## A Brief History of the Northwestern University Dental School



Ron Sims Special Collections librarian at the Galter Health Sciences Library

The Dental School was organized in 1891 as a department of the University. The origins of the school date back to 1887 as the University College of Dental and Oral Surgery which was a proprietary institution. Subsequently reorganized as the University Dental College, it had a loose affiliation with Northwestern. Located near the medical school on the old Mercy Hospital campus, an agreement permitted the dental students to receive instruction along with medical students in anatomy, physiology, pathology, histology and *materia medica*. The standards were high and the program required three years, seven months in each. The additional time and expense discouraged matriculates. In the spring of 1891 the College was not able to cover institutional expenses. Northwestern President Henry Wade Rogers and his administration took control to insure the survival of dental.



Under the umbrella of the University and guidance of the first dean of the Dental School (1891-1897), Edgar Swain, the entering class numbers rose. The school was located on South State St. near East 22<sup>nd</sup> Street, and then moved into the new Medical School buildings on South Dearborn and East 24<sup>th</sup> in 1893.

In 1895, the University purchased the American College of Dental Surgery, which was located in Chicago's Loop, merging the two schools into one at the corner of Madison and Franklin Streets, with a combined enrollment of 403.

Dr. Swain retired in 1897 and Dr. Greene Vardiman Black was appointed dean. Dr. Black, formerly professor of Pathology, reorganized the curriculum and put the school on a very sound footing.

He is recognized as the 'Father of American Dentistry' and under his administration the school became known as the largest and most outstanding institution of its kind.

Dr. Black contributed to the advancement of dental science with a meticulous scientific approach and descriptive dental nomenclature, standardization of dental alloys and guidelines for treating caries.

In 1898, the University awarded him an LLD (honorary Doctor of Law degree) in recognition of his accomplishments. That same year the Northwestern College of Dental Surgery was purchased by the University and merged with the dental school.

In 1902, the University purchased the Tremont Hotel in the Loop at the corner of Lake and Dearborn Streets, providing a new home for the dental as well as the pharmacy and law schools.



Dr. Black died in August 1915 and was succeeded by Dr. Thomas Gilmer. He was the chairman of the group of dentists who founded the dental school. A four-year course was adopted in 1917 during the Gilmer administration, continuing the quality in dental education.



Dr. Black's son, Arthur D. Black, was the fourth dean of the dental school after Dr. Gilmer's retirement in 1918. He was a researcher, author, editor, administrator and lobbyist. He organized the World Dental Congress in conjunction with the Century of Progress Fair in 1933; was one of the founders of the American College of Dentists; organized Omicron Kappa Upsilon, an honorary dental fraternity; and established the Dental Index Bureau.

With major gifts from Mrs. Montgomery Ward in 1923, 1924 and 1926, Dr. Black was instrumental in planning the physical facilities for relocating the dental school to the Montgomery Ward Memorial.

Dr. Black was awarded the University Alumni Medal in June 1937. A graduate of the Dental School (1900) and Medical School (1901). he died in December that year of leukemia.

Dr. Charles W. Freeman succeeded Dr. Black and served as dean from 1938-1953. He is most noted for creating one of the first centers for dental research, promoting the foreign student program, and establishing the Cleft Palate Institute involving the dental, medical, and speech schools.

Dr. George W. Teuscher was appointed dean after Dr. Freeman's retirement in 1953 and served until 1971. He was very active as an editor, dental researcher, and continued to build upon the successes of his predecessors by expanding the graduate and international programs.



In 1972 Dr. Norman Olsen was appointed dean. Under his administration ties were strengthened with alumni resulting in the construction of the Health Sciences Building, opened in 1978, to house clinics and teaching facilities—a necessary upgrade from the well-used facilities in the Ward Memorial.

In the 1980s many curriculum changes introduced greater flexibility in student experiences and inaugurated an electives program. Funding became a cause of concern for basic science and clinical research, but the dental school was able to maintain its excellent profile.



Dr. Olsen retired in 1995 and was succeeded by Dr. Michael Heuer, the associate dean for academic affairs, he had in that appointment reorganized advanced dental graduate education core curriculum, and introduced new programs in oral pathology, general dentistry and geriatric dentistry. He was a leader in the development and standardization of endodontic instruments and materials, serving in many professional endodontic organizations.

In December 1997 he announced the closing of the Dental School as prescribed by the University board of trustees and president.

Dr. Lee Jameson assumed the deanship in 1998. He and his staff creatively and courageously began the countdown to May 31, 2001, when the dental school doors were closed for the last time. Through negotiations with the Evanston administration, arrangements were introduced to make sure all the current students graduated.

Other noted faculty members over the years include Gilbert Brinsden as professor of prosthetic dentistry and founder of the summer program serving migrant workers in Colorado; Leonard Fosdick, professor of chemistry, whose research in caries prevention established Northwestern as a leader in that field; Stanley Harris, professor of physiology and pharmacology, who was instrumental in expanding academic programs in those fields, establishing the Department of Oral Biology, did experimental work on the effectiveness of local anesthetics and also served as director for the Master of Science and PhD programs; Eugene Lautenschlager, professor of biological materials, whose research on orthopedic bone cements and bio-compatible materials has significantly improved the success rate and understanding of materials implanted in the human body; Eugene Skinner, professor of physics, who studied the surface structure of enamel and dental materials created the foundation for continuing research in those fields; Evan Greener, professor of biological materials, who made contributions in amalgam corrosion behavior and the theory of reinforcement for dental composites; Harold Perry, professor of maxillo-facial surgery, graduate of the medical and dental schools, a leader in soft tissue repair of cleft lip and palate patients; and Arthur Veis, professor of biochemistry, with NIH Merit Awards for his research in the structure and biosynthesis of collagen molecular and fibrils research in bio-mineralization and the structure and formation of bone and teeth research.



Established through the approval of the Board of Trustees of Northwestern University on June 29, 1891, the Dental School built an esteemed reputation through the exceptional talents and achievements of the men and women who served on the faculty and staff. Over 14,000 students from all fifty states, sixty countries and six continents received the skills and knowledge to provide high-quality care and leadership throughout the world.

Major achievements in the early years include: acquisition of library materials; creation of an index to periodical literature; 1<sup>st</sup> post-doctoral degree in dentistry (1922); 1<sup>st</sup> graduate program in pediatric dentistry (1935); one of the first graduate orthodontic programs; founding of the honor society in dentistry, Omicron Kappa Upsilon (1914); founding of the honor society in dental hygiene, Sigma Phi Alpha (1951); 1<sup>st</sup> use of procaine in mandibular anesthesia in America; discovery of 'gardol', a plaque preventive used in toothpastes and mouthwashes.

The Dental School was also recognized for: studies of environmental agents and man-made materials on tissue; development of standards for biocompatibility studies; identification of the role of oncogenes and suppressor genes in oral cancer development and detection of oral cancer lesions; development of low-corroding and low-mercury-release amalgams; genetic control of angiogenesis and its role in wound healing and cancer development; development of porous free acrylic bone cements, high aspect ratio dental composites and directional fiber reinforced bio-composites, titanium dental castings, and biosynthetic materials for implants in the human body; definitive work in structure and synthesis of collagen in basic clinical studies; identification and characterization of proteins involved in dentin mineralization and bone formation; identification of growth factor TNF-alpha and its role in angiogenic activity; behavioral research on dentist-patient relationships; and training of dentists to manage HIV-positive patients.

A complete and thorough history of the dental school was written by Clifton and Lois Doyle Dummett, published by the Dental School in 1993—*Culture and education in dentistry at Northwestern University (1891-1993)*.



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