medicare are adopted, including establishment of fee schedules for routine laboratory work on the basis of the lowest charge paid within a region; reimbursement for teaching physicians is transferred to "Part A" of Medicare Professional Standards Review Organizations (PSROs) given responsibility for review of Medicare services.
 Texas Tech University School of Medicine opens in Lubbock
- 1973 Dean Corll-Elmer Wayne Henley mass murders of twenty-seven males are found in Houston. Harris County Medical Examiner is in charge of identifying victims.

Mid- 1970s Number of malpractice suits increases to a point of crisis.

1975 F. Lamont Jennings, MD, of Galveston begins service (1975-1981) as CAP governor.

1977 Medicare-Medicaid Fraud and Abuse Amendments adopted. One section calls for disclosure of ownership of 5 percent or more in facility, such as an independent laboratory, in order to participate in Medicare and Medicaid. Texas A&M College of Medicine opens classes with thirty-two students.

1977-1978 Vernie A. Stembridge, MD, of Dallas serves as president of the American Society of Clinical Pathologists.

1978 Rules for 1972 Medicare amendments are implemented, and include imposing "lowest charge" reimbursement for twelve laboratory tests.

1979 An "automated fee schedule" for Medicare is established for laboratory tests in some laboratories

John R. Rainey, Jr., MD, begins service (1979-1985) as CAP governor.

1980 Dr. Vernie A. Stembridge, Dallas, is president of the American Board of Pathology.

1980s Mergers of large commercial laboratories accelerate.

1982 Tax Equity and Fiscal Responsibility Act (TEFRA) brings hospital ancillary units, including laboratories, under reimbursement limits. Health Care Financing Administration (HCFA) has authority to limit reimbursement to pathologists under reasonable compensation equivalent (RCE)

1982-1983 Frank Vellios, MD, formerly of Dallas, is president of the American Society of Clinical Pathologists.

1983 RCEs are replaced with prospective payment system (PPS) based on diagnosis-related groups (DRGs).

1984 Deficit Reduction Act of 1984 replaces reasonable charge basis for outpatient laboratory testing with carrier-wide fee schedules.

Thomas H. Dutcher, MD, formerly of Dallas, is president of the American Society of Clinical Pathologists.

1985 The Gramm-Rudman-Hollings deficit-reduction legislation leads to Court decision that in effect sets stage for cost-shifting of indirect laboratory charges for nonpatients in an amount equal to that applied for the hospital's own patients.

In England, DNA "fingerprinting" results first presented as evidence in a criminal prosecution.

When a Delta Airlines aircraft crashes on August 2 at Dallas-Fort Worth Airport, the Dallas County Medical Examiner is in charge of autopsies.⁸¹¹

Thomas H. McConnell, MD, Dallas, and P. Ridgway Gilmer, Jr., MD, Galveston, begin terms as CAP governors, Dr. McConnell to serve until 1988, Dr. Gilmer until 1991.

- 1987 Under OBRA '87, Secretary of Health and Human Services is authorized to impose sanctions on physicians who decline assignment of Medicare benefits on fee schedule testing. Also eliminated are previous allowances for return on equity of capital for hospital outpatient departments, including laboratories. Medicare laboratory reimbursements are reduced.
Federal Bureau of Investigation (FBI) establishes DNA "fingerprinting" laboratories
- 1988 CLIA '88 is passed, in principle would extend direct federal jurisdiction for the regulation of clinical laboratory quality to all US clinical laboratories. Also provides for Medicare coverage of preventive laboratory service, including payment for screening of Pap smears every three years.
- 1988-1989 Joseph H. Keffer, MD, later of Dallas, serves as president of the American Society of Clinical Pathologists
- 1989 OBRA '89 reduces laboratory fee schedules again and bars "self-referral" to laboratories owned by physicians; creates "shell lab" concept regarding laboratory-to-laboratory referrals.
Specialty society delegates given vote in TMA House of Delegates.
- 1990 William Gordon McGee, MD, of El Paso becomes president of the Texas Medical Association.
OBRA '90 again reduces laboratory fee schedules. Changes definition of shell laboratory to one that does not perform on site 70% of tests for which it has received requisitions.
- 1991 America sends troops to the "Gulf War" in the Persian Gulf region to protect Kuwait against encroachment by Iraq.
- 1992 First regulations for CLIA '88 take effect. Final regulations on the Medicare and Medicaid Patient Program Protection Act, passed in 1987, are implemented as is the Stark self-referral ban
- 1993 Branch Davidian mass disaster occurs near Waco; Fort Worth physicians conduct autopsies and identify victims
Michael W. Lieberman, MD, chairman of the department of pathology, Baylor College of Medicine, Houston, is president of the American Society for Investigative Pathology (includes progenitors, the American Association of Pathologists and Bacteriologists and the American Society for Experimental Pathology.)
- 1994 Merle W. Delmer, MD, San Antonio, is president of the American Board of Pathology.
- 1995 John D. Milam, MD, of Houston, serves as president of the American Board of Pathology.
Human Genome Project reports completion of first map of human DNA; has identified at least fifty disease-causing genes. Efforts begin toward identifying the precise sequence of each of the three billion bases in human DNA. By fall of 1995 had sequenced about 1 percent of the total number.⁸¹²

Regulations related to Medicare continue to impose confusing and onerous regulations on laboratory medicine.

Court ruling in suit against Pathology Laboratories of Arkansas appears to have been favorable and supportive of that group's separate billing for the professional component of its work to an insurance fund, however the Court ruling did not assure that an insurance company in the future would have to allow separate billing for the professional component.⁸¹³

Robert W. McKenna, MD, of Dallas is 1995-1996 president-elect of ASCP

Appendix Two

RECIPIENTS OF TEXAS SOCIETY OF PATHOLOGISTS' AWARDS (All MDs unless otherwise noted.)

Recipients of Certificate of Merit

- 1935 Hardy A. Kemp, Dallas
Robert M. Moore, Galveston

Recipients of Scientific Award

- 1948 Joseph M. Hill, Dallas
Sol Haberman, (PhD), Dallas

Recipients of Citation of Merit

- 1993 Henry C. McGill, Jr., San Antonio
1994 Joseph A. Jachimczyk, Houston
Alice L. Smith, Dallas
1995 Nancy W. Dickey, Richmond

RECIPIENTS OF THE GEORGE T CALDWELL AWARD

- 1955 Paul Brindley, Galveston
1956 Beecher F. Stout, San Antonio
1957 John L. Goforth, Dallas
1958 May Owen, Fort Worth
1959 Stuart A. Wallace, Houston
1960 Elbert DeCoursey, San Antonio
1961 A. O. Severance, San Antonio
1962 T. C. Terrell, Fort Worth
C. B. Phillips, Temple and Houston
1963 C. T. Ashworth, Dallas
1964 A. J. Gill, Dallas
1965 John J. Andujar, Fort Worth
1966 William O. Russell, Houston
1967 V. A. Stenbridge, Dallas
1968 J. V. Irons, (ScD), Austin

- 1969 Elwood E. Baird, Galveston
1970 Carl J. Lind, Houston
1971 Frank M. Townsend, San Antonio
1972 John H. Childers, Dallas
1973 George J. Race, Dallas
1974 O. J. Wollenman, Fort Worth
1975 R. H. Rigdon, Galveston
1975 Maynard S. Hart, El Paso
1976 Lamont Jennings, Galveston
1977 John R. Rainey, Jr., Austin
1978 Bruce D. Fallis, Dallas
1979 Dorothy Patras, Fort Worth
1980 Feliks Gwozdz, Fort Worth
1981 John D. Milam, Houston
1982 Merle W. Delmer, San Antonio
1983 James C. Stinson, Temple
1984 Wm. Gordon McGee, El Paso
1985 P. R. Gilmer, Galveston
1986 Lloyd R. Hershberger, San Angelo
1987 Margie B. Peschel, Fort Worth
1988 Thomas H. McConnell, Dallas
1989 William T. Hill, Houston
1990 Jack Line Smith, Beaumont
1991 Charles S. Petty, Dallas
1992 Harlan J. Spjut, Houston
1993 Domingo H. Useda, McAllen
1994 Eleanor S. Irvine, Wichita Falls
1995 W. L. Dub Crofford, Dallas
1996 Jerome S. Wilkenfeld, Houston

Appendix Three

PRESIDENTS OF THE TEXAS SOCIETY OF PATHOLOGISTS

(All MDs unless otherwise noted)

1921	Moise D. Levy, Galveston	1959	J. E. Williams, Abilene
1922	J Harvey Black, Dallas	1960	O. J. Wollenman, Fort Worth
1923	W F Thomson, Beaumont	1961	Raymond H. Rigdon, Galveston
1924-	B. F. Stout, San Antonio	1962	William N Powell, Temple
1925		1963	Carl J. Lind, Jr., Houston
1926-	Edward F.Cooke, Houston	1964	Mervin Grossman, Dallas
1927		1965	John R Rainey, Jr, Austin
1928	W. W. Coulter, Houston	1966	Vernie A Stembriage, Dallas
1929	James E Robinson, Temple	1967	Norman H Jacob, Jr., San Antonio
1930	Violet Keiller, Houston	1968	William T. Hill, Houston
1931	John L. Goforth, Dallas	1969	George J. Race, Dallas
1932	Truman C. Terrell, Fort Worth	1970	Jack P Abbott, Conroe
1933	B F. Stout, San Antonio	1971	Jack L. Smith, Beaumont
1934	Marvin D Bell, Dallas	1972	Elwood E. Baird, Galveston
1935	Henry Hartman, San Antonio	1973	Dorothy Patras, Fort Worth
1936	Truman C Terrell, Fort Worth	1974	Sidney Kowierschke, El Paso
1937	John F. Pilcher, Galveston	1975	Lamont Jennings, Galveston
1938	Truman C Terrell, Fort Worth	1976	James C. Stinson, Temple
1939-	George T. Caldwell, Dallas	1977	Marc Garza, Dallas
1940		1978	John D. Milam, Houston
1941-	Truman C. Terrell, Fort Worth	1979	John Alfred Webb, Wichita Falls
1942		1980	Wm. Gordon McGee, El Paso
1943	John L. Goforth, Dallas	1981	W. L. Dub Crofford, Dallas
1944	Albert H. Braden, Houston	1982	Eleanor S. Irvine, Wichita Falls
1945	Paul Brindley, Galveston	1983	Van Q. Telford, Richardson
1946	May Owen, Fort Worth	1984	Domingo H. Useda, McAllen
1947	David A. Todd, San Antonio	1985	Thomas H McConnell, Dallas
1948	W. W. Coulter, Houston	1987	Jerome S. Wilkenfeld, Houston
1949	John F. Pilcher, Corpus Christi	1988	R. Irvin Morgan, Greenville
1950	Charles Phillips, Temple	1989	Joyce S. Davis, College Station
1951	Stuart Wallace, Houston	1990	Margie B. Peschel, Fort Worth
1952	C T Ashworth, Dallas	1991	Ladon W. Homer, Fort Worth
1953	A.O. Severance, San Antonio	1993	Richard J. Hausner, Houston
1954	John J. Andujar, Fort Worth	1994	Ibrahim Ramzy, Houston
1955	Sidney Bohls, Austin	1995	Susan M. Strate, Wichita Falls
1956	C.B. Sanders, Houston	1996	David N. Henkes, San Antonio
1957	Lloyd Hershberger, San Angelo		
1958	John H. Childers, Dallas		