A Century of Endodontics: From Philadelphia to Boston

By the 1950s, with funding from the National Institute of Dental Research, multidisciplinary investigations into the basic sciences of bacteriology, pathology, pharmacology, and immunology contributed to a better understanding of the infected pulp and periapical pathology. Clinical observation based on considerable experience also led to a fuller understanding of the problems related to failure of previously successful cases. Endodontics became the accepted treatment and the preservation of the dentition a priority for the dental profession.

Dr. Grossman published voluminously and lectured endlessly on the topic both here and abroad, and in 1940 he wrote the first of 11 editions of Root Canal Therapy (later entitled Endodontic Practice), published by Lea & Febiger of Philadelphia. These seminal contributions occurred within Penn’s Department of Oral Medicine, chaired by Lester Burnett, DDS, who would go on to become dean of the Penn School of Dental Medicine. Beginning in 1953, Dr. Grossman oversaw a series of six International Conferences on Endodontics given every five years at Penn. The University Press published these as bound transactions of the events.

In 1964, Dr. Grossman initiated a postgraduate department of endodontics at Penn. Upon his mandatory retirement in 1968, the university established its first Department of Endodontics and the Louis J. Grossman Professorship in Endodontics. Former associate Seymour Oliet, DDS, occupied the first chair. Penn later honored Dr. Grossman with a Doctor of Science degree in 1978.

The Future of Root Canal Therapy

Realizing the need for a group of like-minded clinicians to set the stage for the future of root canal therapy, Dr. Grossman organized the Philadelphia Study Club in 1939. Two of the earliest members included his previous dental students, Drs. Israel Boris Bender and Samuel Seltzer. This success was followed with a call for a national organization, which was encouraged by both Dr. William J. Gies, founder of the International Association of Dental Research, and Dr. L. Pierce Anthony, editor of the Journal of the American Dental Association (JADA).

When notified that W. Clyde Davis, DDS, a dentist from Lincoln, Nebraska, was also interested in a similar organization, Dr. Grossman invited him to serve on an organizing committee of the American Root Therapy Association. The gathering would coincide with the Chicago Dental Society meeting, and an announcement would be placed in JADA. Nineteen dentists from various sections of the country met at the Palmer House Hotel in Chicago on January 23, 1943, for the purpose of organizing a society for the study of root canal therapy. After a spirited discussion, they voted to name it the American Association of Endodontists (AAE).

Twenty-one years later, endodontics was accepted by the American Dental Association as a recognized specialty. The American Board of Endodontics was incorporated in 1956, was recognized and approved by the Council on Dental Education in 1957, and gave its first examinations in 1965. The board became a reality due to the work of Dr. George Stewart, Dr. Grossman’s associate at Penn, and Dr. Jacob Freedland of North Carolina.

As the pioneering moment in endodontics began to wane with its acceptance as a specialty, the founders began to think about expanding the scope of the society. This led to the formation of a committee on advanced education in endodontics.

The Future of Root Canal Therapy

Realizing the need for a group of like-minded clinicians to set the stage for the future of root canal therapy, Dr. Grossman organized the Philadelphia Study Club in 1939. Two of the earliest members included his previous dental students, Drs. Israel Boris Bender and Samuel Seltzer. This success was followed with a call for a national organization, which was encouraged by both Dr. William J. Gies, founder of the International Association of Dental Research, and Dr. L. Pierce Anthony, editor of the Journal of the American Dental Association (JADA).

When notified that W. Clyde Davis, DDS, a dentist from Lincoln, Nebraska, was also interested in a similar organization, Dr. Grossman invited him to serve on an organizing committee of the American Root Therapy Association. The gathering would coincide with the Chicago Dental Society meeting, and an announcement would be placed in JADA. Nineteen dentists from various sections of the country met at the Palmer House Hotel in Chicago on January 23, 1943, for the purpose of organizing a society for the study of root canal therapy. After a spirited discussion, they voted to name it the American Association of Endodontists (AAE).

Twenty-one years later, endodontics was accepted by the American Dental Association as a recognized specialty. The American Board of Endodontics was incorporated in 1956, was recognized and approved by the Council on Dental Education in 1957, and gave its first examinations in 1965. The board became a reality due to the work of Dr. George Stewart, Dr. Grossman’s associate at Penn, and Dr. Jacob Freedland of North Carolina.

As the pioneering moment in endodontics began to wane with its acceptance as a specialty, the founders began to think about expanding the scope of the society. This led to the formation of a committee on advanced education in endodontics.
tistry was in the process of crystallizing in Boston. The venture would be grounded on a sound biological rationale with close cooperation with a surgeon and a promise of total health. It was led by Henry M. Gold- 

dman, DMD, a 1935 graduate of Harvard Dental School who returned from the ser-
vice in 1945, where he had served as the first chief of the dental pathology section at the Armed Forces Institute of Pathology for the United States Army.

Harvard Dental School transformed itself into the Harvard School of Dental Medicine in 1942. The university envisioned a future where dentistry would be an integral part of the broader field of medicine, preparing students to become future educators and researchers. It used the Johns Hopkins Medical School model from 1883 as its working standard. Dr. Goldman, not having advanced degrees, did not find a place in this new paradigm. However, a prominent physi-
cian, Dr. Jacob Fine from the Beth Israel Hospital staff, invited him to use its small dental unit at teaching for the Boston Dental School.

During 1946, Dr. Goldman began his association with the faculty of the Univer-
sity of Pennsylvania by joining Drs. Lester Berkut, Lefkoy Finkl, and William B. Hall on the Ivy Cross expedition to Hol-

dland. The purpose of this venture was to bring new dental knowledge to countries that had suffered under the Nazi regime. Dr. Goldman had known Dr. Berkut, an oral pathologist, during the mid- to late 1930s while Dr. Berkut was acquiring his medical degree from Yale University. The trip introduced the young Harvard graduate to both the international educa-
tion and the worldwide travel that would become essential components in establish-

ing the future school. As the Beth Israel dental clinic grew, Dr. Goldman took a number of yearlong residents in periodontology. One of the ear-

erliest was Dr. David Walter Cohen, a re-

cent graduate of the Penn dental school. Dr. Cohen returned to Penn in 1951, was named head of the first Department of Periodontics in 1956, and was named dean in 1972. Through the efforts of Dean Berkut, the Beth Israel Hospital program established official links with the Penn dental school by creating a unique two-year postgraduate program in periodontology with Dr. Goldman as its director. The didactic year was spent at the Penn Graduate School of Medi-
cine and the clinical year at the Reisman Clinic at Beth Israel. Under this format, Dr. Goldman's students earned certifi-
cates of distinction from a major uni-

versity and became eligible to earn a master's degree and a potential diploma status from the American Board of Peri-
odontists.

On the advice of Dr. Philip Shapack, a classmate who trained in periodontics at Beth Israel, Herbert Schilder, DDS, a young graduate of New York Univer-
sity Dental School who was serving a two-year Army commitment in Aberdeen, Maryland, called upon Dr. Goldman at the Beth Israel clinic in 1955. Dr. Goldman ad-

dressed and directed the aspiring endodontist to seek additional training at the University of Pennsylvania with Dr. Grossman and then to return to Beth Israel. Even though Dr. Goldman had not yet formed an of-


cicial postdoctoral program, he invited Dr. Schilder to attend his short courses while still in the military.1

Dr. Cohen, who was also a lec-

turer in periodontics at Temple Dental School beginning in 1953, was familiar with the one-year residency program in endodontics at that school. The Depart-
ment of Endodontics at Temple had been established in 1948 by Dr. Morton Am-


dersmith, Jr., a fellow Penn dental school graduate. With the 1954 death of Tufts endodontist Dr. Bernard Berg, Dr. Gold-


mans recommended his new clinician. At a con-
tinuing education course, Des. Cohen and Schilder discussed the latter's future as a root canal therapist. Since there was no offi cial postdoctoral program at Penn, Dr. Cohen called Dr. Amsterdam, who, after interviewing Dr. Schilder, offered him the endodontic residency at Temple. Dr. Schilder would also have the oppor-
tunity to complement his education with Dr. Grossman through Penn's yearlong short courses. Dr. Amsterdam impressed upon Dr. Schilder the need to attend and actively participate in the yearly meet-

gs. The latter planned to return to Bos-


ton, where his wife had attended Welles-


le college. Upon completion of Dr. Schilder's year in Philadelphia in 1956, Dr. Gold-
mans secured offi ce space at 53 Bay State Road in Boston so that Dr. Schilder could open a private practice. Dr. Goldman also offered him a teaching position at the Reisman Clinic at Beth Israel. The nucleus for the future Boston University School of Graduate Dentistry was now in place.

As a role model, Dr. Goldman urged his staff to publish, lecture here and abroad, and teach. The purpose was to develop a more advanced institution that would benefi t the profession. As Dr. Schil-
der became more experienced, he became an advocate of specialty education within the AAE, where he served as president in 1985, as well as in the ADA, where he held the effi ce of offi ce vice president in 1990. Unlike Dr. Goldman, who was known for publishing numerous texts (many with Dr. Cohen), Dr. Schilder, out of deference to Dr. Grossman, never wrote a textbook on endodontics. By 1958, Dr. Schilder was head of the endodontic section of the department of stomatology at Boston University School of Medicine and accepted his fi rst postdoctoral student, Dr. Cyril Gaum, in 1960. In 1963, Dr. Schilder became a founder and a first president of the Department of Endodontics at the School of Graduate Dentistry at Boston University.

Dr. Bernard Berg's earlier work with gutta-percha technique employing Kerr sealer and vertical compaction to obtu-
rate the root canal system; this technique in fl uenced the fundamental changes of the face of modern endodontics. The trial of cleaning, shaping, and fl illing took on new meaning.2 Dr. Schilder eventually re-
tired from teaching in April 2003. In a tribute to Dr. Schilder upon his death in 2006, Dr. Joseph Williams wrote of his influence. Herb's genius was his ability to articulate very complicated concepts and techniques into easily un-
derstood vernacular.3

In 1999, Jeffrey W. Hutter, a gradu-

ate of the Penn dental school, assumed the mantle as the fi rst Herbert Schilder Chair in Endodontics at Boston Univer-

sity. Dr. Hutter spent his professional career in the Navy, culminating as chair and director of postdoctoral endodontics at the Naval Dental School in Bethesda, Maryland. In 2008, he became dean and the fi rst Spencer Frank Professor in Dental Medicine at Boston University Goldman's School of Dental Medicine. During 2009, Dr. Hutter appointed George Huang DDS, MS, a former resident and former student of Dr. Schilder, as the second Herbert Schilder Chair in Endodontics.4

Summary

While Dr. Grossman was in Rostock with a large group of students, Dr. Pirtle visited several distinguished dentists in Berlin. One was the aged Dr. Otto Walkoff, who, with the help of a physicist while in Wurzburg, was the fi rst dentist to capture the image of a tooth soon after the discovery of radiology by Roentgen in 1895. At his home, Dr. Walkoff passed the X-ray tube head that had taken the historic fi lm to Dr. Grossman, who then held this treasured artifact in his hands. This transfer of culture from Germany to the United States marked the beginning of modern endodontics. Similarly, when Dr. Goldman gave Dr. Schilder his backing by sending him to study under Dr. Gross-


15. Schilder H. Video biography. Goldman School of Dental Education. 1991. Dr. Herbert Schilder


References


7. Begg B. Endodontic management of multi-


18. Berg B. Endodontic management of multi-


