Harold Brunn (Figure 1), the 21st President of the American Association for Thoracic Surgery, was born in San Bernardino, California, on January 26, 1874. Raised in Southern California, he attended the University of California, Berkeley, where he received his premedical education from 1891 to 1893. He then entered the University of Pennsylvania Medical School, graduating in 1895. With his medical degree at the age of 21 years, Brunn found himself in the midst of profound changes and progress in the science of surgery. Notably, in that decade in Baltimore, medical clinicians, pathologists, and the surgeons Halsted, Kelley, and Hurd were creating what was to become “American medicine” by establishing research laboratories coordinated with clinics and emphasizing scientific research directed at problems identified at the bedside.1 Surgical outcomes were dismal at that time, and what was needed was a novel systematic approach to surgical research and education. In fact, not long before, a French surgeon remarked that the operating room was an “an antechamber to death.”1 It was during the late 1800s that Lister, applying Pasteur’s discoveries, proposed the revolutionary concept of antisepsis in the conduct of surgery. By the 1890s, bacteriology, histopathology, and Roentgen’s diagnostic x-ray emerged as major underpinnings of medical advances, and Brunn was keen to apply these developments to clinical surgery.1

After a year of travel and study in German and Austrian university clinics, during which he trained under Mikulicz and Wolfer in Breslau and Volkman in Leipzig, Brunn returned to California much inspired.1 2 In 1897, he arrived in San Francisco as an associate of Beverly MacMonagle, a noted surgeon and gynecologist. However, Brunn’s enthusiasm for research and education persisted; soon, along with his clinical practice, he began teaching pathology at Dr Hugh Toland’s primitive Medical College at North Beach, which was the forerunner of the Medical School of the University of California.1 2 The prominent surgeon Thomas Huntington, the first in California to perform an operation using Listerian antisepsis, greatly influenced Brunn. Huntington, who later became professor and Chairman of the Department of Surgery at the University of California Medical School, chose Brunn to be assistant and in this manner propelled him onto a distinguished career as clinician, teacher, and researcher.

On April 18, 1906, came the fateful San Francisco earthquake and ensuing fire. Brunn and other physicians gathered the casualties into an auditorium known as the Mechanics’ Pavilion; the Pavilion also caught fire, and Brunn continued working until the patients were evacuated.1 2 In the aftermath of this devastation, along with many political and social disruptions, the Department of Surgery at the University of California reorganized, and the service of the University Hospital was separated from that at the San Francisco Hospital. In 1912, Brunn was appointed associate clinical professor responsible for administration, patient care, and teaching on the University of California Service of the San Francisco Hospital. From the beginning of his practice, Brunn closely observed the evolution of thoracic disorders and diseases. In the early 1900s, typhoid fever, malaria, and tuberculosis monopolized the clinical resources. Increasingly, cancer was being diagnosed at earlier stages,
providing surgeons with a chance to improve patients’ outcomes. Because it had fallen into disrepair with rat infestation and plague after the earthquake, San Francisco Hospital was torn down and reconstructed. With the opening of the new hospital in 1915, Brunn was determined to develop thoracic surgery as a discipline and formed the Thoracic Clinic of the University of California.1

Bacteriologist and pathology of lung diseases became Brunn’s passion. Of his 34 major contributions to the surgical literature, nearly two thirds pertain to intrathoracic pathology or thoracic operative techniques. Among these communications were studies of benign bronchial tumors, in particular bronchial adenomata, and his experience with pulmonary resection. According to Eloesser, surgery owes to Brunn “modern lobectomy,” which was first performed in 1918; previously, “lobes were resected in stages, being tied off, separated from the rest of the chest by gauze packs and allowed to slough. Brunn was the first to resect the lobe, tie the vessels, sew up the bronchus, and close the chest.”2,3 In “surgical principles underlying one-stage lobectomy,” Brunn reported 6 cases with 1 operative death and noted, Lobectomy, that is, the removal of one or more diseased lobes of the lung, must appeal to everyone as the ultimate goal in surgical procedures on the chest. By this method, the diseased lobe is removed at one stroke; the period of convalescence is diminished, and deformity does not result. The method also more nearly conforms to the procedures surgeons are accustomed to apply for diseases of other organs of the body. Just as cholecystectomy superseded cholecystotomy and as hysterectomy superseded the old time method of extraperitoneal treatment of the uterine stump for fibroids, may one not also expect in the future that with improved technic and lowered mortality lobectomy will become the operation of choice in many diseased conditions of the lung?4

Brunn established the fundamental principle of obtaining early expansion of the remaining lung by means of immediate air-tight closure of the chest wall aided by the use of suction drainage.5 By this means, the lung was re-expanded, and complications associated with an undrained pleural space were minimized. Brunn acknowledged the advances in pulmonary resection at the time and stated, “My own interest in lobectomy was stimulated by the writing of Dr. Howard Lilienthal whose method has been the basis on which I have done all my work, modified from time to time as experience seemed to direct.”4

Brunn was described as a “frank, hearty, open-handed man; hospitable, kind to his patients, considerate of his younger staff men, and interested in their welfare and advancement.”2 His intellect and sense of humor made him a delightful social host.5 During the San Francisco earthquake and fire, Brunn worked with Miss Elsie Fechheimer. Shortly after the earthquake, which destroyed both his and her homes and burned his office and equipment, he and Miss Fechheimer traveled to San Bernardino and were married at the home of his parents. They had 2 daughters. He was a devoted husband and father. After his wife’s long illness and death in 1933, his colleagues observed that he was never quite the same.2 Brunn retired from surgical practice in 1946. He died on October 5, 1951.

Affiliated with the University of California until his retirement, Brunn became Clinical Professor of Surgery, serving as Chief of the University of California Service at San Francisco Hospital (later San Francisco General Hospital) until 1942. In recognition of his services, patients endowed the Mack Foundation at the University of California Medical School, directing that it be devoted to the study of cancer and of thoracic surgery under his guidance. In the latter half of his career, Brunn’s energy was also directed at clinical care, research, and teaching at Mount Zion Hospital in San Francisco. As Chief of the Surgical Division from 1929 to 1939 and Chief of Staff from 1929 to 1948, he recruited able colleagues to staff various clinics and the newly organized Mount Zion Research Laboratories.1,6 He was responsible for the organization of the Harold Brunn Institute for Cardiovascular Research at Mount Zion. In the 1930s, the Jewish community requested that Mount Zion provide a position for an unmarried German Jewish physician with special training in pathology.7 Brunn was particularly sympathetic to the physicians who were fortunate enough to leave Germany and requested that more local internships be established for émigré physicians. Through the efforts of Brunn, who enlisted the aid of R. Langley Porter, Dean of the University of California Medical School, many German Jewish doctors were assigned training positions in other San Francisco hospitals in addition to Mount Zion. Eventually, most of these physicians joined the Mount Zion staff.7

During his career, Brunn remained engaged in various professional organizations and was a founding member of the Pacific Coast Surgical Association and served as its president from 1935–1936. He was the chair of the Cancer Commission of the California Medical Association in 1946. On his retirement, then University of California President Robert G. Sproul remarked,
The ideal teacher of surgery is, first of all, a man who combines in his own person both great skill of hand and brain and sound and thorough knowledge. Secondly, he is a man adapted by natural endowment to use that skill and knowledge with sensitivity and with that sixth sense that might almost be described as intuition. And thirdly, he is a man capable of objectively analyzing his sensitivity and intuition in concrete terms of skill and knowledge, so that his students and followers may comprehend the ideal of
perfection and, fortified by understanding, strive to attain this goal of their high calling. That kind of teaching has been and still is the great privilege of the students of the University of California Medical School to receive at the hands of Dr. Brunn.8

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References