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## A Century of Smiles

Eric K. Curtis

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# A CENTURY OF SMILES

Eric K. Curtis











# A CENTURY OF SMILES

Eric K. Curtis

1896 - 1996

One hundred years of excellence at the College of Physicians and Surgeons

University of the Pacific, School of Dentistry

San Francisco, California



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Jack Werners  
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 A.P.M. M.











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## About the Author



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## POSTSCRIPT



## Foreword

**EARLY IN 1982 MY MOTHER'S AUNT,** Lucille Andrews, picked me up at the airport and drove me into the city for my admissions interview at UOP. I was nervous, but she bubbled with confidence. Her own son David had graduated from the school not a decade before, and she was impressed by his experience. "This is the place for you to go," she said with a wink. "They're people oriented. They'll teach you well and treat you well."

**AUNT LUCILLE WAS RIGHT.** With a remarkable capacity for innovation and adaptability, UOP has thrived through earthquakes, wars, legislation, and depression to forge a long-standing reputation for producing excellence in clinical training. From the beginning, the school also built a parallel reputation for encouraging diversity, accessibility, and opportunity, which has been poured into the strong sense of community that prevails among alumni and supporters. Today both traditions, of excellence and caring, combine to form UOP's guiding philosophy of humanism.

**THE STORY IN THIS VOLUME OFFERS** an explanation for how the school's personality and its purpose came to be. It has been both exciting and excruciating to piece together. I soon realized that the narrow space I was allotted to squeeze in the happenings of a whole century would not allow room to mention many important people, trends, and events that shaped the school. Therefore, a caveat is in order. This history is neither exhaustive nor all-encompassing. I have sought to paint a picture that is selective, contextual, and interpretive rather than simply tally up a list that reads like an overgrown set of board-meeting minutes. Among the fast-moving flow of ideas and actions that exploded on the scene in San Francisco, America, and American dentistry from the waning years of the 19th century to the brink of the 21st, there is a rich cultural brew to be filtered and sampled through the school's experience.



# I n t r o d u c t i o n

## The Rise of American Dentistry

**"AMERICAN** boys are...more resourceful when it comes to practical work requiring manual dexterity and a cool head," declared P&S professor Asa W. Collins, MD, in a 1911 *Chips* yearbook essay titled "Surgical Qualities." The specific example Collins had in mind was dentistry. "This may be a blunt assertion," he wrote, "but it is true, in theory as well as fact, and it will not be long before the American surgeon will be as far ahead of the foreign surgeon as the American dental surgeon is superior to the foreign dentist."

**EVEN** before the turn of the 20th century, American dentistry's worldwide reputation was assured. Dentistry in this country, nevertheless owes a significant debt to another nation: France. Much of dentistry's modern identity, its ideals and culture, first sprang from fertile Gallic minds. The 14th century surgeon Guy de Chauliac, for instance, identified dentistry as a separate category of health care and coined the Latin-based term *dentista* for one who treats teeth. And Ambroise Paré was the 17th century surgeon who is considered the father of modern surgery.

**PARÉ** became surgeon to several kings of France. His reputation and writings, which included extensive descriptions of dental instruments and procedures, began to advance surgery from lowly craft to medical art. In 1619, perhaps as a result of Paré's influence, and under pressure from surgeons' guilds seeking to upgrade their status, an ordinance was passed in France granting equal rank to dentists, bone setters, and lithotomists. Upon passage of examinations before a commission of three Masters in Surgery, each specialist would be considered "expert" in his branch of surgery.

**PARISIAN** surgeons of the College of Saint Côme, asserting their independence from patronizing physicians of the University of Paris, further shaped dentistry's identity when they set about to block the performance of minor surgery by street hawkers. In 1699 Louis XIV decreed that training for surgeon dentists should be conducted at the college. After a two-year course of study, a student could call himself a "chirurgien dentiste." That name, which the English language borrowed for the word "dentist," is still the designated title for dentists in France.

**SUCH** striking progress was not nearly enough, however, for a remarkable 18th century Frenchman named Pierre Fauchard. Trained as a military surgeon, Fauchard settled in Paris and devoted himself to dental surgery. He envisioned a profession out of a craft and in so doing created the modern concept of dentistry. Fauchard did not invent dentistry as such, but he catalogued existing techniques, procedures, and ideas and published them to the world in an age when secrecy among practitioners was deemed essential for business. His landmark 1728 work, *Le Chirurgien Dentiste*, presented dentistry for the first time as a coherent, cohesive discipline, and signaled the beginning of shared information among professionals. Fauchard identified dentistry's deficiencies in three important areas. He decried a) inadequate dental literature, b) the scarce opportunities for instruction, and c) the sketchy regulation of practice across France. He clamored loudly and eloquently against those "who practice [dentistry] at hazard, possessing neither principles nor system."

**FAUCHARD'S** precepts flourished, and dentistry's course was remapped for the next generation of dentists. French dentistry gained a reputation for superiority. Then came the anarchy of Liberty, Equality, and Fraternity. For dentistry the French Revolution was a disaster. Fauchard's vision of an autonomous, disciplined, educated body of practitioners was cut off by the revolutionary ideal of egalitarianism. In a wild, utopian attempt to secure equality among the people, all requirements for professional training were swept away. Only a license, available to any citizen for the asking, was needed to practice medicine, surgery, or dentistry. The ensuing chaos enveloped all areas of health care. Charlatans surged forward, unchecked and sanctioned by the state.

**ALTHOUGH** the magnitude of the mistake became immediately obvious, it took Napoleon until 1803 to impose order with new laws of medical regulation. Strangely, dentistry fell through the cracks. No legal standards were instituted for dental surgery in France until 1892. French dentistry fell into disrepute.

**THE** cradle of dentistry's evolution shifted to the United States. There are four reasons why. First, the tumult of France's revolution interrupted scientific advancement and disrupted the social stability needed to nurture the frail future profession. Second, the United States, young and hungry for legitimacy, was developing an ambitious, inquiring, and entrepreneurial spirit. America fostered the ideal climate for business and professional minds; European-trained doctors found their services in great demand. America's revolutionary war not only set the stage for France's own revolution, but also set in motion the transfer of French talent to the United States.

**THE** third factor contributing to America's growing pre-eminence in dentistry was the development of technology. The burgeoning population and coming of the Industrial Revolution augured a rise in expectations of better living. The resulting upswing in consumption encouraged the experiments of designers and inventors, many of whom applied their ingenuity to dentistry. Charles Goodyear's mid-19th century invention of vulcanite rubber, for example, meant that denture bases could be made cheaply and easily. Suddenly, false teeth were available to the masses.

**FOURTH**, the spread of free public school education produced an expanded audience of readers, resulting in the proliferation of reading materials. For dentistry it meant the increased printing and circulation of both patient education tracts and professional publications. In the fledgling United States, both European-educated and home-grown practitioners made great strides. Lacking the restrictive dental tradition of Europe's barbersurgeon guilds and aided by a growing populace of developing sophistication, America's dentists were free to reconstruct their calling into a profession. By 1826, a German-born dentist named Leonard Koecker, who had lived in both London and Philadelphia, proclaimed of America, "In no part of the world has the [dental] art attained a more elevated station."

**AS** Pierre Fauchard had contended a century before, dentistry as a profession depends on a solid footing of three components: education, organization, and literature. During the years 1839 and 1840, this tripartite base was established for the first time in the world, in Baltimore. The impetus came from two men, Horace Hayden and Chapin Harris.

**HAYDEN** and Harris organized the original dental society, the American Society of Dental Surgeons, and the world's premier dental periodical, the *American Journal of Dental Science*. They founded the Baltimore College of Dental Surgery, the first school dedicated to educating dentists. They constituted two of the initial four instructors, who gave lectures on anatomy, physiology, pharmacology, and "practical dentistry." The curriculum covered a two-year span (including only four months of formal instruction, with the rest of the year spent pursuing practical experience in a dental office), equivalent to that of existing medical schools. Hayden and Harris created the school's degree, Chirugia Dentium Doctoris, the initials of whose translation became the familiar DDS. With the granting of the first diploma to Robert Arthur, the dentist was reinvented as doctor.





# 1 2 3 4 5 6

CHAPTER

1896-1923

## OPPORTUNITY KNOCKS



**B**y responding to a new direction in legislation mandating formal education for dentists, the proprietary College of Physicians and Surgeons sets in motion what will become a long tradition of thriving on change.



## PRE-1896 THROUGH 1923

- 1860 Charles Boxtton is born in Shasta County.
- 1869 Emperor Norton, looking over the San Francisco Bay, pronounces an edict: "The bridges shall be built."
- 1870 The California State Dental Association is founded.
- 1885 The Dental Practice Act establishes the California State Board of Dental Examiners.
- 1895 Roentgen discovers x-rays.
- 1896 New Orleans dentist Edmund Kells applies x-rays to dental diagnosis.
- 1896 The College of Physicians and Surgeons of San Francisco is established, June 22.
- 1899 Dr. Boxtton is elected to the San Francisco Board of Supervisors.
- 1906 The great San Francisco earthquake strikes on April 18.
- 1907 Bubonic plague breaks out in the city; P&S students don mask and gloves for clinic. Dr. Boxtton becomes mayor of San Francisco. Dr. Boxtton resigns as mayor. Novocaine is introduced to American dentists.
- 1911 San Francisco establishes its "Muni" system, becoming the first city in the U.S. to operate its own transportation network.
- 1912 The Marina District is created for the 1914 Panama Pacific Exposition.
- 1915 The new city hall is completed.
- 1917 Selective service begins; the entire junior class at P&S is put in uniform.
- 1918 World War I ends, along with the P&S medical and pharmacy schools. P&S opens an orthodontic clinic, headed by 1901 alumna Elizabeth E. Richardson.



## OPPORTUNITY KNOCKS

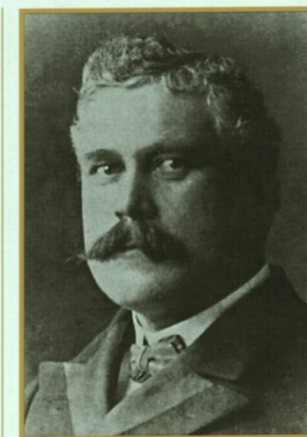
**Charles Boxtton** was nothing if not enterprising. Energetic, ambitious, and charming, at twenty-four the young dental surgeon had a new office, a faculty appointment at the University of California, and a bona fide DDS—no small accomplishment in 1884, when apprenticeships were the norm for training dentists. Dr. Boxtton had great plans for the future, and he knew San Francisco was the right place to pursue them.

Boxton was born in 1860 in the gold fields of Shasta County. However, his miner father soon thereafter set aside pick and pan, and moved his family to the city. There Charles grew up, among a restless population that the 1850 *Annals of San Francisco* called the "excitement-craving, money-seeking, luxurious-living, reckless heaven-earth-and-hell-daring citizens of San Francisco."

San Francisco indeed offered an exotic blend of the elegant and the wild. In the latter decades of the 19th century it was still a raw and exuberant town with genteel aspirations, a place where an opera goer could thrill to the sublime voice of a famous Italian tenor and yet have to watch out on the way home for the press gangs who roamed the Barbary Coast. When the novelist Frank Norris, for example, was ready to leave his creative writing classes at Harvard to find real life material for a book, the place he chose was San Francisco. "Things happen in San Francisco," he wrote. "There are certain cities in the world which are adaptable to the uses of the writer of fiction...the same story laid out in another city would be ridiculous." For a real person like Charles Boxtton, things would also happen, and the unique character of San Francisco would prove both eminently rewarding and tragically tempting.

The pendulum of Charles Boxtton's professional life was early set in motion. At sixteen he apprenticed to two San Francisco dentists named Sichel and Richards. Although a year later he was running his own prosthetic laboratory, he stayed on to serve a six-year preceptorship. In February 1882 he entered the new University of California dental school. On graduation in 1884, Boxtton became professor of mechanical dentistry at his alma mater.

By affiliating with a formal dental school, Boxtton adroitly rode the cutting edge of progress. Just one year later, in 1885, the California Dental Practice Act was passed,



Charles Boxtton, Dean  
1896-1923.



## OPPORTUNITY KNOCKS



East side of Montgomery Street, San Francisco, about 1850. A sign in the foreground at right announces a dental office.

requiring formal licensure of dentists. The requirement for licensure would be graduation from a dental school. The profession was becoming more sophisticated, and society demanded accountability now, proof of expertise—a diploma. By 1902, the board would require both a diploma and a board certificate to practice. Such changes signaled a shift in social consciousness as dentistry grew in professional status.

By no coincidence, the book Norris eventually wrote reflected that very shift. *McTeague* (1899), the novel which made him famous as a master of American literary naturalism, is the gripping story of a dentist from the California gold country who moves to San Francisco, and whose career is destroyed by shortsightedness, greed, and his own inability to adapt. Trained only by apprenticeship, McTeague's practice is closed down when he can't keep up with the changing times that now require him to get a license. "But, Mac, you ain't a dentist any longer," McTeague's wife tells him sadly, "you ain't a doctor. You haven't the right to work. You never went to a dental college." Without a sheepskin, the story might have been Boxton's.

Except that Boxton was also eminently adaptable. He plunged into local dental affairs, opening a private practice at 403 Powell Street and teaching. He spent the next decade building a local reputation as an authority on prosthetics. Then in 1896, he made a very wise move. He founded a dental school of his own.

An eloquent lecturer with a successful practice attracting such upscale patients as the sugar industrialist Adolph Spreckels, Boxton was a natural leader. With a clutch of five physicians, Boxton organized the perfect business venture—a for-profit, proprietary school of medicine and dentistry. He was joined by a fellow instructor at the University of California, an Australian named Thomas Morffew who had luxurious mutton chop whiskers and a reputation for gold foil virtuosity. Morffew also brought the prestige of presidency of the State Board of Dental Examiners.

Their timing was impeccable. Dentistry was at a crossroads. It was evolving from a part-time, haphazard occupation to a serious, formalized calling. With technical advances such as Morrison's 1871 engine—which, through a cable, foot treadle, and series of pulleys brought power to dental drills—as well as dental societies, examining boards, journals, and regular schools, dentistry, in the words of medical historian Henry Harris, "presented by 1890 all the paraphernalia of a specialized, liberal profession."

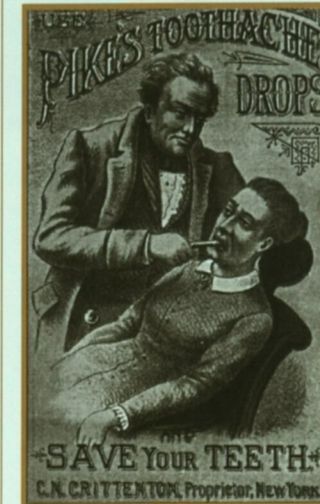
## OPPORTUNITY KNOCKS

Certainly, supported by research from the likes of G.V. Black and Willoughby Miller—the dentist-microbiologist trained in the laboratories of Nobel prizewinner Robert Koch who established the biological basis of dental decay—dentistry was on the cusp of becoming a scientific discipline. Dentists eager to move the profession forward also sensed the need for expanded education. Dental education should include much more than the "three Rs of readin', 'ritin' and 'rithmatic," said F.H. Metcalf in an 1896 paper read before the California State Dental Association, referring to the fact that dental schools routinely accepted high school graduates and taught liberal arts courses such as English and math. Metcalf noted that "dentistry today means more than the three Ps—pull, plate and plastics—just as medicine means more than pill, purge and plaster."

The new school would be more, indeed. The application for a state charter announced that this was to be an institution furnishing to the students of the Pacific states a thorough and practical education in dentistry and medicine. The college's Dental Department announced in 1897, "It will at all times be the purpose of this school to elevate the profession through its students, and to this end it will be the constant endeavor of its corps of instructors to inculcate in the minds of matriculants a broad and comprehensive knowledge of didactic instruction as well as skill in the laboratory and infirmary technique, so that the graduates of this college may be a credit to their profession, the college, and themselves."

On June 22, 1896, Boxton, Morffew and the physicians met at 707 Bush Street and elected themselves the Board of Trustees of the College of Physicians and Surgeons of San Francisco. They were, in fact, also the owners. Boxton would be dean and Morffew president of the dental faculty and vice-president of the board. Professors, unless they accepted honorary positions at no pay, were expected to buy into the school. For a full professorship they had to ante up five-hundred dollars. In return, they would collect a percentage of lecture fees.

There was a one-time matriculation charge of five dollars. The "regular course" cost seventy-five dollars per year. Added on were a lecture fee at twenty-five dollars per year, demonstrator's tickets in anatomy, two of which were required at ten dollars each, and two more for both chemistry and practical microscopy, five dollars. Graduating seniors also paid a separate examination fee for the DDS degree, which cost twenty-five dollars.



Nineteenth century dental trade card urging "save your teeth" reflects a growing awareness of dentistry's 20th century promise.



## OPPORTUNITY KNOCKS

Known popularly as CP&S, or simply P&S, the new college in September 1896 leased a building called Federation Hall, at 818 Howard Street, on the corner between Fourth and Fifth Streets, two blocks from Market Street—near the area where a century later the Moscone convention center would be built. Medicine was a four-year program of seven months' attendance each year, while the dental curriculum could be completed in three years. Pharmacy would be phased in later.

The trustees had judged their market well: with the more stringent state board requirements, the College of Physicians and Surgeons was an instant success. The Dental Department was approved by the State Board of Dental Examiners. It was also accepted by the National Association of Dental Faculties and endorsed by the Stomatological Club of California. The students poured in. Ninety matriculated in medicine, and a stunning one hundred-fifteen in dentistry.

The first graduates were produced the very next year. In a nod to the preceptorship tradition, proof of previous experience counted. 1902 P&S graduate A.W. Ward, for example, attended the school only his senior year because his preceptor, a Dr. Armstrong from Kansas City, contacted Dr. Boxtton and recommended an exemption from other requirements based on Ward's several years of clinical work performed as Armstrong's employee. Dr. Ward sat in on a year of lectures, demonstrated his ability in bench tests at the school, and got his degree.

But the new school was no diploma mill. At the school's first commencement on July 15, 1897, only five dental students received their degrees. Promised the college in its 1897 public announcement: "A high educational standard has been established, and the aim and efforts are to make didactic teaching secondary to thorough practical and clinical training. The intention is to teach by actual demonstration and not on paper."

It became immediately apparent that the quarters at Federation Hall would be cramped. In 1897 the dental school boasted: "With this announcement, the Dental Department of the College of Physicians and Surgeons enters upon its second year as a school devoted to instruction in the theory and practice of dentistry. It is a matter of record, and one of which the faculty is justly proud, that the initial term of this school was attended by more students than ever attended the first session of any other dental school in America."



Front page of the *San Francisco Chronicle* on the founding day of the College of Physicians and Surgeons, June 22, 1896.

## OPPORTUNITY KNOCKS

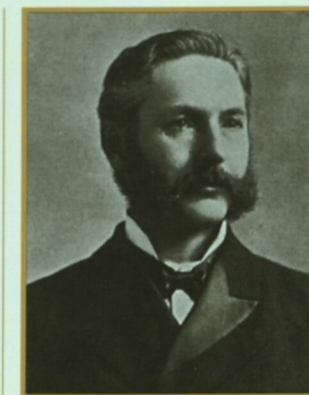
The very next year, the Board of Trustees began looking for another site. In 1899, they announced, "The unexampled rapidity with which the College has grown, and the unexpected number of students received in its three years of existence have made it not only possible but necessary that a larger building, and one better adapted to the uses of a medical, dental and pharmaceutical college, be secured." The place selected was a large lot, once a private zoo called Woodward's Gardens, on Fourteenth Street between Valencia and Mission.

The dedication of the new school in May 1899 was attended with great ceremony. The keynote speaker was Mayor James D. Phelan, who outlined the eras of the city's development, from mission to cow town to gold rush center, and dramatically declared San Francisco to be in its educational era. Wrote an attendee in the *Pacific Medical Journal*: "His Honor said we are doing our part in bringing about a realization of the destiny of San Francisco. He spoke of this city as a veritable fountain of youth, where people come and enjoy health...[and] congratulated the faculty upon [our] great institution."

Phelan had particular reason to wax warm in his praise of the school. One of his new colleagues on the city's Board of Supervisors was Dr. Boxtton. For his part, Boxtton harbored another ambition: to be mayor of San Francisco himself. Opportunities soon presented themselves. In 1898, the Spanish American War broke out. Another calculating young man with political aspirations and a dashing mustache, Teddy Roosevelt, went to Cuba and made a name for himself charging up San Juan Hill. Leaving the dental faculty in the hands of Thomas Morffew, Charles Boxtton, who earlier had signed on with the National Guard, secured a commission as major in the 1st California Regiment and shipped out for the Philippines.

In 1899, back from Manila a lieutenant colonel and much publicized locally for his record of bravery, Boxtton was elected to the San Francisco Board of Supervisors. He proved to be a gregarious politician with a droll waggish wit, who, it was said, "popped champagne corks with the same facility as teeth." On all fronts, Boxtton's star was rising.

Dr. Boxtton wasn't the first California dentist to have a hand in civic life. Indeed, he seems to have belonged to a solid tradition of colorful dental characters. Kentucky



Thomas Morffew, first president of the P&S dental faculty and vice-president of the Board of Trustees.



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Early dental chair and x-ray unit at the College of Physicians and Surgeons. The science of dental radiology emerged the same year P&S was founded.

dentist Robert Semple, for example, arrived in California in 1845, just in time to join the Bear Flag Revolt. Semple bought up land around the Carquinez Strait, and helped build Benicia. A member of the California legislature, he was instrumental in having Benicia named the state capital.

And in 1843, an American dentist, naturalist and mechanic named William A. Streeter traveled to California on the brig *George A. Henry*. Landing at Monterey, he paid his respects to the Mexican governor Micheltorena of Los Angeles, then headed north to tour Santa Cruz, Napa, Sonoma, and San Francisco. After assisting in the building of California's first steam engine at Bodega, Streeter practiced medicine in Santa Barbara until 1846. "In Mexican times flourished the able and versatile dentist Streeter," wrote Dr. Henry Harris in his 1932 book, *California's Medical Story*. "Fancy Streeter pulling teeth, or setting up machinery, or embarking on vaccination expeditions with cholera virus from scabs, proud in the belief that he had never transmitted syphilis in the entire undertaking."

"Dentistry I found very little call for," Streeter himself reminisced, "as the Californians had exceptionally good teeth." Nevertheless, by 1852 San Francisco listed besides its fifty-seven physicians, nine dentists, and seven dentist-physicians.

The list shows that among medical endeavors, dentistry was distinguishing itself as a standout. "As the curtain rises on the American occupation of California," wrote Harris, "medical specialization was non-existent except for the recognition of dentistry as a field apart. A practitioner of that adventurous time in California and in the succeeding mad swirl of the gold hunt was likely to take a hand at medicine, surgery and dentistry and a few other ventures on the side. Nevertheless, the earliest city directories, 1850 and after, make the distinction between dentist and physician. As this is about 20 years before such medical specialties as oculist, aural surgeon and laryngologist are generally recognized, dentistry is therefore given top priority."

A case in point is the story of enterprising Philadelphia dentist J. Foster Flagg, who rounded the Horn to land in San Francisco in 1848. Unable to find a room in the crowded, restless city, Flagg pitched a tent on Rincon Hill. Unable to find a suitable patient base for his specialty, either, Flagg played flute in an Oakland saloon until he could ship out for the Mother Lode country. In the gold fields, miners demanded

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their dental restorations, of course, in gold. Flagg practiced on tree stumps, charging an inflated five dollars per root for an extraction or the tooth's own weight in the precious yellow metal.

Yet for all its energy and bravura, dentistry was a profession in embryo. Calvin Call Knowles, first president of the San Francisco Dental Association in 1869, and of the California State Dental Association the year after, arrived from the east in 1852. Harris noted that "The picture Knowles gave of the dentist of the '50s was that of a tradesman, hybridized between a veterinarian and a tinker, with a few genes of quackery or downright knavery."

And surely several more genes of quirky individuality and independence. In San Francisco, wrote Frank Norris in 1897, "we are set down as a pinpoint in a vast circle of solitude...Perhaps no great city of the world is so isolated as we are...Isolation produces individuality, originality. The place has grown up independently. Other cities grow by accretion from without. San Francisco must grow by expansion from within; and so we have time and opportunity to develop certain unhampered types and characters and habits..."

In 1901, an original cast of characters was assembling that would spell trouble for the dental dean of P&S. Time and opportunity were about to allow Dr. Boxton to begin developing certain unhampered habits that would eventually produce profound isolation. Eventually, his expanding lifestyle would explode.

It was an election year, and the political winds changed. Mayor Phelan, who had opposed labor leaders during a recent strike, was defeated. Several union bosses were elected to public office on a single issue, that of giving the working man a larger voice in civic affairs. Eugene E. Schmitz, a popular orchestra leader who was president of the musicians' union, was elected mayor.

In San Francisco, in both business and government, the 1880s and 1890s were a turbulent, materialistic age. Corrupt alliances often developed between office holders and those seeking favors from them. Bribery, rigged elections, and boss rule were the order of the day. The real power behind the new mayor was Abe Ruef. An attorney and real estate speculator who was Schmitz's campaign manager, after election Ruef became

In mid-nineteenth century

California, wrote medical historian

Henry Harris, "medical

specialization was non-existent

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end of the 1800s, dentistry was a

new-born profession.



## OPPORTUNITY KNOCKS

While 300,000 homeless people  
camped in the park, on the  
streets, and in vacant lots,  
makeshift signs popped up  
around the city advising "eat,  
drink and be merry, for  
tomorrow we may have to  
go to Oakland!"

the local political boss. He lost no time in making the most of his position. At city hall Ruef consolidated his influence to orchestrate a system of large scale bribery. He required businesses who applied for permits to pay him substantial "legal fees," which he discreetly shared with the mayor and board of supervisors.

An incensed Phelan enlisted the help and financial support of Adolph Spreckels to fight back. The pair hired William J. Burns, a detective with the U. S. Secret Service, and maverick Tucson attorney Francis J. Heney to investigate possible ways to bring the city administration down. By 1906, Heney and Burns were beginning to be an annoyance for Ruef and his political machine. Then disaster struck.

April 18, 1906, is a date seared into the collective memory of the city. "The San Francisco earthquake...started as a tremendous big roar," recalled A.W. Ward, who practiced in the city. "It sounded like a tremendous thunderstorm in the distance. Then it became nearer and nearer, and then it shook the house with a force that you can't imagine. I was in bed—it was 5:15 on a Wednesday morning, and the house commenced to shake like a dog would shake a doll, you know, just an unbelievable shaking and creaking and groaning of the house."

Along with some five hundred other dentists in the city, Dr. Ward lost his office in the ensuing fire. "I had three dental chairs in a row—everything was consumed except the iron chairs," he wrote. "When I came back three months afterward, they were all sitting upright and some wag had made a great big sign sticking on a pole, 'Dr. Ward's Dental Parlor.' "

Although three hundred thousand homeless people camped in the park, on the streets, and in vacant lots, the attitude of San Franciscans to the devastation revealed their powerful pride of place. Lawrence W. Harris wrote a poem praising "The damndest finest ruins ever gazed on anywhere." Makeshift signs popped up around the city, advising, "Eat, drink and be merry, for tomorrow we may have to go to Oakland!" Novelist Charles Dobbs reported that the fire hadn't changed San Franciscans' tastes or their outlook on life: the city's merchants found that "silk dresses sold, but wash dresses languished on their shelves."

The newly-finished College of Physicians and Surgeons was destroyed. But not for

## OPPORTUNITY KNOCKS

long. The Board of Trustees suspended classes and immediately commenced rebuilding in the very same spot. Reported the Class of 1908 in the yearbook "The dreadful catastrophe that so suddenly ended our Freshman year left us widespread; we hurried to our respective homes, where College history ended for four months, and four months only. For when the following September rolled around we were all, true to our colors, on the old stomping grounds giving one another the hearty grasp of the hand."

As the city busied itself in reconstruction, another calamity struck: an outbreak of bubonic plague. While the city fathers hired four hundred workers to hunt down San Francisco's rodent population, students at P&S—presaging a look that years in the future would become routine—wore gowns, gloves, and masks in the clinic. In the earthquake's aftermath, the public had forgotten Phelan's crusade against the mayor and supervisors. At city hall, the objects of Phelan's unwelcome attentions felt protected from his fist shaking by their sterling performance as rescuers of the city in its time of need. They shouldn't have.

Heney, nursing his own ambition to be district attorney, had stuck doggedly to his task. Unable to prove bribery, he engineered a sting operation to trap the cocky supervisors. While three men, including Spreckels' secretary, watched through peep holes in an adjoining room, several supervisors, including Boxton, were individually offered \$500 to vote against an ordinance to close down city skating rinks (which had been loudly declared by a local priest to be hotbeds of immorality).

Boxton and the others accepted the money. Heney pounced. By quickly closing the net, he hoped to use this witnessed, provable indiscretion as a lever to make the supervisors admit to bigger bribes. Confronted with the evidence, however, Boxton refused to admit complicity. Spreckels himself intervened, urging Boxton as both a friend and a patient to confess. Then the district attorney offered a deal—immunity from prosecution in exchange for a confession. Boxton, insisting all the supervisors should be in one boat, called for a private meeting. In a secret caucus the group met and agreed to sign affidavits admitting guilt.

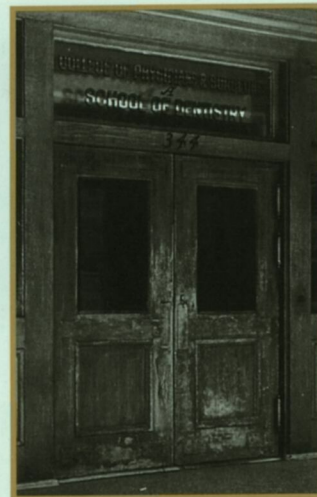
Mayor Schmitz was removed from office, and both he and boss Ruef were eventually convicted. Charles Boxton, in turn, was elevated to the mayor's seat. But although he was never charged with a crime, Boxton couldn't endure the blistering public criti-



The first P&S building at Fourteenth Street, between Valencia and Mission, which was destroyed in the 1906 fire.



## OPPORTUNITY KNOCKS



The familiar wooden  
P&S doorway at  
344 Fourteenth Street.

cism. His administration lasted exactly one week. On July 9, 1907, Dr. Boxtton achieved his dream to become mayor of San Francisco. On July 16, he resigned.

"Before he went to the Philippines with the California Volunteers he was a dentist who enjoyed a fair income with which he seemed satisfied," a local newspaper editorial wrote bitterly of San Francisco's shortest-term mayor. "When Boxtton came back from the wars he was a changed man, and his service under the banner of Ruef has completed the transformation..."

Boxton's public humiliation was complete. Dropped from the rolls of the Native Sons of the Golden West, the Masons, and the United Veterans Association of California, he was also ousted as Dean of the Dental Department at P&S. In the face of ignominy, however, Boxtton left an important legacy to his college. Call it spirit or spunk. Just as Dr. Boxtton's school immediately rose from the ruins of the earthquake, it would weather the social scorch of scandal. From his time forward, a certain determined tenacity was embedded in the institutional culture of P&S. Throughout the century, that trait would serve the school well. The college he founded, like Boxtton himself, would prove to be an adaptable, plucky survivor.

And Dr. Boxtton's own story doesn't end in 1907. Despite his fall from grace, he continued to control the College of Physicians and Surgeons. He slowly bought out the other owners. By 1913, Boxtton was listed again on the Board of Trustees. In 1915 he regained the title of dean. In 1921 he moved up from secretary of the board to president. Replacing him as secretary was a young P&S alumnus named Arthur R. McDowell. A year later McDowell was named Junior Dean.

By 1923 Boxtton was the sole owner of the school, coordinating its activities through a board of trustees that now had only nominal influence. Wrote student Eugene Skelly of the class of 1915: "Over these tribes ruled a king of vast power and exceeding good nature and wise in the ways of the tribesmen, and the name of the King was Dr. Boxtton and his court was known as the Faculty." The school was all Boxtton had left of his dreams, and he poured his considerable energies into it. An entry in the 1911 yearbook reveals in Boxtton, even as king, a gruff, fatherly pride in his charges: "Who would have thought you fellows would ever amount to anything? In your freshman year you were regular babies; in your junior year you were a bunch of devils, but in your senior

## OPPORTUNITY KNOCKS

year you have aged ten years and are a class of ambitious young gentlemen." In 1914 the yearbook was dedicated to Boxtton with this tribute: "His untiring interest in the welfare of each and every Dentist from the timid Freshman to the dignified Senior has made him a friend of each and every student who has passed through the dental halls since P. and S. was established. Here's to him who knows your standing without an examination."

Despite the tight grip Boxtton held on school finances, P&S was having trouble. After years of cutthroat competition between dental schools, dental education was becoming more rigorous and professional standards more exacting—as they were for medicine. The requirements set by state licensing boards and other authorities were constantly rising. As a result, escalating economic demands confronted both students and schools. The academic year at American medical and dental schools, for example, which in the 19th century had consisted of about four months of formal training, was lengthened to eight or nine months. Fewer students could afford the extra time lost for earnings. Schools were squeezed not only by decreasing enrollment, but also by the dramatically increased expenses of new requirements for laboratories, libraries and clinics.

In the wake of the famous Flexner report from the Carnegie Foundation for the Advancement of Teaching, which called for the vigorous restructuring of medical education, the college bowed to the changing fiscal and political realities. P&S closed its medical and pharmacy school in 1918.

The pressure for progress was also bearing down on dentistry. Just five years later, in 1923, the American Dental Association's Committee on Dental Education gave Boxtton an ultimatum: The College of Physicians and Surgeons would either become a public trust or go out of business. Boxtton, the ultimate survivor, was at the end of his rope. What would become of the school? As he pondered the dilemma, Dr. McDowell knocked at his door.



Busy students pose for a picture on  
the clinic floor in this scene from the  
dental infirmary, early 1920s.



## • LICENSE TO SUCCEED •

"In this age of progress," asserted the P&S dental department in its 1897 public announcement, "dentistry has kept pace with all other branches of science and learning, and today the student cannot, as of old, hope to acquire a thorough education in the office of a practitioner. In common practice, the dentist is now called upon to treat all disease of the oral cavity, and consummate skill, keen perception and profound judgment are most essential qualifications for a successful practitioner."

P&S had good reason to insist on the importance of formal schooling and certification to practice. In spite of the groundbreaking progress of the Baltimore College of Dental Surgery, dental schools remained scarce throughout the 1800s. By the turn of the 20th century, perhaps only one third of all dentists were college trained. The education and regulation of dentists were haphazard. As a result, dentistry was woefully undervalued. A dentist in 1842 remarked, "The practice of dentistry is too circumscribed for an intellectual mind."

Because of its prosthetic emphasis, dentistry was often shunned by physicians, who as gentlemen still didn't condescend to work with their hands. Wrote medical

historian Richard Harrison Shryock in his 1960 work, *Medicine and Society in America: 1660-1860*, "Dentists, by the very nature of their work, were always in danger of being relegated to the level of technicians." James Fleming, MD, at an 1850 meeting of Pennsylvania Association of Dental Surgeons, said, "There is no profession, I believe, which embraces, in proportion to its number, so great a variety of talent and character as the dental; and there is none perhaps in which the requisite qualifications for successful practice are less generally appreciated." As late as 1893, Pope Leo XIII chose a barber to attend to his dental needs instead of a dentist.

The growth of dentistry's reputation depended on the growth of its authority—that is, its status, or the quality that encourages public trust. And the accumulation of medical authority, wrote Paul Starr in his 1982 book *The Social Transformation of American Medicine*, required the resolution of two problems: the internal problem of consensus and the external problem of legitimacy. Dentistry would have to agree on the criteria for belonging to the profession and what its rules would be. Then it had to convince society of its own validity.



Enter licensing. The issuing of licenses, public certification of dentist competence, would help solve both problems in dentistry's professional coming of age. In 1841, just one year after the founding of the first dental school in Maryland, Alabama enacted a statute providing for dental licensure following examination by medical boards of the state, without specifying education requirements. In 1868, Kentucky authorized the state dental association to appoint a board of dental examiners with authority to examine applicants for licensure. Graduates of dental schools were allowed to be licensed without examination.

Arrival at a general consensus, however, was a long, slow process. (Indeed, as the 20th century closes, the ongoing debates over reciprocity and licensure by credentials illustrate how complete agreement in American dental licensing still has not been

achieved.) In 1861, the Dental Society of the State of New York, through a Board of Censors, began a program of dental licensing by examination. In 1870, the Society was also even authorized to award successful candidates a Master of Dental Surgery (MDS) degree. By 1899 state requirements for admission to dental practice reflected the various ways a dental education might be acquired. Some states required an applicant to hold a diploma from a reputable school as a prerequisite to taking a licensing examination. Others required either a diploma or an alternative qualification, such as three

years of practice or preceptorship. Still other states simply required a licensing exam. One important result of the licensing trend: California's state licensure requirement of a dental degree to practice paved the way for the founding of the College of Physicians and Surgeons of San Francisco.







# 1 2 3 4 5 6

CHAPTER

1923-1938

## PRIDE & FAITH



**P**hysicians and Surgeons comes of age as its own alumni take the helm, gambling on survival to dramatically buy out Dr. Boxtton and lead the private school to a public trust.



## 1923 THROUGH 1938

- 1925 The Charleston dance craze sweeps the nation.
- 1926 The Carnegie Foundation for the Advancement of Teaching releases its report by William J. Gies on Dental Education in United States and Canada.
- 1927 Lindbergh flies across the Atlantic.
- 1928 Prototype cartoon character Mortimer Mouse gets a new name: Mickey. The president of United Artists Pictures dismisses the sensation, predicting, "People will not want talking pictures long."
- 1929 Alexander Fleming discovers penicillin.
- 1930 Iowa artist Grant Woods unveils the painting that will epitomize America: American Gothic. The soon-to-be-famous farmhouse faces are those of the artist's sister . . . and his dentist.
- 1931 Bela Lugosi stars in Dracula.
- 1932 Eleven million are jobless around the country. Ex-Olympic swimmer Johnny Weissmuller finds work as Tarzan.
- 1933 The U.S. officially recognizes the communist government of the USSR.
- 1935 FDR enacts Social Security. Vitamin C is identified.
- 1936 Eugene O'Neill gets the Nobel Prize for literature. His agent is a dentist. Oakland Bay Bridge is opened. Its capacity is believed to be large enough to handle traffic for fifty years.
- 1937 DuPont takes out a patent for nylon. Though lacking the prestige of silk, nylon promises a dazzling future as sheer, elegant stockings for the masses. Nylon is also great for dental students shining wax ups. The Golden Gate bridge, "a \$35 million steel harp," is completed.



## PRIDE AND FAITH

*It was the decade* that roared. The nation emerged from World War I as the leading industrial and financial power of the world. Women won the right to vote and jazz musicians flourished. The Bay Area's civilian air mail pilots bragged of flying from Crissy Field to New York in only thirty hours. Science and technology were making rapid advances that would define the entire century: the 1920s were the years in which commercial airlines, talking movies, and radio would come into their own.

As would dentistry. The population was clamoring for dental care. Telephones, automobiles, and paved roads allowed patients greater access to dentists. The rise of cities, with their promise of more jobs and better pay, put dental care within the income range of more people. In the decade from 1910 to 1920, the American population grew fifteen percent. The number of dentists in the same ten years increased by forty percent.

The profession showed great promise. Dentists, perceived as can-do problem solvers, were becoming authoritative figures in American society. A political cartoon of about 1915 portrayed Woodrow Wilson as the nation's dentist, who by signing the Federal Reserve and Clayton Antitrust Acts was pulling the rotten teeth of big business and labor. Mayo Foundation for Medical Education and Research cofounder Charles H. Mayo declared, "The next great step in medical progress in the line of preventive medicine should be made by the dentists."

Dentistry was equal to the challenge. The world was awash in germs. World War I took four years to kill 8.5 million people, but the influenza pandemic of 1918 efficiently carried off an astounding 20 million in a mere quarter of the time. Microbes entered the public consciousness. With the recognition that dental decay was associated with bacteria came a clear sense of the role of prevention. And with that understanding came an avalanche of advertising as toothbrush and dentifrice companies rushed to ride the wave of a major market windfall. "A clean tooth never decays," the slogan trumpeted by dental societies and the manufacturers of personal care products alike, became the watchword of the next decade.

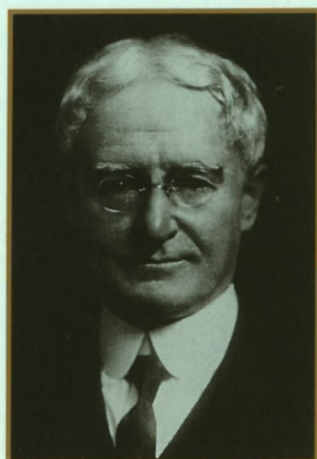
The world's new emphasis on science and progress had not escaped the attention of the American Dental Association (ADA). The ADA itself had experienced a leap in



Arthur R. McDowell, Dean  
1923-1938.



## PRIDE AND FAITH



William J. Gies headed the 1926 Carnegie Foundation study that changed the course of 20th century dentistry.

the growth of its membership. It began offering expanded services, and revised its constitution in 1922 to reflect a broader sense of purpose. Dentistry's leaders were concerned about shaping the profession's future, and there was no better present indicator of future directions than the schools. The ADA's Committee on Dental Education, later a council, was called into service to monitor the development of U.S. dental schools.

The Committee on Dental Education had two rivals. In January 1923, the American Association of Dental Schools was founded, an organization disingenuously declaring itself "non-mandatory in authority," and "devoted mainly to the advancement of teaching." An independent Dental Educational Council of America had grown in prestige during World War I, when the Surgeon General of the Army consulted it on questions of dental education. The three groups suffered from competing political interests, jealousies, and intrigues. However, all three entities had one point on which they completely agreed: the need to get rid of the commercial taint in dental education. That meant pressing for the closure of proprietary schools.

Still another powerful educational force was moving forward. The Carnegie Foundation for the Advancement of Education, a private but immensely influential institution, had begun in 1920 a six-year study of dental education, and already the recommendations were emerging. The ambition of William J. Gies, the Columbia University biochemistry professor and dental caries researcher who headed the study, was to change the face of dentistry—not just its system of education, but the breadth and depth of its mission, and even its very identity.

It wasn't just the advancement of science itself that compelled this remarkable confluence of interests towards educational reform in dentistry, but increasingly a sense that dentistry needed an image boost. A non-dentist, Gies involved himself with the profession in 1909 when his research focus turned toward saliva. Gies became concerned that American dentistry was not being taken seriously in the medical circles he traversed. The United States had invented dentistry as a health care calling separate from medicine, and American dentists were esteemed the world over for their advanced skills.

Yet the very tradition of mechanical acumen that made U.S. dentistry the finest in the world was ironically its greatest weakness. In 1910 the British physician William

## PRIDE AND FAITH

Hunter, lecturing to a Canadian medical school faculty, delivered a scathing denunciation of dentistry. Hunter accused dentists of ignoring the health of their patients in the pursuit of technical virtuosity and dismissed the entire profession with his famous description of a crown as "a mausoleum of gold over a mass of sepsis."

It didn't matter that medicine itself was experiencing severe growing pains; that very year, the educator Abraham Flexner had issued a harsh report under the auspices of the same Carnegie Foundation criticizing the poor quality of medicine and demanding the closure of many medical schools. Even so, dental leaders were appalled. Dentists do *not* treat the mouth as isolated from the body, harrumphed an indignant Dental Faculties Association of American Universities at its annual meeting in 1923, still smarting from the reverberations of Hunter's provocative charge that dentists view the oral cavity as if simply "ivory pegs in stone sockets."

Gies cast his cool eye on the scene and began a long, critical appraisal. "What were the reasons for the prevailing indifference to dentistry in scientific, educational and medical circles in 1909?" he wrote. "Among the reasons were these: (a) Dentistry was generally regarded as an occupation that was more trade than profession. (b) It was provincial in its tendencies and relationships, and did not induce its practitioners to participate actively in public affairs. (c) Its science, chiefly that of prosthetic mechanics, had exerted little influence beyond the useful applications. (d) Its growth in professional quality had been greatly retarded by a system of journalism that was predominantly nonprofessional, under editorial leadership that was commercial and selfish. (e) Its educational system was mainly proprietary, chiefly technological, and weakly biological."

Gies personally took charge of rectifying the situation. He helped establish schools of dentistry and dental hygiene at Columbia, and conceived the notion of a national board dental examination. Declaring that research is "the register of a profession's achievement and standing," Gies founded the International Association for Dental Research. He also started the Journal of Dental Research and stayed on as volunteer editor for seventeen years.

Gies' opinions were widely respected, and his advice to force the closing of proprietary schools added increased emphasis to the ADA's resolve to boost dental education

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## PRIDE AND FAITH

to a higher plane. In 1923, the weight of the entire profession came to bear on Dr. Boxtan's small proprietary college in San Francisco. Dentistry's dignity was at stake; authorities felt that a school shouldn't be run as someone's business, like some corner grocery store. With the disapproval of the ADA, the American Association of Dental Schools, the Dental Educational Council, and the Carnegie Foundation arrayed against it, the school was overwhelmed. More than its reputation or accreditation, its very existence was at stake. It was the turning point. P&S was either to become a not-for-profit institution or go out of business.



The patient in the foreground models the latest hair style—the bob—in the P&S infirmary, 1924.

That year, Arthur McDowell was Junior Dean and Ernest Sloman was Superintendent of the Infirmary, or clinic. The two spoke quietly in the long wooden corridors lined with glass cases. It would be tragic to close down a good school with a strong clinical tradition. There was such a great need for high quality education. After all, there were still proprietary schools on the west coast—one in Oregon, whose graduates were barred from taking the California dental board exam, immediately came to mind—that were shabbily substandard.

The older of the two, McDowell took charge. Like Charles Boxtan, and Norris's dentist McTeague, Arthur McDowell came out of California's mining country. There the similarities ended. Born in Yuba County in 1890, where his father worked in the placer mines, McDowell was clearly from the next generation. Unlike his professional forebears, he served no preceptorship to become a dentist. Instead, at eighteen he took a teacher's certificate and taught school for six years. In 1914 McDowell moved to San Francisco to attend classes at the dental department of P&S. On graduating in 1917, he accepted a commission as a first lieutenant in the Officers Reserve Corps of the U.S. Army and began teaching again—this time to dental students at P&S.

McDowell was reserved and thoughtful, with the tweedy charm of an English professor. At the same time, he was the consummate organization man—a patient consensus builder and team player, a master of human relations, with one especially salient quality that would forever flavor the atmosphere of the school: Arthur McDowell was loyal. He liked people, he made them feel comfortable, and he was genuinely devoted to his colleagues and students.

He would need all his communications skills, as well as his dedication, to pull off the

## PRIDE AND FAITH

plan he and Sloman had in mind. They would buy the school from Boxtan. They would reorganize it to conform to the changing philosophy of education. They would slip their hand in the hand of progress.

But who would help? It was a more ambitious undertaking than a pair of young dentists alone could take on. They looked around the college. Pioneer orthodontist Fred West was a versatile and imaginative instructor, a loyal P&S graduate, and a solid citizen who consistently lent his support to the school. He would sign on. So would B.C. Kingsbury, a natural leader "whose able efficiency," the 1918 yearbook dedication had announced, "has raised the dental infirmary to its present high standard of efficiency." And Henry Veatch, a flamboyant, colorful oral surgeon with diplomas from both the dental and medical schools at P&S, was willing to take a risk. So five members of the dental school faculty, all alumni of the school, joined together as members of a new Board of Trustees. Their mission: to take over Boxtan's interest and save the school. They pooled their resources and made an offer.

Boxton sold. The school was reorganized September 1, 1923, according to the ADA stipulations, as a public trust. The roster of the Board of Trustees included Arthur R. McDowell, Henry Clay Veatch, Bernard C. Kingsbury, Frederick T. West, and Ernest G. Sloman. It was a daring step. The new trustees, whose average age was about thirty, took the responsibilities of the school on their shoulders with more enthusiasm than understanding of the rigors of running a professional school. But they knew the facts: the Board of Trustees no longer owned the school, and board members no longer would be paid for their services. The circumstances of the reorganization forged one more enduring tradition at the dental school: the enthusiastic interest of alumni. The emergence of P&S as a public trust represented not only the first step in the creation of the school as it exists today, but a sharp turn in school culture. Henceforth, volunteer alumni would be a mainstay of school strength.

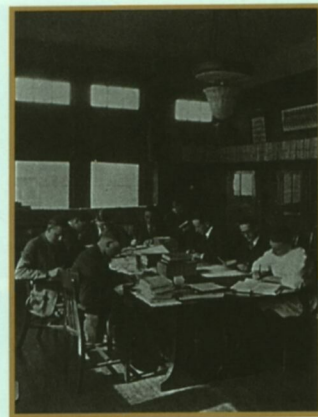
When the euphoria wore off, the group found themselves saddled with a debt to Boxtan of \$50,185. It was a mountain of money. Roos Brothers haberdashers advertised "the newest college suits" at thirty nine dollars. One dollar would cover an entire week's stay at the Germania Hotel near the school. And what had they bought? It amounted to little more than a smattering of outdated equipment and a dash of goodwill. Boxtan retained ownership of the building itself and leased it to the board. The



Saved by the Board of Trustees, clockwise from top left: Henry Clay Veatch, Frederick T. West, Ernest G. Sloman, and Bernard C. Kingsbury.



## PRIDE AND FAITH



Meeting of the minds in the  
Sloman library, 1926.

entire administration consisted of the board members, five clerical assistants and secretaries, including Dr. Boxton's own wife, Elsie, who would stay on until Boxton's death in 1927 as an informal facilitator of student-faculty communication, and the janitor. McDowell was chosen to be dean.

Dean McDowell considered what his first move should be. He thought of the alumni, his reason for and allies in saving the school. He appreciated the P&S alumni's sense of community, its energetic connectedness. The original Alumni Association of the College of Physicians and Surgeons of San Francisco had been a happy social affair. It had held its first annual meeting with a banquet at the California Hotel on Thursday evening, July 14, 1898. After the close of graduation exercises that day, the members of the association, whose dental component officially numbered fourteen, five from the class of 1897 and nine from 1898, were accompanied by the faculty of the two departments for, in what would become a long-standing tradition, "a cheerful dissection of fish, fowl, and flesh, and an evaporation of liquids."

But the alumni represented more than conviviality. Understanding full well from his own recent experience the power of strong and dedicated alumni, Dean McDowell's first priority was to reorganize and focus the energies of the school's graduates. "Energy is never wasted, [says] a well known law of physics," he wrote soon after assuming the deanship. "Also, well directed energy, concentrated upon a given line, will produce far greater results than if allowed to scatter. This same reasoning holds true and may be applied to human endeavor. We can visualize the application of this law by a parallel in our alumni activities. Do you know that the dental alumni of the College of Physicians and Surgeons now numbers 952? Consider the possibilities for educational advantages...for each alumnus through organized effort and unity of purpose...The Organization Committee [of the P&S Alumni Association] has taken it upon themselves to endeavor to unite the dental alumni into an association for solidarity, with dental education as its objective."

In fact, when the newly reorganized alumni association met on May 24, 1924, it had on its agenda the development of a novel idea: offering regular, formal continuing education. "Be Fair to Yourself," urged an early ad in the new school magazine, *Contact Point*, "by giving your diploma Assurance of Strong Parentage through membership in the Alumni Association Lecture and Postgraduate Foundation."

## PRIDE AND FAITH

In 1924 continuing education as such did not exist. Dentists interested in gaining new skills or even keeping their knowledge current after graduation had to hire teachers privately. The Lecture and Postgraduate Foundation sponsored the banding together of graduates to hear lectures from dental instructors and researchers. "Five alumni or more can be served for the price of one post graduate instructor," the alumni association announcements explained, "because it costs less to bring instruction to you than for you alone to secure it."

McDowell's next move was to build up the faculty. "There is no operation in the oral cavity presented to the dentist in his daily practice, or even those of rare occurrence, which is not to be met in the infirmary, nor is there any operation too complicated to be handled there," the P&S dental department had bragged in 1897. "The infirmary is always crowded, and all the work is done under the supervision of skilled demonstrators, of whom there are sufficient to insure each student individual attention." By 1923 the infirmary was still crowded, but the faculty were thinning out. Of the fifty-seven faculty members, only three were full time teachers to the 350 students enrolled.

Boxton's administration had been typical of medical schools of his day in that the faculty members were unsalaried. Compensation for instructors came directly from student fees for classes and private tutorials, and indirectly from the advantages that professorial appointments gave them in private practice.

Although part-time instructors culled from its alumni formed the glue that held the school together, McDowell knew that, with the eyes of the ADA and the Carnegie Foundation on him, he couldn't rejuvenate the school's energy and reputation with loyal alumni alone. The Johns Hopkins University medical school had recently proposed a radical new direction—that a school's faculty ought not to consist of only local practitioners. To promote the healthy cross-fertilization of ideas, some should come from outside the school and city. And they should be paid a salary.

McDowell determined to invest in several key people. As a committed participant in organized dentistry, the new dean traveled. And he kept his eyes open. In Minnesota, he hit gold. He drafted Alver Selberg, an oral surgeon and prosthodontist, to take over the prosthetics department. Another midwesterner, gold foil and inlay virtuoso Harry True, who had trained under G.V. Black himself, was hired to restructure the operative



The social side of student life at  
The Sophomore Hop, 1926.



## PRIDE AND FAITH

Was dentistry to become a

specialty of medicine?

Dentists were urged to become

not only dental surgeons and

oral engineers, but also

oral physicians.

department. Selberg and True revitalized the school's strongest suit—its tradition of teaching practical clinical dentistry. The school's reputation, as well as its structure, was rebuilt to a philosophy that has always since been followed: that, in education as well as practice, patient services are paramount.

In 1926, the Gies Report, officially known as "Bulletin Number 19," was published. Many observers were expecting, and a number of dentists and educators had in fact supported, a call for dentistry to merge with medicine. Gies himself supported dentistry's claim as a parallel medical discipline. "Dentistry is like a specialty of medicine," he wrote, "and, in effect and in the view of laymen, is such a specialty." Gies urged that "dentists as a body should be trained to give systemic health service, and to become not only dental surgeons and oral engineers but also oral physicians and oral sanitarians."

Nevertheless, Gies recommended that dentistry remain politically separate from the rest of medicine to protect its technical (or "mechanical") excellence. "Medicine, mechanics, and art constitute the tripod on which the whole of modern dentistry rests," he declared. "Pull away one of the three legs of that tripod, and dentistry ceases to be itself."

Gies proposed a national standard for dental students, including a) at least two years of approved pre-dental work after high school at an accredited college; b) at least three years of undergraduate dental education; and, c) an optional fourth year of advanced clinical dental training. P&S was a step ahead of the trend. McDowell, the old school master, was already busy instituting a "one-four" five-year curriculum. In the 1925-1926 school register, requirements for admission were still a high school diploma. But before the four year regimen of regular dental coursework would begin, a mandatory year of pre-dental liberal arts instruction would take place at the school for entering students.

Among the required classes were English and German. "Students who intend to follow a professional career should not neglect to study seriously a foreign language," explained an article in the October 10, 1935 issue of *Contact Point*. "In medicine, dentistry and chemistry the foreign language most useful is German, for in that language the best type of professional literature is printed."

## PRIDE AND FAITH

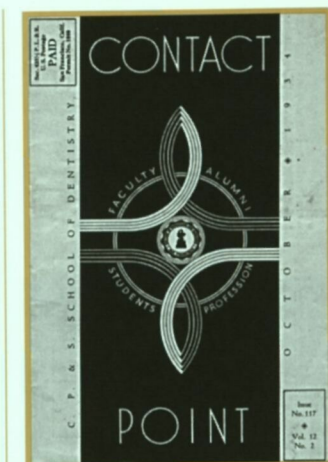
To the students themselves, of course, it was a hard sell. Wrote dubious freshman Robert Sweetzer in 1926: "We were told to go upstairs for our first class. It was English. Dr. McDowell explained to the class that it was a pre-dental course we were taking—a medium between high school and college proper—a medium that would easily enable us to become acclimated and oriented. Why we were taking different subjects that seemed so alienated from dentistry was explained to us; that is, all except German, and that I cannot see."

Nevertheless, a number of students would earn dual degrees. Frank Inskipp, who would later become dean, entered P&S in 1926. By 1931 he had taken both his BA and DDS. In another decade the school would offer a six-year combined course for BS-DDS degrees. "We have seen the entrance requirements of our dental college advance from the four-year course in 1917 to the pre-dental standard of one year of liberal arts work in 1928," Dean McDowell announced in 1935, "and now we are on the threshold of [a] two-year pre-dental prerequisite...effective in the fall of 1937."

The beefed up standards were called the "two-four" curriculum. They reflected the findings, in the Gies mold of dentistry as the equal of medicine, of an AADS study that recommended parity requirements for the nation's medical and dental schools. John Tocchini, another future dean who would graduate in 1937, took his BS from P&S along the way in 1936. "We hold that the ideal dental curriculum is a vital, living, ever-changing flow of subject matter expanded from just teaching to learning, guiding and counseling students," explained Dean McDowell. "The curriculum must not be restricted strictly to dental subjects, but should include attitudes, activities, interests, and habits of society and questions of professional interest."

Outside the classroom, the 20th century was hurtling on. Chicago gangster Al Capone, for one, looked at the frenzy gripping Wall Street in the 1920s and steered clear of the stock market, calling it "a racket." Its crash in 1929 ultimately brought Roosevelt's government to produce the Social Security Act of 1935. Social Security promised to dramatically change the tenor of American life with three provisions: old age pensions, unemployment insurance, and health insurance. Through the 1930s the dental profession fretted and debated what the Social Security Act would mean for dentistry.

In the infirmary, depression-era patients waited on benches in the hallway each day for



School pride gets a voice in *Contact Point* magazine, which, with this October 1934 issue, is in its 11th year of publication.



## PRIDE AND FAITH



In 1927, P&S founded its own scholastic honor society, Tau Kappa Omega.

Dr. Elmer McEvoy to walk by and assign them a student. If a patient didn't pay the fees for treatment, the treating student had to pick up the tab. Drs. Susan L. Lindsay '35 and Herbert Stuart '35 remembered a classmate who was treating his girlfriend. The woman promised to pay her bill only if the student would marry her. Times were tough; the student married his patient.

By the middle of the decade, government numbers reported that twenty five percent of the work force was unemployed. Private sources put the number at fifty percent. Patients were not keeping dentists busy, yet the proposed solutions were frightening to the profession. Socialized medicine seemed inevitable. Health insurance itself was a troubling concept, in no small measure because of the shift in decision making power it represented. Conservatives foresaw a dental profession enslaved by the federal government's "panel dentistry." On the other hand, a student editorial in *Contact Point* argued, "Dentistry as an integral part of the medical sciences must necessarily be considered in that phase of health service that has as its primary goal or purpose raising the standards of maternal and child welfare. Dentistry must be specifically mentioned in any proposals of health aid or insurance."

Under its Board of Trustees, however, the College of Physicians and Surgeons was not only surviving, but prospering. "We hear people say that everything is going wrong," wrote a *Contact Point* editorial reflecting the school's determined optimism, "that the world is getting worse every day, morally, practically, and in general. What constitutes the world? We are the world. Think and believe in terms of advancement and improvement, and the world cannot but be better."

Underscoring the school's resolve to excel, a chapter of the national dental honor society Omicron Kappa Upsilon (OKU) was established in 1933. Even before that, a scholastic honor society called Tau Kappa Omega (TKO), was founded at the school in 1927. The letters stood for *Teopatia Kai Ophelia*, Greek for "honor and service to alma mater." It didn't matter that TKO's founding faculty member Kenneth Nesbitt was not a P&S graduate. He was treated as an alumnus, anyway. The college had a knack for winning loyalty and inspiring enthusiasm.

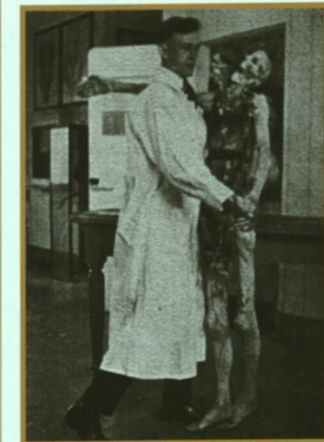
For all its vitality, there was just one hitch in the school's development. P&S had no university backing. By 1921, two-thirds of all dental schools in the United States were

## PRIDE AND FAITH

already affiliated with universities. The Dental Educational Council had set up a ranking system that had become a powerful influence among educators. With the weight of the AADS and ADA behind it, the council succeeded in dropping from its "A" ranking the schools that lacked a university affiliation. By 1927, there were no independent schools left with better than a "C" ranking. Except one.

Save for a short initial period with a "B" rating, P&S succeeded in navigating a continuing "A" rating in spite of its shaky sovereign status. However, the Carnegie Foundation's strong recommendation was that P&S become affiliated with a university. The specific university Carnegie had in mind was Stanford. "The union of the school with Stanford University, and its intimate coordination with the medical school and hospital in San Francisco," the Carnegie report read, "would seem to be a logical as well as a desirable development in dental education in California."

Accordingly, McDowell went to Stanford president Ray Lyman Wilbur with a proposal to merge the two institutions. Wilbur agreed, and put in writing that Stanford would accept the dental school as its own—just as soon as P&S could hand over \$1,250,000 to defray the costs of the takeover. In 1923, dance marathons were the rage in the United States. Press syndicates reported to newspapers around the nation that in Baltimore a couple was stopped by police after a staggering fifty-three hours. Prodded by the Carnegie Foundation and armed with the assurances of Wilbur himself, P&S would begin its own curious forty year dance marathon with Stanford.



A student dances with his cadaver; the 1920 *Chips* staff called the picture "A pair of stiff's."



## • WHY ARE DENTISTRY & MEDICINE SEPARATE? •

**M**odern dentistry is becoming more and more allied to its sister profession, medicine," announced the P&S dental department in 1897. "It is necessary that students of dentistry should have thorough instruction in certain branches of medical science. Special advantages in this respect are offered students in this college by the fact that they attend many of the medical lectures."

The school emphasized the strength of its twin programs: "Reason and common sense...readily show that the two departments can easily and properly go together. Medicine includes many of the dental studies, and these studies can be best pursued at a medical college under medical teachers. Again, the question is today being seriously discussed whether it would not be wiser to make dentistry a specialty of medicine, as are now otology, laryngology...and a number of other specialties. Should such an event transpire and a dentist be required to secure an MD before being permitted to practice his profession, the colleges that have already established two departments together will to a degree be in advance of a separate institution." Even after the P&S medical school closed, the dental school profited from its

medical instructors. Professor of anatomy and histology, Alva Jacob Remmel, MD, for example, who was also personal physician to trustees B.C. Kingsbury and Fred West, taught from 1918 to 1948.

How did dentistry and medicine, which share much in common knowledge and philosophies of treatment, come to be separate in the first place? One reason lies in dentistry's historical emphasis on surgery, which in medieval Europe was considered a craft and not practiced by physicians. Another has to do with timing. As a result of France's dental legacy to the United States, developing early 19th century dentistry demanded a specific recognition the medical establishment was not prepared to extend. "Dentistry was, in effect, the first full-time specialty in American medical practice," wrote Shryock, "and the fact that it broke off from the medical profession may be ascribed in part to the latter's disinclination—as late as 1860—to recognize specialization of any sort."

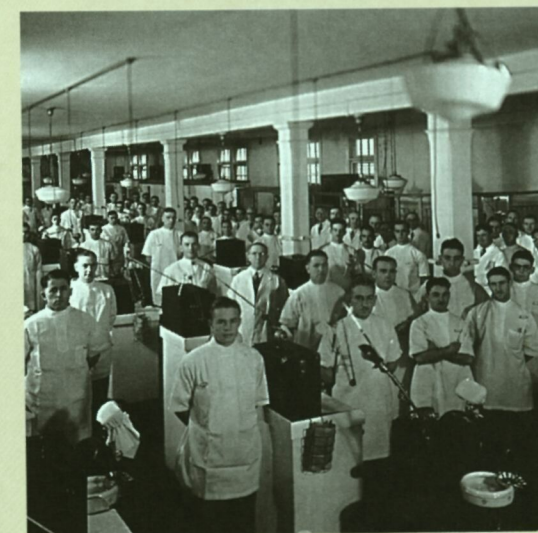
Throughout the 19th century there were questions about dentistry's identity. Although the Baltimore College of Dental Surgery was founded in 1840, twenty-seven years passed before the next dental school appeared.

Harvard opened its doors in 1867 with a different take on dentistry, as a specialty of medicine. Its dental students, however, would not be admitted to the medical school, but to a new, parallel school of dental medicine. Its degree, Doctor of Dental Medicine, or DMD, reflected a competing philosophy to that in Baltimore.

Nevertheless, some physicians took their MDs, either with or without a DDS or DMD, and practiced as dentists. Apprenticeships also prospered. In the latter half of the 19th century, then, three paths to dental practice coexisted: dental colleges, preceptorships, and physicians who specialized as dentists.

In the 1920s, the question of dentistry's place in medicine re-emerged. Many dental educators argued for a merger of dentistry with medicine, as was occurring in some European countries. William J. Gies felt

differently. Leading the Carnegie Institute's influential 1926 study on dental education, Gies envisioned dentistry as a co-equal branch of medical science, but concluded that for the sake of preserving technical superiority it should remain a separate profession.



To a remarkable degree, dentistry complied with Gies's recommendations. Proprietary schools should be closed, he argued, and they were. Dental schools should become integral parts of universities, he said, and they did. Gies emphasized biological sciences in the dental curriculum and called for full-time instructors for clinical sub-

jects. He championed graduate education in basic sciences, and such specialty areas as oral surgery and orthodontics. The die was cast: dentistry might be technically a specialty of medicine, but politically and educationally it would stand on its own as an independent health science.





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CHAPTER

1938-1952

## LEGACY OF SERVICE

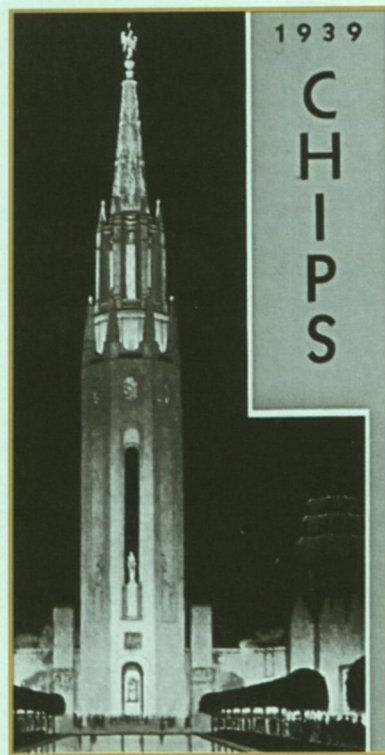


A sense of purpose and attention to research helps students, faculty and alumni pull together to preserve the dental health of the nation's soldiers.



## 1938 THROUGH 1952

- 1938 A radio dramatization of H.G. Wells' science fiction yarn *The War of the Worlds* causes thousands to panic in the belief they are hearing broadcasts of an actual extra-terrestrial invasion.
- 1939 Mail order dentures are declared illegal in the United States.  
Golden Gate International Exposition, for which Treasure Island is created, attracts 17 million visitors.  
In Frank Baum's *Wizard of Oz*, the Tin Man is cured of temporomandibular joint dysfunction when Dorothy oils his jaws.
- 1941 With its multiple military installations, the San Francisco Bay Area is called an "arsenal of democracy."
- 1944 Fluoride is added to the drinking water of Grand Rapids, Michigan and Newburgh, New York, in an experiment to determine the practicability of mass protection against dental caries.
- 1945 The atomic bombs are dropped. VJ Day signals an end to the war. Winston Churchill, newly voted out of office, tells a college group in Fulton, Missouri, "An Iron Curtain has descended across the [European] continent." The United Nations charter is signed in San Francisco.
- 1946 The baby boom begins.
- 1950 The Korean Conflict begins, an ambiguous enterprise that ultimately inspires the long running television series *M\*A\*S\*H*. Four million TV sets are sold.
- 1952 Vice presidential candidate Richard Nixon revives his sagging political image with a televised speech defending his accepting the gift of a dog named Checkers.



## LEGACY OF SERVICE

With precious little capital and few resources, Dean McDowell had accomplished astounding things. Under his watchful eye the only independent dental school in America had emerged from the roar of the twenties intact and resilient, efficient and proud. With the likes of oral surgeon Sanford Moose and chemistry professor Ingo Hackh, the college's top flight faculty had reinvigorated its reputation for the excellent clinical training of its students, and its innovative alumni association produced an unusual continuing education program for its graduates. In a special 1950 mid-century issue of the *Journal of the American Dental Association*, McDowell would be singled out as the embodiment of fifty years of dental progress in California. The College of Physicians and Surgeons of San Francisco was shocked when McDowell, still young and energetic, suddenly died in 1938.

Ernest G. Sloman '21, McDowell's longtime colleague and fellow board member, assumed the deanship. Dean Sloman, a San Francisco native, was born in 1895, the year before P&S was founded. He did not share his predecessor's quiet reserve. Outgoing and gregarious, Sloman was a notable story teller and raconteur; his portly profile and commanding presence invited Churchillian comparisons. He was an avid golfer and enthusiastic bridge player. As a teacher, Sloman had an intuitive knack for achieving rapport with his protégés. He often invited students for a game of poker, where he would reveal both his gallantry and a flair for flourish: when the students lost he made them write checks out to him, which he never cashed.

In fact, where Sloman most closely resembled McDowell was in the latter's famous loyalty to the school and a fierce dedication to its students and graduates. When Dr. Arthur Molinari '23, for example, was a new graduate in San Francisco's North Beach, that neighborhood had yet to become a trendy mecca for literary types and tourists. Molinari often saw his blue collar patients in the evenings after their work days were over. Once, late at night, he had trouble extracting a tooth. The lingual root of an upper premolar had snapped off, remaining stubbornly wedged in bone. The patient remained stubbornly in the chair, insisting on its removal. Molinari called Sloman, who was asleep. "You told me," Molinari began apologetically, "that if I ever got in trouble to call you. Well, I'm in trouble." Sloman put his clothes on and took a cab to the school to fetch the tray of sterile instruments he kept in his office. Arriving at Molinari's office sometime after 11 p.m., Sloman operated until midnight



Ernest G. Sloman, Dean  
1938-1951.

Sloman



## LEGACY OF SERVICE



Yearbook photo, 1946, titled "Dark Horse Harry pulls a Paul Revere."

and extracted the recalcitrant root tip for his former student. Bolstered by such a show of support, Molinari went on to practice in the same office for sixty-five years before retiring in 1987. Sloman, waving away grateful, embarrassed offers of a fee, hailed a cab and went back to bed.

With such energy, charm, and a problem solver's willingness to confront inconvenient turns of events, it was no wonder that Sloman acquired a golden reputation as conciliator. In 1935, Morris Fishbein, the influential editor of the *Journal of the American Medical Association*, spoke in Oakland to the California Dental Association on what *Time* magazine would call one of his "terrible-tempered crusades against quacks." Railing against medical advertising, Fishbein called for a California law to control the advertising of "charlatans, quacks, and Painless Parkers." Edgar Randolph "Painless" Parker, who was then living in the Bay Area, promptly filed a slander suit against Fishbein in the San Francisco superior court. Fishbein retained legal counsel, and called Ernest Sloman.

Fishbein was concerned that Parker's suit would jeopardize the public's confidence in medicine by giving the famous showboating dental advertiser a public platform to complain about mainstream dentistry. Sloman, a CDA past president, agreed to help. Bypassing the attorneys, Sloman contacted Parker directly, and asked him as a personal favor to drop the suit. And, immediately sending back a note that read, "I concur in your courteous suggestion," Painless Parker did.

Certainly Fishbein and Parker both would have recognized Sloman's reputation as a scrupulous and impartial researcher. Well-known and respected in medical as well as dental circles, Sloman was an accomplished anatomist who contributed for years to the standard medical text *Gray's Anatomy*. Prior textbooks had shown an incorrect course for the buccal nerve, the branch of the mandibular that supplies cheek mucosa and the posterior buccal gingiva. Sloman's dissections established a more accurate position. His studies on trigeminal anatomy and anesthesia, and particularly his description of the buccinator nerve, were widely recognized.

Sloman's research interests and educational duties required uncommon measures. Every so often the school needed a fresh supply of a vital teaching aid that couldn't be ordered through the supply house detail men. So Dean Sloman would climb into

## LEGACY OF SERVICE

the school station wagon and drive north into the gentle green hills of the California wine country. Pulling up to the Napa County state hospital, he would flatten out the back seat and with the help of white coated attendants reap a grim harvest—a car load of human bodies.

The Belgian Andreas Vesalius was the 16th century father of anatomy. Modern medical history is said to begin with his text, *De humanis corporis fabrica* (On the Structure of the Human Body), written from his own human dissections. Surgeon Richard Selzer, in his 1987 book of essays *Mortal Lessons*, describes the picture hanging in a medical school of Vesalius at work: "He is driven by a dark desire. To see, to feel, to discover is all."

The ancient speculations about the workings of the body gave way to observation and understanding, but such discovery came with a price. Here was a pressing demand with an uncertain supply. Where would the specimens come from? The drive to dissect once made anatomy synonymous with skullduggery. Nineteenth century England was famous for its resurrection men, the grave robbers who grabbed corpses out of morgues and cemeteries to sell to desperate medical schools.

Sloman had his own, tidier solution. He had arranged with the hospital directors to have the remains of patients who died unclaimed donated to P&S science. He would bring his cache straight to the school. The third floor was devoted to basic sciences, including chemistry, bacteriology, and anatomy. Through at least the 1930s, the school's anatomical specimens were prepared on site. To one side of the dissecting area was a spotless, tiled embalming room. Sloman would hoist the cadavers up with big ice tongs clamped to their heads to drain the blood, and then immerse them in vats of formaldehyde for preservation. Although the windows were blacked out and usually kept tightly closed, on one hot and sultry day a window was thrown open in hopes of catching a breeze. A passing visitor on a tour of the school glanced across the way, and fainted at the shocking sight of a cadaver hanging from the ceiling.

P&S enjoyed a veritable culture of cadavers. Early classes had their group photographs taken with a cadaver or two propped upright, dressed, and posed casually among the classmates. The students penned poems to their specimens, speculating on who they might have been in life and imagining conversations with them. A 1920



Seniors dress for class, 1940 Chips.



## LEGACY OF SERVICE

The anatomy lab, with its  
cache of bodies, neat rows of  
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graveyard risen from the soil,  
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photograph in *Chips* shows a student dancing with his cadaver over the caption "A pair of stiff's."

The unsettling closeness to death endured by young students involved in anatomy lessons inevitably results in horseplay. Perhaps the intensity of the experience requires some neutralizing mechanism. University of Utah folklore professor Jan Harold Brunvald, in his 1989 anthology of urban legends *Curses! Broiled Again!*, recounts an apocryphal tale of modern body snatchers, medical students who remove an arm from a cadaver in their anatomy lab. They attach a quarter to the hand and set out on the highway. Coming to a toll booth, they extend the arm out the window. The startled toll taker then finds himself holding the gruesome arm as well as the coin as the car speeds away. Following the story from St. Louis to Boston, Brunvald traced it to San Francisco, where it reportedly stemmed from a real occurrence at another dental school.

At P&S the shenanigans apparently remained inside the building. The freshman class of 1937 once tried to trap the sophomores in their lecture hall by stacking cadavers against the door. But perhaps the most famous target of student anatomical hijinks was Jackson, the school janitor.

It was generally known that Jackson was nervous about his cleaning duties on the third floor. The lab, with its cache of bodies, neat rows of rigid human outlines laid out under sheets like an entire graveyard risen from the soil, had an especially eerie ambience in the dead of night. One year, the students couldn't resist a prank. With a lookout posted for the arrival of the unsuspecting custodian, they assembled one evening after classes and prepared the scene. A steely nerved undergraduate reclined on a vacated dissection table and had a drape arranged over him.

The janitor climbed the stairs, singing softly to himself. He stepped into the room, and began to work, methodically and self-consciously, amid the tense, terrible silence of the covered mounds. It was show time. Suddenly, the counterfeit cadaver rose up on his table, moaning as the shroud slipped to the floor. Poor Jackson started, and for an instant stood transfixed in horror as his wildest nightmare came to life before his eyes. Then with a convulsive, gut-wrenching scream he spun around and burst out of the room. He would never set foot in the lab again. The next morning, arriving stu-

## LEGACY OF SERVICE

dents discovered the door to the anatomy lab leaning against the wall. It had been torn completely off its hinges.

Dean Sloman took such disturbances in stride. Indeed, one of the dean's greatest native assets was his unflappable cheerfulness. "Perhaps, yes, certainly the most important lesson we learned from our devastating experience of the early thirties," he wrote of the nation's struggle through the depression, "was that man's age old apprehension that his consumption of the necessities of life may exceed his productive capacities is to be a groundless fear hereafter." America's struggles, as it would turn out, were far from over. In fact, they were just changing course. In 1938 the winds of war were just beginning to blow. A *Contact Point* editorial fretted that "the future of our race, it seems, is dependent upon the whims of but a handful of men." The dean would need all the optimism he could muster for the years that lay ahead.

As Hitler rose to power in Germany, other observers less sanguine than Sloman also contemplated the future of humanity. Anthropologist Ernest A. Hooton saw it in terms of teeth. In his 1937 book, *Apes, Men and Morons*, Hooton wrote: "I firmly believe that the health of humanity is at stake, and that unless steps are taken to discover preventives of tooth infection and correctives of dental deformation, the course of human evolution will lead downward to extinction."

Hooton's fears were to become justified in a way he couldn't have predicted. Inevitably, on December 7, 1941, the bombs fell at Pearl Harbor. With newspaper headlines screaming above photos of smoldering wreckage, the United States declared war. In the rush to mobilize, however, government officials were shocked to find that many of the people they tried to put into uniform flunked their physicals. The reason was not bad backs or weak hearts. It was teeth. "Dental defects" topped the list for rejecting military recruits. Selective Service regulations required the nation's draftees to have at least six opposing teeth in each jaw, meaning only three sets of matching incisors and three pairs of posterior teeth. Some ten percent—by some counts double that—couldn't qualify.

It became obvious to everyone from the Surgeon General to the local draft boards that dentists also would be needed to fight the war. But because of dentistry's development and subsequent tougher entrance requirements for dental schools, and doubt-



National Lampoon cartoon illustrating the World War II-era military emphasis on dental health.



## LEGACY OF SERVICE

less abetted by the economic sluggishness of the depression, the population of dentists in the United States in 1939 had decreased by 8,000 since the boom of the 1920s.

As the nation committed itself to a second world war, Dean Sloman committed the school to support the war effort. "This year, nineteen hundred forty two," he announced, "finds a group of young men, highly trained in a special branch of the healing arts ready to take its place in a world vastly changed during the past six years. Our government has seen fit to grant deferments from conscription to this group—looking ahead to the time it could call upon it to fulfill a vital need. The time has come—the need is great. Our work is well defined—the maintenance of the dental health of the armed forces of our nation. As a group we stand ready to meet this obligation, setting aside our well laid plans of a few short years ago."

In July 1942, the school converted to a four-quarter, year-round, three-year program, with new classes entering in July instead of September to supply the American military with the dentists it needed to fight the war. "Dentistry and dental education are just beginning the greatest task we have ever contemplated. We must recover the salvageable men lost through dental neglect," Sloman vowed. "[We must have] healthy soldiers and a healthy people providing the wherewithal to fight. If one dentist rehabilitates one rejectee a month for one year he will have served his nation twelve times better than he could have by shouldering a gun." The accelerated curriculum produced two graduating classes in 1944, the four-year program designated the class of 1944A, and the three-year class of 1944B.

In 1943 and 1944 P&S itself was drafted, as Army Specialized Training Unit 3932. One hundred fifty-eight out of the one hundred-sixty dental students enrolled at the college accepted Army and Navy Commissions. Military officers even took up residence in the building.

Students were inducted as privates with the promise of officers' commissions on graduation. Academic instruction was mingled with military classes and drills. "Whatever effect uniforms and military discipline may have on our students of dentistry, we hope they will never forget for one moment that they are members of our institution, one of that great triad of Faculty, Alumni, and Students, a member of one of which we shall ever be," *Contact Point* cautioned in June 1943. "It is still our school, our alma

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## LEGACY OF SERVICE

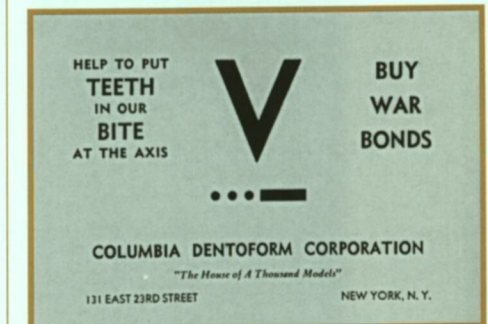
mater, and we shall revere her just as loyally, and feel as much one of her family, whether we wear the plain clothes of the civilian or the blue or khaki of Uncle Sam."

Amid the strangeness and stress of the rapidly shifting circumstances, anecdotes abounded about dentistry at the front lines. A popular wartime story told of a dentist about to remove a tooth while under siege. When the dentist and patient hear the whine of a falling bomb, the patient raises his hand. "Stop," he says. "It may not be necessary."

Although a surprising amount of treatment was rendered on the battlefields, by 1943 the dean was worried about the war's impact on the quality of dental care. "Our graduates, during the last decade or more, have been educated in comprehension and trained in ability to render kinds of dental services for which there can be little call in military life," he wrote. "The danger ahead for these and for dentistry is in the likelihood of forgetting concepts and techniques not usable in the war effort. The tremendous backlog of dental defects created by traditional neglect and tremendously aggravated by a costly depression makes it impossible for the dentists of the military forces, even with the highly desirable ratio of one dentist to five hundred enlisted men, to render services other than those that can be performed with necessary regard for time."

While dentists in the military faced a dilemma—how to adequately treat all the soldiers in their care without compromising their standards—their civilian counterparts faced a bonanza. How would they have time to see all those patients? Back home, dentists and patients alike felt the pressure to do their part. A 1944 *Contact Point* advertisement profiled a girl at State Teachers College in Whitewater, Wisconsin, who sold enough hogs and poultry to buy \$1,400 worth of war bonds. "That's enough to buy 70,000 .45 caliber cartridges!" proclaimed the copy. "How is your bond buying record?"

Many military dentists in World War II ended up pursuing conspicuously non-dental tasks. Dentists served as medical officers, communications officers, electrician's, and quartermasters, and even captained boats. "The lay public is quite surprised to learn that commandos and rangers have dentists in their units, as also do the paratroops," pointed out *Contact Point*, "although they do not plan on immediately placing Class II



V is for victory in this advertisement for war bonds from the 1943 *Chips*.



## LEGACY OF SERVICE

amalgams on landing on enemy territory. As our local shopkeepers constantly remind us—this is war.”

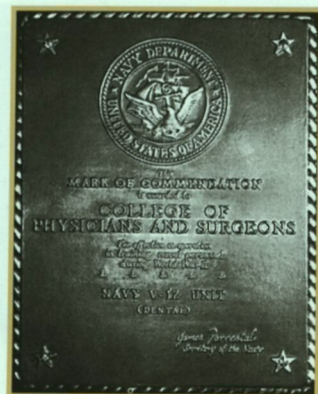
Even though perhaps not able to fully perform the functions for which they were formally trained, in war the American dentists held their own. Military dental historian Irene Bober-Moken documents that fifty-three U.S. military dentists, for example, were captured in the first six months of the Pacific war. Eight were subjected to the Bataan Death March in the Philippines. Many were held for the duration of the war in the Cabanatuan prisoner of war camp.

The other POWs at Cabanatuan, on the orders of their senior officers, went to their dentists. Although one dedicated officer managed to floss by meticulously unraveling threads from his clothes, most men had no recourse to such oral hygiene amenities as toothbrushes. Cleanings were in great demand. Using handmade wooden chairs with adjustable headrests and handmade instruments, and writing their records on the reverse side of labels peeled from six-ounce evaporated milk cans, POW dentists logged over fifty-thousand appointments in thirty-three months.

Conditions were bleak. Surgical instruments were boiled in the kitchen only once a day. Nevertheless, the camp dental officers displayed tremendous ingenuity. At least one dental engine was fashioned from purloined sewing machine parts and powered by an enlisted man pumping a foot treadle. Amalgams were made by mixing mercury raided from syphilis medications in the medical supplies—mercuric chloride powder heated in mess kits with fifty percent hydrochloric acid yielded a usable form of the liquid metal—with shavings from smuggled silver coins. Some of the resulting makeshift restorations, monitored after the war, lasted well into the 1980s.

Ultimately, the dentist in World War II emerged as a popular symbol of power. Various cartoons and illustrations circulated through the military and around the nation, showing the American GI as a dentist pulling the teeth of cowering Axis soldiers. The Allies would prevail, and so would their dentists.

Then the troops finally came home, and a jubilant United States, again triumphant among the nations of the world, was ready to celebrate what *Time* magazine publisher Henry Luce called “The American Century.” During the war years, over one and a



World War II P&S commemorative plaque, U.S. Navy.

## LEGACY OF SERVICE

half million servicemen poured into and out of San Francisco. When the war ended most of the five hundred thousand workers and soldiers who had moved to northern California to support the military industrial complex stayed. The country, and the city, were primed for progress. The fifties really began in 1945.

Across America, dentistry became a public health priority. Shocked at the revelation of poor oral conditions among military conscripts, officials prepared to conduct a vigorous effort to improve the nation's dental health. The U.S. Public Health Service began experimenting with a new idea for reducing caries in the population—water fluoridation. The early 20th century research efforts of Colorado dentist Frederick S. McKay, who traced the mottled, caries resistant teeth of his patients to heavy fluoride consumption, were taken up by H. Trendley Dean of the National Institute of Health.

Dean studied two pairs of communities, Grand Rapids and Muskegon, Michigan, and Newburgh and Kingston, New York. Grand Rapids and Newburgh had fluoride added to city water supplies, while Muskegon and Kingston were to be the control groups. The results were spectacular. In the fluoridated communities the incidence of dental decay among children was reduced to half of that in non-fluoridated areas. Michigan soon lost its control site when Muskegon also decided to fluoridate.

Back in California, at P&S Dean Sloman likewise was encouraging research. Studies on toothbrush abrasion were launched and grants received for an investigation by Dr. Charles Scrivener that sought to introduce organisms into saliva that would inhibit the bugs associated with tooth decay. Drs. Henry Leicester and Paul Thomassen mounted a search for other elements that might be introduced into the apatite lattice of tooth structure, replacing calcium ions to render it more resistant to decay. (Beryllium seemed very promising at one point, but was later discarded because of its toxicity.) P&S oral surgeon Dr. Edward Lattig pioneered the use of movies, particularly through his dazzling mastery of close-up photography, to teach clinical techniques.

Clinical dentistry was also becoming more sophisticated. Only recently independent of operative dentistry, the new specialty of pediatric dentistry had a champion in Dr. Charles O. Sweet. The high-minded and meticulous Sweet had combed the nation for ideas on how to train dentists for children. And he successfully wrote the grants to pay for them. When P&S opened a new department of pedodontics under his direc-



Under the direction of Charles O. "Pop" Sweet, P&S opens its new department of pedodontics in 1949.



## LEGACY OF SERVICE



A portrait of repose: students hang out at the neighborhood coffee shop in this 1949 *Chips* photo titled, "where our money goes."

tion in 1949, it also included preventive and interceptive orthodontics and the treatment of handicapped and medically compromised children.

The economy was now booming again, and there still weren't enough dentists in the country. A 1945 study by economist Melvin Dollar estimated that the current number of dentists could only treat half of the dental problems occurring per year. For its part, P&S couldn't keep up with the demands of the public and its students. In 1948 more than eight hundred students applied for fifty new slots at the school. On a shoestring budget, Sloman purchased a lot behind the school building and moved four Navy surplus metal prefabricated hospital units—Quonset huts—on site to house clinics and offices.

In his 1960 book *The Evolution of Dental Education*, John Gurley identified three levels in modern American dental development. The first, whose beginning Gurley identified about 1880, he called the Repair Era. It was Dr. Boxton's era, and was characterized by an emphasis on the relief of acute pain and the repair and replacement of teeth. The second was the Control Era, beginning around 1920. That was Dr. McDowell's time and was marked by the development of the scientific method and the introduction of "inanimate sciences" such as chemistry to dental school curricula. The third level of dental development, heralded by the integration of life sciences into dental education and a broad emphasis on health service and the care of children, was the Preventive Era. Its 1950 advent corresponded neatly to Dr. Sloman's tenure at P&S.

Sloman himself might have named it the Awareness Era. In 1951 he wrote to the graduating class, "As you take your places in your communities remember the sacrifices—aside from your own and those of your family—that have been made for you. Resolve now that you will repay these in terms of service to your fellow man and to the profession of which you are now a part. And resolve, too, that you will not fall behind in the rapid advancement of your chosen profession."

The one situation of which Sloman was perpetually aware was the school's independent status. The lack of a university parent was constantly on his mind. Throughout his career as mentor to the reorganized school, merger mania, as one observer put it, was the order of the day. True to the old Carnegie Foundation's recommendation, Sloman had pinned his professional hopes for the school to merging with Stanford.

## LEGACY OF SERVICE

With the weight of his considerable credentials, including the presidency of the American Association of Dental Schools (the very institution that had threatened to close the school in 1923), an honorary Doctor of Science degree from the University of Southern California, a position on the Board of Governors of the Commonwealth Club of California, and finally an appointment as the only dentist on Harry S. Truman's 1951 Commission on the Health Needs of the Nation, he was certainly the perfect emissary. Sloman poured his considerable energy into the project.

There were limited victories. Sloman succeeded in achieving some integration between the schools, appointing teachers at Stanford to professorships at P&S and winning assignments for dental faculty at the medical school. Sloman himself was a lecturer in surgery at Stanford Medical School from 1941 until his death. The Stanford University board of governors ran variously hot and cold over the years and finally seemed about to approve the merger. Then Dean Sloman died.

Even with all of Ernest Sloman's distinguished history of research and administration, his most enduring legacy to the school was something more personal: a sense of P&S as family. "His everlasting understanding of student problems made for him a place in the hearts of all grads," read his *Chips* obituary. "A professional problem could be solved if only they could take it to 'Uncle Ernie.'" Sloman himself provided what could be his own epitaph, when he told the graduating seniors in 1951, "Give your best impulse the widest possible latitude."



Under Sloman, research blossoms at P&S. Photo from 1948 *Chips*.



## • DENTISTS AT WAR •

The Marquis de Lafayette was not the only significant French volunteer in George Washington's camp. Two dentists played a part as well. Jacques Le Mayeur emigrated to serve as Washington's dentist during the American Revolution, and Jacques Gardette, who went on to help establish dentistry's preeminence in America by publishing the first scientific dental article, volunteered as a surgeon with the infant American navy. But it wasn't until 1844 that Washington D.C. dentist Edward Maynard, who also invented the Maynard rifle, first suggested that dentists formally serve with the nation's military. St. Louis practitioner Henry J.B. McKellops petitioned Congress in 1858 to provide for dental services in the military. During the Civil War, although the South regularly assigned dentists as medical surgeons to hospitals and combat regiments, such appointments were unofficial. By war's end, neither the Union nor the Confederate armies had made any provision for dentists.

Ironically, at the same time the vicissitudes of war gave dentistry a status boost. The U.S. government's incessant search for new sources of revenue for the war machine in the 1860s increased the pressures on many dentists. Excise taxes were levied, and dentists

had to take out a license costing ten dollars. Some tax collectors insisted that the preparation of dentures was a manufacturing operation instead of a service and tried to collect an additional ten dollar fee, plus a three percent assessment on the value of the output. A ruling obtained by local dentists from the Philadelphia Collector that dentistry provides services, not products, and hence was not subject to additional taxes, was an important victory for the establishment of dentistry as a profession.

But it took until 1901 to establish the first Dental Army Corps, which consisted of thirty contract dentists without rank who were attached to the Medical Corps. In 1906 the ADA formed a Committee on Army and Navy Dental Legislation to improve the status of military dentistry. In 1911, congressional legislation led to the founding of the Dental Corps of the Army. Dentists joining the armed forces would receive a lieutenant's commission with regular Army pay, allowances, and retirement benefits. The Navy Dental Corps was created by an act of Congress in 1912.

By June 1915 more than 5,000 dentists were commissioned in the Army Reserve Corps. The National

Defense Act of 1916 permitted dentist promotions to captain and major. The next year a Dentists Bill was passed by Congress granting dental students the same exemptions allowed medical students. Soon thereafter the War Department drew up plans for a full complement of military dental surgeons. A Student Army and Navy Training Corps would be conducted at all dental schools approved by the Surgeon General.

World War I proved to be a productive testing ground for dental officers. The western front was even the setting for a dentist's development of a new medical specialty. Varaztad Kazanjian was head of Harvard Dental School's prosthetic laboratory when he was named chief dental officer to a Harvard medical unit organized in 1915 to care for casualties of the British Expeditionary Forces. Kazanjian arrived in France to discover that battle inflicted facial wounds were routinely left untreated.

Combining his interest in dental and maxillofacial prosthetics with new surgical reconstructive techniques on facial wound patients, Kazanjian eventually treated 3,000 cases—and emerged from the war to be hailed as the father of modern plastic surgery.



World War II brought new worries about providing enough dentists for both soldiers and civilians. Various schools were asked, as was P&S, to accelerate their curriculums. Programs were also instituted, called the Army Specialized Training Program (ASTP) and in the Navy, the V-12 Program, to allow dental students to be inducted as enlisted personnel with the assurance of commissions on graduation.

In recent times, one of the latest military dentists to serve a U.S. Commander-in-Chief is a UOP graduate: Naval officer Boyd Robinson '76 was President George Bush's personal dentist.





1 2 3 4 5 6

CHAPTER

1952-1968

## EXPANSION & SOLIDIFICATION



Sustained by the vision and energy of its alumni, the school renews itself—P&S finds both its university and a brand new building.



## 1952 THROUGH 1968

- 1953 Jonas Salk announces a vaccine for polio.
- 1954 San Francisco International Airport opens.
- 1955 Seamstress Rosa Parks, unwilling to move to the back of an Alabama bus, is arrested. The minister at her church agrees to help. His name is Martin Luther King, Jr.
- 1957 The Beat generation is born when Allen Ginsberg writes poem "Howl," and Jack Kerouac goes "On the Road." Sputnik, the first artificial satellite, is launched by the Soviet Union.
- 1959 Alaska and Hawaii become the 49th and 50th states.
- 1961 JFK inaugural address: "Ask not what your country can do for you—ask what you can do for your country." The Berlin Wall goes up. At the Fairmont Hotel, Tony Bennett first croons the song heard around the world: "I Left My Heart in San Francisco."
- 1963 P&S gets a new school and a new name UOP.
- 1964 Lyndon Johnson launches his "Great Society." Medicare and Medicaid are implemented. The Vietnam war is on. Beatlemania hits America.
- 1966 Ronald Reagan is elected governor of California. A convict named Miranda goes to the Supreme Court to get the right to have his rights read to him.
- 1967 Tune in, turn on, drop out. The San Francisco corners of Haight and Ashbury become a world wide symbol of the hippie movement. Golden Gate Park hosts a mass "Be-In."
- 1968 Baby expert Dr. Spock is convicted of conspiracy to aid draft evasion. The conviction is later overturned.



## EXPANSION & SOLIDIFICATION

The heads turned in the classroom as the instructor silently stepped up to the chalk board. Turning from the expectant faces, he wrote out his identity—to dispel any question of pronunciation—in phonetic code: "Toe-key-knee."

In a simple stroke of the chalk, John J. Tocchini revealed two characteristics, directness and practicality, that would be P&S hallmarks for sixteen years. Born in 1912 in San Mateo, California, Tocchini represented a new breed of San Franciscan, the suburbanite. In keeping with the P&S requirement of two years pre-dental education, he took an associate of arts degree from San Mateo College before enrolling in the dental school.

Tocchini went on to become a well-regarded teacher of restorative dentistry. Called "King John" by his students in tribute to his rigorous attention to detail, he developed an innovative multilayer plaster model molar with yellow dentin to help pre-clinical students negotiate the cementoenamel junction when practicing tooth preparations. In 1948, the yearbook dedication to him read, "For the past nine years, the students of the College of Physicians and Surgeons have sought guidance and helpful advice from Dr. John Tocchini both in personal and scholastic matters. Too few students realize what patience and understanding are required of a faculty member. We... will long remember and cherish the good times and laughs, worries and sorrows that we shared with him."

The post-war years were conservative and conventional, embodied by the ubiquitous man in the gray flannel suit. In 1956 William Whyte would write *The Organization Man*, examining the peculiar American penchant to conform. For dentistry, however, the times would yield distinctly non-conformist innovations. In 1955, Michael Buonocore would develop acid etching for adhesion in restorative dentistry. In 1967, composite resins would make their debut.

"Although we assume ourselves to be a people possessed of unusual opportunities for leisure, we are actually occupied in more and more work," observed theater critic Walter Kerr in his 1962 book *The Decline of Pleasure*. "It's almost as if the twentieth century has been engaged in a long struggle to produce a new kind of man—a man whose sole concern should be his useful work."



John J. Tocchini, Dean  
1952-1968.



## EXPANSION & SOLIDIFICATION



Signs of the times: bobby socks  
and saddle shoes.

By 1952 Tocchini, a passionate sailor, found that his leisure actually was becoming his work. Busily exploring a new direction in which to channel his creative urges, he contracted with a nautical architect to design and construct a new ocean going power boat. The project engulfed him, and he cut back on his school activities and slashed his private practice to half time to focus his energies on building the boat. Dean Sloman gave up trying to recruit him to the full-time faculty.

The same year, Tocchini watched from an Alameda shipyard as Fred West, one of the original members of the P&S Board of Trustees, stepped in to serve as acting dean until a search committee selected a permanent replacement. Frank Inskipp was its choice. Inskipp, who was born in England, came to the U.S. in 1925. Graduating from P&S in 1931, he had stayed on as a part-time faculty member and had served as secretary of the faculty since 1938.

Inskipp was the long time editor of *Contact Point* and co-author with Harry True of a text book on operative dentistry. Called "efi" because of the way he signed his initials in the students' unit books, Inskipp was by all accounts humble and hardworking, formal, exacting, and a perfectionist. He was also admired as a model professional and gentleman who had great warmth for his undergraduates. "As our students enter the college as freshmen," Inskipp wrote in the January 1953 issue of *Contact Point*, "they become junior members of the family which is C.P.&S." But in 1953, unexpectedly, Dean Inskipp was dead, the third P&S dean in a row to give his life prematurely for his school.

This time, West called Tocchini. "We want you back at the school," the acting dean said. "Think about it." Tocchini thought about it through the summer. Who would want him as dean, anyway? And why should he give up his romance with ocean spray and the tangy salt air for a desk job, and a grueling one at that? "When can you start?" pressed Dr. West, in a series of phone conversations that would pull the candidate away from the sawdust and lacquer of the shipwrights again and again. School loyalty finally won out. "I'm launching my boat on Labor Day," Tocchini replied. "Then I'll be ready."

In one of his first messages to the alumni in the fall of 1953, Dean Tocchini joked, "We have lost two great leaders in the last two years because of a heart condition... [now] the board [has] selected a younger and comparatively unknown man to be your dean. I suspect I was chosen because I've been told I don't have a heart..."

## EXPANSION & SOLIDIFICATION

More likely, the new dean was chosen not only because he could run a tight ship, but because he could also build one. Tocchini noted that in 1923 Dean McDowell had identified three goals for the college. The first was to make it the equal of any dental school in the country. The second was to move to a modern building, and the third to bring about a university affiliation.

The first goal was quickly achieved; by 1926 the newly reorganized school had been awarded full accreditation. The other two, however, decades later still were not accomplished. Tough and flinty, Tocchini would be single-minded in his pursuit of bringing to fruition the dental school's thirty-year dream. "What are your plans now?" asked West soon after Tocchini was back at school. "The first thing we need to do," growled Tocchini, "is get out of this barn and into a new school. Give me ten years." The quest would take thirteen.

Tocchini visited Stanford to check on the old ties. Dean Sloman had been a good friend and card playing partner of the former medical school dean. However, the present university administration seemed aloof. The medical school itself was in a state of flux. It was located in San Francisco, on Sacramento Street, between Buchanan and Webster. But in a move to consolidate, the Stanford medical school's university overseers in 1957 called for it to join the mother campus down the peninsula in Palo Alto.

So when Dean Tocchini went calling, he discovered that Stanford considered its medical school to be a serious drain on university finances. Officials were still wary of taking on an additional burden. The monetary demands that Stanford placed on the dental school to capitalize the merger reached as high as five million dollars. And the talk in the Palo Alto boardrooms of changing P&S from a teaching institution to primarily a research one with reduced class sizes and clinic activity left the dental school's trustees shifting uneasily in their sturdy oak chairs.

Moreover, Tocchini suspected that the ongoing, stalemated negotiations had actually served as a convenient device to keep dental accreditation authorities at bay. As long as the school was working towards affiliation with a university, the Gies Report watchdogs who urged the closure of independent dental colleges could be placated. Even back in 1934, Edwin W. Shultz, MD, a Stanford medical school professor of



Drill and fill—this 1954 handpiece  
ad fits the bill.



## EXPANSION & SOLIDIFICATION

As the only independent  
dental school left in America,  
P&S had become something of a  
legend. Articles appeared  
around the country extolling "the  
school that refused to die".

bacteriology, had said as much in a speech to the P&S Alumni Association: "You have caught the vision of the men in whose hands the destiny of your School has been placed and you share with them a high ideal, an ideal which leaves much for all of us to do. The obstacles are real, but not insurmountable. After all, the value of an ideal lies in striving for it. It is not the arriving but the going that counts. It is not becoming affiliated with Stanford, but the trying to become affiliated that may do the School the most good."

In the end, handing over money to Stanford, to anybody, proved untenable. The school couldn't afford to buy a university. Although a merger endowment fund scratched together by alumni yielded several million dollars, Tocchini had discovered on assuming the deanship that the school was running a deficit of \$646 per student per year. He concluded that P&S would have to forge ahead without Stanford's umbrella. The dean explained his decision to the alumni in 1958: "Private educational institutions are like human beings. They have a personality, heart, traditions, and roots that grow deep. They are born in sacrifice, grow strong or weak, and sometimes die a natural death. We are not business organizations first and educational organizations second, rather we are just the opposite."

As the only independent dental school left in America, P&S had become something of a legend. The nation's dental establishment was eyeing San Francisco's College of Physicians and Surgeons with more and more curiosity. Trustee B.C. Kingsbury, who became ADA president, crisscrossed the country bragging about his school. Articles appeared in various dental journals around the country, extolling the uniqueness of "the school that refused to die."

In fact, the school couldn't be more alive. P&S was one of the top five schools in national board examination scores. "It can be said without reservation," Tocchini declared to the alumni, "that CP&S will not lose its national prominence." The school again raised the pre-dental ante for entering students, now requiring a minimum of three years of outside liberal arts college education before matriculating in dental school. P&S had become for the most part a post-baccalaureate institution. Of two hundred-twelve students enrolled in 1953, one hundred-fifty had bachelor's degrees.

At first glance, the school was an unlikely bastion of high academic standards. The old

## EXPANSION & SOLIDIFICATION

Fourteenth Street building, a creaky wooden structure thrown up in the aftermath of the 1906 earthquake, was a shambles. It was a fire hazard. There was no running water upstairs. Students joked that the building was so feeble, the only thing holding it together must be a group of termites holding hands. Tocchini himself attributed the building's resistance to collapse to "bailing wire and the ingenuity of [maintenance man] Walt Morrison."

Nevertheless, among entering students the school remained wildly popular. Applications were as high as ever. There were two very compelling reasons why. The first centered on P&S's emphasis on practicality and its long-standing reputation for clinical excellence. P&S taught its students how to be successful practitioners. The second reason resulted from the first: fostering an intense pride, P&S graduates went out into the world and talked up their school.

"It is positively amazing," Fred West wrote bluntly in 1953, "how our overcrowded, overpopulated and poorly equipped school attracts our graduates and the graduates of other schools to return and give of their time, knowledge, patience, energies, and good will just to help Physicians and Surgeons. This is the one crowning feature that we possess that our eastern friends, members of school investigating committees on the Council of Dental Education, and other well wishers could never understand. Our loyalty, enthusiasm and devotion to an ideal, our expenditure of time and money by faculty and alumni alike, our perseverance and stick-to-itiveness has impressed everyone interested and concerned with dental education."

Such perseverance yielded impressive results. In conjunction with Presbyterian Hospital, Tocchini developed a program to care for physically and emotionally handicapped children. In joint training sessions, anesthesiology residents would work with dental students to provide comprehensive care to pediatric patients in a hospital setting. By 1954, the dean had exploited the new medium of television for teaching. With a gift from the alumni association, the school was equipped with a closed circuit television, including a camera, control unit, and three screens for operative and surgical demonstrations. Amazingly, even students in the back row of a lecture hall could see the details of patient treatment.

Such progressive technology, of course, was served with sensible doses of sagacity. In



"Cuspid Corner:" a student makes his purchase at the school store.



## EXPANSION & SOLIDIFICATION



Out with the old: the corner of Fourteenth and Mission streets.

1961, the legendary Harry True retired on his 80th birthday. In the 33 years of his tenure as operative instructor, he had maintained a singular tradition. He required all P&S students passing under his tutelage to memorize a list of maxims known as "Truisms." Then, law school-style, True would randomly call on students in his lectures, without warning, to repeat in front of the class one of the wise sayings. Sample Truisms: *It is not good enough until it is the best I can do. One cannot repeat too often that which has not been learned. Only those who have the patience to do simple things perfectly will acquire the skill to do difficult things easily. Failure begins only when one gives up trying to succeed. Human progress marches on only when children (students) excel their parents (teachers). The difficult things of today become commonplace tomorrow.*

That one of the school's own difficulties had become commonplace, however, rendered it no less difficult. No amount of technology or passionate teaching could obscure the glaring need for the building to be replaced. "Our institution has reached a point that in order for it to survive it must think in terms of enlarging its physical facilities to take care of the present demands and future increased demands that are brought upon it to educate young people in the dental health sciences," Tocchini wrote in 1958.

But where would the money for a new school come from? As a private school, P&S had no recourse to public education funds. Since 1896, there was really only one source of support—the school's own people. In a 1958 speech to the alumni, Dr. West quoted from the 1901 yearbook: "The most sanguine hopes of the most sanguine men did not count on more than thirty students during the first term, and many of those interested expected to be called upon to contribute from their own pockets the moneys necessary to conduct successfully the enterprise."

In 1959 Tocchini spelled out the school's financial hopes plainly: "Love of the Alma Mater is a true love and the graduate has a deep spiritual feeling for the school and will not think less of the school should she experience economic difficulty. Actually, when the school stands in need there will always be the alumni and the teachers who will close ranks solidly behind the school and generously pump life-giving fluids into her system."

Although the concept of educational fund raising in America probably dates from

## EXPANSION & SOLIDIFICATION

Yale University's 1890 Alumni Fund, P&S's tradition of alumni donations must have evolved independently. The graduates simply always looked after their school. Soon after the first graduates opened their practices in 1897, they began sending in a steady stream of extracted teeth to supply students with the crucial raw materials for learning professional skills. Alumni gave the school equipment, instruments, and textbooks. They kept the college alive with their donated hours of teaching. And most of all, the graduates gave money.

Dean Sloman began a modest library fund asking for alumni contributions. Even before that, alumni had also offered the means to create a continuing education endowment fund, as well as the moneys for a university merger. In 1954, Dean Tocchini seized upon the tradition to make a concerted effort to escape from Fourteenth Street. Calling his idea the "Filling-a-Month Club," he asked graduates to systematically contribute the cost of a restoration towards the building of a new school. The Filling-a-Month Club would grow into a permanent formal fundraising organization, named first the P&S Club, and later, the Pacific Dental Education Foundation.

*We wanted to give something back* is the foundation's motto. Clarence E. "Clancy" Butler '34, the first P&S Club organizing chairman, envisioned a program that would make the crucial difference between the school's surviving and excelling. "We believe," he declared, "our club will provide the support needed to make our alma mater the most outstanding dental school in the nation!" Butler's wife, energetic San Francisco philanthropist GERALYN E. Butler, threw herself into the task of helping build the foundation. In 1968 she inaugurated the annual dinner-dance for contributors that would become the club's hallmark.

In 1960 city officials condemned the Fourteenth Street building. Anticipating its next move, the P&S board of trustees purchased a ten-thousand square foot lot for a new school on the corner of Webster and Sacramento and arranged to lease another adjoining twelve-thousand square feet. The site was across the street from the old Stanford medical school. By 1960 Stanford was gone to Palo Alto. Staffed by many former medical faculty members, the site had become Presbyterian Hospital, then Presbyterian Pacific Medical Center, and still later was renamed California Pacific Medical Center. The P&S Board of Trustees approached the hospital about making the dental school part of the medical center complex.



In with the new: the corner of Webster and Sacramento streets.



## EXPANSION & SOLIDIFICATION

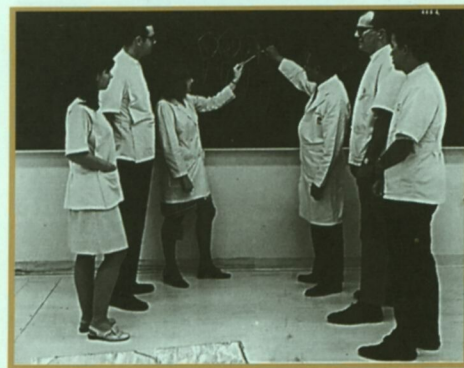
"I am afraid both P&S and Presbyterian were keeping their fingers crossed, their tongues in their cheeks, and whistling lightly to keep their minds off the cost of buildings, equipment, furniture, and maintaining a new dental school," said Fred West in 1967. Nevertheless, the site was fraught with destiny. Stanford's medical school had evolved from the Cooper Medical College, which had been affiliated originally with a small school down the peninsula called the College of the Pacific.

Established just barely after statehood in 1851 by the action of a Methodist Church educational conference, the Santa Clara-based University of the Pacific (renamed College of the Pacific in 1911) was California's first chartered institution of higher learning. The liberal arts college's first degrees were awarded in 1858, the same year it organized the first medical school on the west coast. Later, however, faltering finances prompted Pacific to cede Cooper to Stanford. In 1870, the school moved to San Jose; in 1924, to escape the competitive pressures of the larger University of California and Stanford, and welcomed by a community hoping for such a cultural influence, the school moved farther inland to Stockton.

Robert E. Burns, Pacific's president since 1946, felt his school's manifest destiny envisioned by its founders was to be a full-fledged university. The College of the Pacific already embraced a music conservatory and school of education. In the 1950s, a pharmacy school was opened and the department of engineering had evolved into a separate school in the college. The scales were tipped; in 1961, the college again became University of the Pacific.

The same year, serendipity came full circle. Dr. Burns had become friendly with a fellow Mason, a prominent San Francisco dentist named Francis J. Herz. Dr. Herz was president of the P&S Board of Trustees. The pair discovered they had complementary interests. The UOP president wanted a university of full and diverse breadth. UOP had once had a medical school, and was seriously considering establishing one again. Although a medical program never became feasible for the university, in 1966 it would acquire the McGeorge School of Law in Sacramento. Taking on a dental school seemed like a logical step. And the P&S trustee knew the dental school needed a university. "President Burns appeared as if by magic," Dr. West later recalled.

The P&S trustees huddled. This time their decision didn't take forty years. It hardly



The classroom comes alive as students and faculty gather around the chalkboard.

## EXPANSION & SOLIDIFICATION

took nine months. The opportunity represented the best of all possible worlds—affiliation with a respected university and the ability at the same time, remaining on a separate campus, to maintain a degree of autonomy. And UOP's offer came at the best possible time; since 1959, the ADA's Council on Dental Education had renewed its pressure on P&S to conform. The schools shook hands. In January 1962, the merger was announced. The class of 1963 would become the first to graduate from the University of the Pacific School of Dentistry.

The P&S board of trustees gave up its independence and reorganized itself as a development committee to supervise fund raising for the new Webster Street complex. A past P&S trustee, Harry Hilp, was one of the biggest general contractors in San Francisco. Hilp submitted a very low construction bid. The alumni pledged to raise \$1,000,000 for the new physical plant, which was projected to cost \$5.2 million. The Stockton administration, in turn, promised that two members of the university's board of regents would come always from the dental school. Accordingly, Fred West and Francis Herz were appointed.

However, even when the trustees relinquished their autonomy, the alumni did not. The alumni association, at the urging of alumnus and faculty member Benjamin Reinke, decided not to turn its assets over to University of the Pacific, and remained an entity apart from the school.

On the other hand, university affiliation itself opened a host of doors. The school was now eligible to receive federal aid for its new building. Ironically, what dentistry most feared in the 1930s had been state sponsored medicine. Now another liberal government, in its push to make American medicine ubiquitous, would strike a blow to save the dental school. In 1964, president Lyndon Johnson signed the Fogerty Bill allowing for federal money to match dollar for dollar the costs of constructing new medical educational facilities.

UOP became the first health care school in the nation to build a facility using the new aid-to-education funds. The grant put the school over the top. The new building could be started. The wrecking ball swung on the home of a famous former San Francisco madam on October 9, 1964, and clearing for the construction of the school was underway.

University affiliation opened  
a host of doors. UOP would become  
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## EXPANSION & SOLIDIFICATION



It's excitement in spades as the school digs in at the ground-breaking ceremony for the Webster Street campus, 1965.

'Strategic' was the dean's middle name. The man who was used to juggling administration with inventing (he designed and produced a mobile dental cabinet in 1955 called the Unicab, which became the prototype for later mobile chairside delivery systems) and practice (even as dean, he still saw patients one day a week) rolled up his sleeves to get the school built. Dean Tocchini and assistant dean Dr. Thomas Beare became masters of utility, stretching dollars as proficiently as they cajoled them.

Productivity was the wave of the future the dean was determined to ride on every front. In 1961 the American Council on Education published its Survey of Dentistry which stressed the need for greater practice efficiency. Soon thereafter, the school hired a team of assistants to begin teaching four-handed delivery of care. "It is well documented that the effective utilization of qualified auxiliary personnel, additional operatories, and modern operative procedures will permit a marked increase in the available dental service for more patients," Tocchini wrote in 1964. "In quantitative terms, one dental assistant can increase the patient load by about one-third and two assistants with two operatories may increase the patient service by at least sixty-five percent." The next year Tocchini set up an Academic Enrichment Program to build up the faculty to match the facility. To encourage the school's teachers in excellence in such areas as "research, basic sciences, instructional theory, educational methodology, ethics, and philosophy."

The school hired a director of development, Edward Harris. Harris gave voice to the school's philosophy. "What are the basic characteristics by which our school is set apart from other schools of higher education?" he wrote in 1964. "The School of Dentistry, College of Physicians and Surgeons, University of the Pacific, as its chief occupation, deals with the human intellect in the specific art and science of dentistry, not with the by-product 'success in the marketplace.' We are the custodians of man's accumulated knowledge of dentistry, responsible for extending the best of our heritage to succeeding generations of students and scholars in this healing art. P&S is a center of creative search for that which dentistry does not yet know. In short, schools such as ours represent the highest aspirations of our culture."

In 1965 the ground was broken for new school of dentistry at the corner of Webster and Sacramento Streets. The Class of 1967 was the last to spend all four years in the old building. No longer would students be able to lean out the third-floor windows to

## EXPANSION & SOLIDIFICATION

fling playful projectiles at patrons of Pearl's coffee shop. The new campus was dedicated on May 7, 1967, at the annual UOP Founders' Day observance. It covered some 113,000 square feet of floor space, almost tripling that of the old Fourteenth Street place.

Contributions had been enormous. And not just from alumni; the school had fired the imagination of significant outsiders. P&S faculty member and UCSF graduate Dr. Kenneth Nesbitt had willed \$360,000 for a clinic which would be dedicated to his mother. Dr. George Hollenbeck, a prominent dentist whose research laboratory in dental materials and instruments at P&S was funded by his patient, Howard Hughes, gave the school its famed Atkinson skull collection and donated \$135,000 to the building fund. Clement Street merchant Leslie Jackson gave \$125,000 to the new campus just because he admired the school's "high moral and educational standards."

The new school was finished; the goal was achieved. His boats were still waiting. Retaining his title as professor of pedodontics, Dean Tocchini retired.



The dream becomes concrete as construction on the Webster Street building gets underway.



## • SPEED •

Since the Industrial Revolution, progress has been measured in terms of speed. For the development of dentistry's modern symbol, the handpiece, nothing would be more important.

Until the mid-19th century dental cavities were prepared very slowly. Long, slender burs were often simply twirled between finger and thumb to remove decay. Or, with a motion resembling the primitive contraptions used to start fires, they could be spun around with a vigorous back and forth sawing motion on a small bow. The tedious nuisance of excavation provoked shortcuts. Holes were sometimes filled with just a shrug and a plug of lead or gutta percha, skipping the caries removal altogether.

The promise of speed focused both professional and public attention on the drill. James Morrison took out patents for an engine powered by a foot treadle in 1872. (An electric engine had been introduced in 1868, but it failed commercially, since few offices had electricity.) Morrison's system of pulleys was adapted for drills right up to the end of World War II.

The dental engine made the drill the workhorse of

dentistry. Operative procedures instead of extractions became bread and butter dentistry. Wags dubbed the new restorative routine "drill, fill and bill." Even a century later in 1985, *Time* magazine would write that as a perennial national problem tooth decay still "meant a mouthful of silver for patients, and for dentists a pocketful of gold."

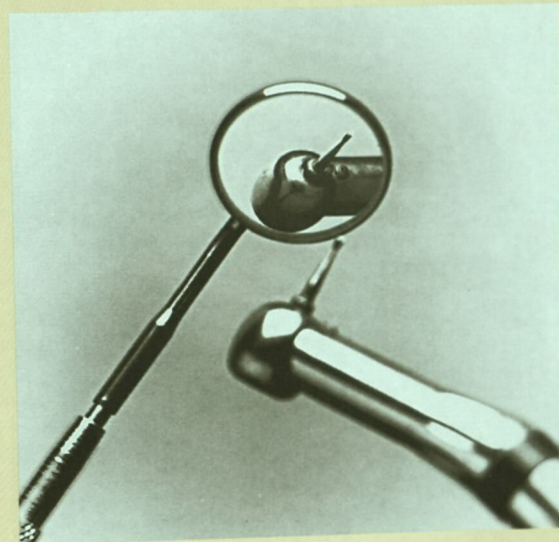
Nevertheless, even with the improved technology, the handpiece was known for its memorable vibrations. In 1897 dental patient Susan Hale described her experience: "He got into my mouth...and drove a lawn-cutting machine up and down my jaws for a couple of hours." Ranted American comedy writer S.J. Perelman, who honed his acerbic skills on slapstick scripts for the Marx Brothers, "[The dentist] snatched up his drill, took a firm purchase on my hair, and teed off. A mixture of sensation roughly comparable to being alternately stilettoed and inflated with a bicycle pump overcame me; two thin wisps of smoke curled slowly from my ears."

In a 1938 poem Odgen Nash offered this constructive interpretation: "And your mouth is like a section of road that is being worked on...and there isn't a nerve

in your head that you aren't being irked on."

The problem was that the average belt-driven, gear angle hand piece in 1938 rumbled along at a speed of only 2,000 rpm. After the war, better cutting diamond and carbide burs came into wider use, which in turn encouraged higher motor speeds. By 1950, 6,500 rpm was the standard for dental hand pieces. Then airplane designers noticed the windmill. The turbines that boosted jets up to mach speeds did the same for dental drills. In 1957, Washington, D.C. dentist John Borden filed a patent for a practical air turbine handpiece, called the Airotor, which utterly changed the pace of the profession. The Airotor, posting bur speeds of 250,000 rpm, was marketed in 1958.

"I must only ask you," says the knowing dentist-philosopher of Gunter Grass's 1970 novel *Local Anesthetic*, "to share my faith in my high-speed drill and in the three hundred fifty thousand rpm provided, with a minimum of noise, by the turbine head of my air drive!"



Among the first to share the faith was P&S assistant clinical professor of operative dentistry Arthur Dugoni. By 1959, he had arranged with the manufacturers to equip the senior amalgam clinic with demonstration units.

"The impact upon the dental profession, and the public acceptance of and demand for increased

speeds has aided in motivating our teaching program," Dugoni explained to *Contact Point* that same year. "However, the prime reason for including increased speeds in undergraduate teaching is the advantage of producing the highest quality dentistry with increased comfort to the patient."





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CHAPTER

1969-1978

## STREAMLINING & SOCIAL CHANGE

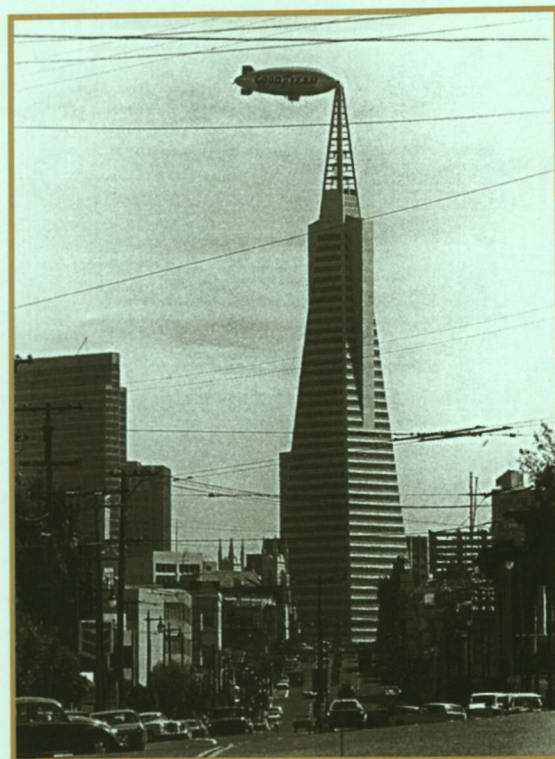


The school defines itself, finds its niche and hones its mission, which is manifest in a daring new educational model: the three year continuous curriculum.



## 1969 THROUGH 1978

- 1969 U.S. Astronaut Neil Armstrong makes "one small step for man, one giant leap for mankind."  
The Woodstock festival is heard around the world.  
S.F. Board of Supervisors President Jack Ertola, son of Dr. Charles Ertola '21, writes the resolution that makes "I Left My Heart in San Francisco" the city's official song.
- 1970 In the wake of nationwide college riots, Governor Reagan vows to shut down California state universities. UOP students send him a condolence telegram.
- 1972 The Watergate Office Building in Washington, DC, suffers a bungled burglary.
- 1974 San Francisco newspaper heiress Patty Hearst is abducted by a terrorist group calling itself the Symbionese Liberation Army. Hearst later joins her captors.  
The OPEC oil crunch has cars around the nation lining up to crawl to the gas station. Automobile sizes will begin to shrink.  
The school implements a four-academic, three-calendar-year curriculum, and graduates two classes, 1974A and 1974B. As in 1896 and 1944, it is again possible to obtain a P&S DDS in three years.
- 1975 President Ford declares the Vietnam war "finished."
- 1976 America celebrates its bicentennial year.
- 1978 San Francisco Supervisor Dan White assassinates Mayor George Moscone and fellow Supervisor Harvey Milk. White's lawyer introduces a novel insanity-by-reason-of-mass-consumption-of-junk-food defense.



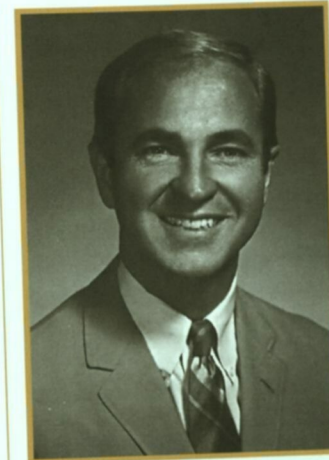
## STREAMLINING & SOCIAL CHANGE

The year was 1969. NASA's Apollo 11 mission had just beat the Russians to the moon, but the Cold War was turning hot. Vietnam brought searing television images of fat transport helicopters bending palm trees in their wash as litters bearing the dead and wounded were pushed into their gaping bellies. And each puff of napalm on that far horizon brought convulsions of rage at home. The social scene had radically changed, and it wasn't only that hair was getting longer. The sophisticated indifference of San Francisco's beatniks had given way to a movement whose adherents the Beat generation condescendingly called little hipsters, or hippies. The peace, love, and rock and roll passivity of the hippies, in turn, was yielding to an angry activism pricked by the draft. Across the country, authority was not just being questioned, but stubbornly resisted.

The times were restless. Behind closed doors at UOP School of Dentistry the discussions grew heated. To reflect the new larger sense of community befitting a dental school now affiliated with a university, a search committee finally decided its quest would be for new blood with fresh perspectives—the next dean would be selected from outside the school. As Dean McDowell had done in the 1920s when the college first went recruiting beyond its own walls, the committee cast its eye on the midwest.

It found Dale F. Redig. Dr. Redig was a 1955 graduate of the University of Iowa College of Dentistry. He had practiced privately as a pediatric dentist until 1961, when he joined the faculty of his alma mater. Redig's organizational and administrative skills quickly led him to chair that school's pedodontic department. Now he was invited west to test his talents on a whole school. It would not be easy taking the reins of a unique institution in a unique city. "More than most American cities," wrote journalist Pete Hamell, "San Francisco has a knowable history and more powerful templates of lore and legend that can't be taught at all." Although the same might have been observed of San Francisco's private dental school, Redig nonetheless would be a fast learner.

The young new dean projected tolerance. "I can't quite see that we can afford to get so terribly upset about a student's hair, trousers, or beard," he told the school that first year, "when the problems facing society are so much greater than that." However, Redig did not long allow such broad-minded displays of level-headedness



Dale F. Redig, Dean  
1969-1978.



## STREAMLINING & SOCIAL CHANGE



Practicing togetherness in the paisley wallpapered clinic bays.

to be confused with bland passivity. The dean's soft-spoken demeanor was wrapped around a steel will. He carefully mapped out a direction for the school and forged resolutely ahead. Two other traits, in fact, would profoundly influence the school's development. Redig's unusual sensitivity would guide an unprecedented upswing in student-faculty relations, and his sharp analysis was to drive spectacular changes in the teaching of dentistry.

One of Dean Redig's first projects was aimed at remolding the attitude of the faculty. He quickly realized that the school had been built on the foundation of providing excellent clinical skills. Yet it seemed that sometimes the underlying goal was reached at the expense and disregard of the people—the students, patients, and faculty—involved. The social status quo in dental schools across the nation, the dean observed, was that instructors were lords of the manor and students serfs. Stories abounded of teachers humiliating their students. Dr. Bernard Aarons '44B, for example, recalled bringing his neighbor, who was a good friend, to the school to perform an amalgam restoration on a needy molar. An instructor standing over him boomed, so that the entire clinic could hear, "Please open your book to the right page and make sure you're doing the right thing!" One classic tactic practically passed into legend: when a wax pattern brought for inspection didn't pass a given instructor's muster, he would ceremoniously drop it on the floor as the student looked on and mash it with the toe of his shoe. Then he would look up at the stricken undergraduate and snort, "I didn't do anything worse to it than you did!"

Redig emphasized a novel idea, one that would work especially well in the question-authority decade. He would, in effect, share authority. He would re-direct responsibility. The old working relationship between students and faculty would no longer be that of servant and master. The dean issued a mandate to his faculty: students were to be treated with respect—not as equals, which would place a burden of unfair expectations on future dentists still in training, but certainly as colleagues.

"There was a good deal of talk in the 1950s about the student and his lack of activity in regard to any kind of involvement in academic affairs and university policy," Redig pointed out. "Now, in the 1960s, we are condemning students for the very things which fifteen years ago we complained they lacked." With the advantages of better teaching systems and wider exposure to television, movies, and travel, he reasoned,

## STREAMLINING & SOCIAL CHANGE

students mature intellectually today faster than they did not so long ago.

One way Redig put his philosophy into practice was to appoint student representatives to faculty advisory groups. "We have students involved on committees in the school now," he announced. "Wherever a student seems to be directly affected by what a committee does, we have effected student participation on that committee." Of particular psychological importance, the dean instituted a student appeals committee. Traditionally, dental students had been introduced to school with the understanding that they might be expelled at any time, without prior warning. Freshman orientations at other schools even began with this dire speech: "Look around you. By the time you graduate, the student on either side of you will not be there." At UOP the student appeals committee, through which a faltering student would have the cause of his discipline clearly explained and the grounds reviewed by peers selected from the student body, gave students an honest feeling of being part of the school. "Five, seven, or twenty years ago, when you and I were in school," Redig told the alumni, "if a student was in the dean's office, that meant the student was in trouble. Today, it probably means the Dean is in trouble!"

Redig also turned his attention to questions of efficiency. He knew the Webster Street school was the first in the nation to be built under the federal assistance program for medical and dental school. UOP had opened the whole process of professional school expansion that was to characterize the 1970s. As such it was something of a showpiece, an example of the great things to come. At the same time, he knew it needed to be fixed.

The building was brand new, and it certainly looked state of the art, but from Redig's point of view it was already outdated. At Iowa he had mulled over the possibilities for improving a school's efficiency. At UOP he saw how to implement them. Redig described his ideas in a grant proposal to the Irvine Foundation, of the same southern California Irvine family for whom a University of California campus is named. He landed the largest such grant ever received.

What Redig intended to do was remodel. The building was arranged, both clinics and preclinical technique laboratories, to accommodate the prevailing procedure-specific style of teaching student dentists to treat patients. Students would do, for



Long hair is kept safely under wraps in the oral surgery clinic.



## STREAMLINING & SOCIAL CHANGE

The clinic was transformed into three large group practices administered on a comprehensive patient care model. UOP's new approach would become the norm for American dental education.

example, only fillings in one area, and prosthetics in another. The dean re-worked the clinic design to reflect not only changes in methods of practice, but also a new philosophy of patient care. The clinic would emerge as three large group practices administered on a comprehensive patient care model by team-teaching faculty. He mapped out the arrangement for a landmark change in clinical dental education, central sterilization, and a central instrument supply. Students had been accustomed to individually carrying and cleaning all of their own instruments. The new system, which would become the norm for American dental education, demanded a major adaptation on the part of both students and faculty. In the process new mobile carts would be introduced, and UOP dental students would all treat patients from the new position that had begun to be introduced in the last years at the old school—sitting down.

Dr. Redig saw that he would be able to unroll his blueprints with confidence. After enduring almost sixty years in the ramshackle Fourteenth Street building, the school had developed what alumni referred to as an "edifice complex." Dr. Tocchini and his co-planners had been determined that the school would never again be trapped in an outdated building. Hence, the Webster Street school was built with its load-bearing skeleton arranged something like a tree. Having major stresses supported by a central trunk allowed interior walls to be moved for remodeling.

Redig's plan also called for broad improvements in both teaching and learning. Accordingly, he simultaneously developed the school's resources. In cooperation with Pacific Medical Center, whose director the dean had known in Iowa, UOP renovated the old Stanford Lane Library across the street on Sacramento and turned it into the school's own. In 1971, orthodontic department chair Dr. Richard Rutter '58 (a grandson of the independent P&S's original anatomy professor, Dr. Remmel) announced a new program of orthodontic graduate study. Even while recognizing that a small private dental school without central university support couldn't afford a major research program, Redig nonetheless expanded research at the school. Under his direction, the school would also buy its first scanning electron microscope. And not only would he hire talented researchers, he would also hone their ability to share their expanding knowledge. Thus, in cooperation with the mother campus in Stockton, the dental school administration launched a master of arts program in education for UOP dental faculty.

Dean Redig's energies ranged far wider than Webster Street. Using federal aid and

## STREAMLINING & SOCIAL CHANGE

available community resources, he launched a series of extramural clinics—at one time as many as seven—including facilities in Oakland, Mendocino, Sacramento, San Joaquin, Fresno, and a flagship clinic in Union City. Faculty members Drs. George Nevitt and Jim Pride successfully negotiated with Union City officials to buy a plot of land. Redig designed the building, on the model of a concept he had developed at Iowa. The clinic featured a circulating traffic system. A central support aisle allowed faculty and students to move about freely, while patients stepped into their treatment areas from separate entrances at the foot of each chair.

The extramural programs served as a positive outreach to communities, offering low cost dental treatment to local patients. At the same time they provided for practical social and professional growth for students in less structured, nonacademic settings. The most dramatic and far-reaching plan of all, however, was the startling idea of scrunching the school's successful four-year program into three. Redig considered two reasons why UOP's administrators and faculty should develop a four-curriculum-year, three-calendar-year program: first, they should, and second, they could. There was still a widespread shortage of dentists in the nation. The government was offering significant federal money to train more students. Schools that expanded enrollment were eligible for special improvement expansion grants of \$1,000,000 each year. And Redig, ever the efficiency expert, recognized that using the expensive new facilities throughout the year would be the best, most efficient use of the physical plant itself. After all, the administration didn't lay off faculty or staff in the summer months, and it was increasingly difficult for students to get significant summer jobs. The new compressed curriculum would actually increase the number of teaching hours, while maintaining evenly spaced short breaks.

The curriculum in American dental schools had not really been revised substantially in 40 years, Redig reminded the dental community. He debated the merits of the program with faculty members for several years. The barriers were formidable and the arguments prickly. "We understand that we have a tremendous problem on our hands when we undergo curriculum revision," the dean admitted in 1970. Perhaps more than tremendous: "It's easier to move a cemetery than to change the curriculum," one medical school dean considering a similar move a decade earlier reportedly exclaimed. And to make the system work, the clinic would also need to be retooled as planned. "A system that doesn't change in a forward direction is doomed to failure or certainly



Staff members at the East Oakland clinic, circa 1970s.



## STREAMLINING & SOCIAL CHANGE

Another dean declared it  
was easier to move a cemetery  
than change a curriculum.  
Nevertheless, "A system that  
doesn't change in a forward  
direction," wrote Dr. Redig, "is  
certainly going backwards, since  
nothing stands still."

going backwards," Dean Redig wrote in *Contact Point*, "since nothing stands still." At length he decided to do it. All of it. The remodeling of both clinic and curriculum would occur together.

"Strife and change is what life is always about," the dean warned the alumni. Predictably, the stresses were enormous. After all, the whole school couldn't just grind to a halt for construction. What was more, two parallel but separate classes, dubbed 1974A and 1974B, were launched into their respective tracks of simultaneous training. "Life is a mosaic," Governor Jerry Brown was fond of saying. At UOP the mosaic was approaching chaos. Harried professors were laboring to perform double doses of work, delivering two sets of the same lecture twice in the same year—sometimes twice in the same day. For many, the years passed as a blur of furious activity.

Redig genuinely felt badly for the tremendous strains inflicted on the students, who nevertheless rewarded his trust in them by responding positively and bravely in the face of dust and confusion. The school's setting itself was reason for positive response. "No city invites the heart to come to life as San Francisco," wrote novelist William Saroyan. Agreed *San Francisco Chronicle* columnist Herb Caen, "It is hard to stay depressed in San Francisco, on a crisp November afternoon, with flowers and pretzels for sale on the street corners and the tourists going instamatically mad at the bright wonder of it all."

Outside the clinic doors was a city of minorities, of neighborhoods. San Franciscans prided themselves on racial and cultural diversity. Nevertheless, even with lifestyle gaps and generation gaps, the city had cultivated with civic pride a certain feeling of oneness: "We're all San Franciscans." At UOP, a similar confluence of separate parts was occurring. As the walls between clinics were broken down, so were the walls of department rivalry. The neighborhoods were coming together. There would be no more separate operative clinic, or prosthetic clinic. In their places would be a new sense of oneness: comprehensive patient care.

When the smoke cleared and the construction workers departed, a new clinic—new in both structure and function—was in place. And the curriculum, which had been sorely tested, emerged victorious. The school's metamorphosis was complete. With the dedicated support of faculty members such as Drs. Herbert Ward, Robert Christoffersen,

## STREAMLINING & SOCIAL CHANGE

Ronald Borer, and Roland Smith, the school was awarded an excellent rating in its accreditation report from the Commission on Dental Accreditation, and was deemed one of the best among the schools of the era.

The school was ready for a return to routine. Out in the community, dentistry's ethos of routine and ritual already had made it a de facto symbol of day-to-day living. "Drought watch!" Herb Caen announced in his loopy, backwards January 28, 1977, column. "Or, some more exciting ways to save water, toilets, and your marriage: Don't walk your dog; teach your dog to walk you. Don't wash your hair under the shower; send it to Meader's to be dry cleaned. Brush your teeth twice a year, see your dentist twice a day." In a 1978 column titled "One Day in the City," Caen used the image of a dentist to paint a picture of stress in the big city. "At 7:05 a.m., a lawyer has breakfast at Sears with a labor leader who is about to be indicted, picks up the tab, and adds \$100 to his fee for a 'consultation.' Five minutes later, a dentist drinks three cups of coffee with shaking hand before going to the 450 Sutter building to make a tricky extraction that doesn't come out right."

For Dean Redig's administration, however, all the planning and pulling together would come out impressively right. Although he remained frustrated in his goal to rebuild the student laboratories (a goal, in fact, that would take his successor seventeen more years to accomplish), Redig had successfully reinforced a humane educational system and presided over the integration of faculty, staff, and students into a true team educational effort. He revolutionized the design and philosophy of the clinic, inaugurated a graduate program in orthodontics, and created a famous three-year curriculum. In 1978, after nearly a decade at the helm of the school, Redig retired to become executive director of the California Dental Association.



The way we were: 1970s style.



## • THE QUEST TO SERVE •

One of UOP's most unique features, Director of Development Emeritus Al Gilmour once pointed out, is its extraordinary ability to win the loyalty and trust of the people associated with it. The result: the school inspires "service rather than servitude."

In the mid-1970s, UOP's tradition of service began to range far beyond the walls of the school when Dr. Thomas Beare began a community outreach program to provide dental screenings to senior citizens. As an expanding number of external clinics sprang up in diverse locations around northern California, the school also widened the scope of its community service. Pediatric professor Dr. Eric Bystrom established programs to deliver dental care first to special needs kids—those with handicaps or medical problems requiring extra care—and then to special needs adults.

By 1995, the school had become proactive in its quest to serve when it wrote a successful federal grant for its CARE Clinic. The clinic provides dental care to residents of the city and county of San Francisco suffering from AIDS who would otherwise have difficulty obtaining dental services. In June 1995, UOP sponsored, along with the ADA, the American Conference on

the Dental Management of HIV Disease.

As UOP School of Dentistry reaches its centennial year, its success on all fronts is framed in terms of service:

**Service to students**—The school's unusual humanistic model of education treats students as partners in learning and patient care.

**Service to practitioners**—Clinics in implants, maxillofacial radiology, oral and maxillofacial surgery, oral medicine, oro-facial pain, orthodontics, pediatric dentistry and people with special needs offer comprehensive, specialized diagnostic and treatment services to practitioners and patients. The Orofacial Institute plans treatment for facial deformities including cleft lip and palate. A sterilizer monitoring service and oral pathology laboratory help keep practices in the Bay Area and beyond on the cutting edge of service to their own patients.

**Service to the profession**—UOP alumni hold more leadership positions in the California Dental Association and its components than graduates of any other dental school.

**Service to the community**—In 1896, the school opened an infirmary to offer care to those unable to afford private dental treatment. Nowadays, more than 100,000 patient visits are logged in UOP's extended hours clinics every year. The school also serves the East Bay directly through its flourishing extramural clinic in southern Alameda County.

The Department of Dental Practice provides outreach projects and dental health screenings for the general population. It also advises employee groups in government and private industry, ethnic groups such as Chinese and Hispanic communities, and people with disabilities, including the blind. The school supplies crucial manpower for Su Salud, an annual dental health care program that has drawn national attention for coming to the aid of some 150,000 migrant farm workers in Stockton. The pediatric dentistry department also delivers programs of

home care instruction to more than 200 area schools. With grants from the California State Department of Developmental Services the school helps social agencies and support groups coordinate with local dentists, hygienists, hospitals and clinics to increase

access to people with disabilities in rural communities. Both in San Francisco and around northern California, UOP trains dentists to provide hospital dental services.

The school's upcoming plans include expanding on-line consultation services. Through an electronic bulletin board dentists can now access timely information

for their practices, including current continuing education courses and the school's monthly listing of career and practice opportunities. Need an x-ray consult? Radiographs can now be scanned for analysis as UOP develops its computer connections to answer practitioner questions on many aspects of dental care.







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CHAPTER

1978-present

## AT THE FOREFRONT



**R**iding the wave of innovation and renovation, the school's progress reflects an ongoing commitment to improving the quality of life for patients, students, and the dental community.



## 1978 THROUGH 1996

- 1978 The Shah of Iran is overthrown by fundamentalist Islamic leader Ayatollah Ruholla Khomeini.
- 1979 Joe Montana joins the 49ers.  
Coca Cola, called "the one product most symbolic and symptomatic of the American way of life," is exported to China.
- 1981 George Washington's gold and ivory dentures are stolen from the National Museum of American History.
- 1982 Seattle dentist Barney Clark is the first artificial heart recipient.
- 1984 Researchers in the United States and France race to identify a virus suspected of causing acquired immunodeficiency syndrome (AIDS).
- 1985 Mikhail Gorbachev becomes the Soviet leader.  
The remains of the notorious fugitive Nazi Josef Mengele are identified by his teeth.
- 1986 Clint Eastwood is elected mayor of Carmel, CA.
- 1989 The Loma Prieta earthquake stuns the Bay Area.  
In the echo of Gorbachev's glasnost and perestroika, the Berlin Wall falls.
- 1991 The Gulf War begins and ends as Bush bombs Baghdad. In a surprise mass mobilization, some 400,000 military reservists are called to active duty.  
The McDonalds hamburger chain opens an outlet in Moscow.
- 1992 After 30 years, Johnny Carson retires as host of the "Tonight Show."  
American culture is exported en masse as the Euro Disney theme park opens in France.
- 1994 The first all-race elections in South Africa bring an end to apartheid.
- 1995 The San Francisco hippie band The Grateful Dead turns 30; the same year, band leader Jerry Garcia dies young at 53.



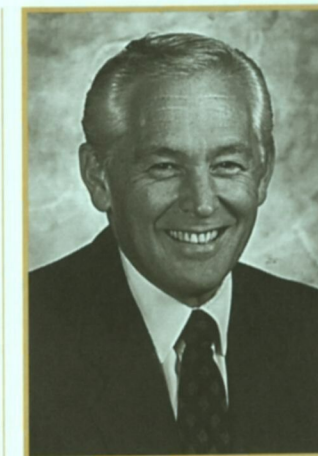
## AT THE FOREFRONT

In some respects, 1978 was a dark year for San Francisco. Just days after the infamous Jonestown massacre, in which more than nine-hundred followers of religious fanatic Jim Jones—many of them from the Bay Area—died in a Guyana jungle, Mayor George Moscone and Supervisor Harvey Milk were assassinated in their City Hall offices. While a riot tore the city, jobs trickled away to Silicon Valley and Los Angeles. "Baghdad-by-the-Bay, which outgrew its rough-and-tumble past to become the 'old money' of the West, has lost its swagger," concluded one news magazine.

The citizenry stewed over its state of affairs. Two years earlier, *Chronicle* columnist Herb Caen had written, "It was an article of faith that there were only two Real Cities in the land—New York and San Francisco. So much in common: tall buildings, night life, good food, excitement, a mixture of races living in comparative harmony, most people at least caring. We still have so much in common: tall buildings, mounting debts, good food, too much excitement on the streets, and a shared feeling that we are headed in the wrong direction. San Francisco has a new skyline, new millionaires, acres of empty blocks, declining population, increasing traffic—what's it all about?"

It would turn out, however, that 1978 also marked the beginning of a run of good luck. For the ailing 49ers professional football team, the future would be all about an inauspicious, third round draft pick that year, a skinny Notre Dame quarterback named Joe Montana. For the square silhouette on the city skyline that was UOP dental school, it would be about the naming of a new dean. With Acting Dean Leroy Cagnone minding the store, the university search committee, responding to an overwhelming faculty and alumni preference, made its choice: an adjunct orthodontics professor named Art Dugoni.

Arthur A. Dugoni was born in San Francisco in 1925, two years after another Arthur—McDowell—engineered the rescue of the College of Physicians and Surgeons. As a youngster, Art Dugoni was befriended by his family dentist, Jean Pierre Cantou. Perhaps Dr. Cantou noticed the restless energy and quick intelligence of his young patient. At any rate, he planted a seed. He took the boy to the dental school on Fourteenth Street where he taught periodontics, and he offered a suggestion: when Art grew up perhaps he would want to be a dentist.



Arthur A. Dugoni, Dean  
1978 - present.

*Arthur A. Dugoni*



## AT THE FOREFRONT



A word is worth a thousand pictures, or maybe a thousand dollars: development director Al Gilmour's license plate, 1980.

During World War II, Dugoni qualified for the Navy's V-12 officer candidate program, and was shipped out to Gonzaga University in Spokane, Washington. He remembered his childhood dentist, and signed up for science courses. By the time he had earned his bachelor's degree, Ensign Dugoni was accepted to dental school. He began classes at the University of Missouri at Kansas City.

Halfway through school, however, the war ended, and so did the Navy's educational commitment. Dugoni was on his own now. The golden hills and sea breezes of San Francisco beckoned, and he decided to explore the possibility of transferring to a dental school at home. He stopped first at the shiny, modern school on Mt. Parnassus, the University of California. The dean there was less than optimistic about accepting a transfer student. Looking over Dugoni's transcripts, he said, "You have good grades, but we don't know if you're up to our program. We'll have to test you in all the subjects, and you may have to start over as a freshman."

Art thought it over, and then went across town to Dr. Cantou's dental school, and met with the dean there. At the ramshackle building of P&S, Ernie Sloman looked him over and said, "We don't know if you're up to our program." Dugoni's heart sank. It sounded like the same stonewalling all over again. But Sloman offered a surprise. "You go into the clinic," he told the hopeful transfer student, "and put on a white smock, and we'll start assigning you patients." It was March. "You can stay until June. If you perform well, we'll enroll you. If you don't, you can still go back to Kansas City in time to resume your classes there." In 1948, Dugoni graduated from P&S. He was right on time. He was student body president. And he was valedictorian again.

Dr. Dugoni's P&S student career clearly reflected the unusually synergistic student-instructor dynamics that were a hallmark of his adopted college. The faculty, to be sure, hadn't stood idly by as their transfer student adjusted to the shock of a new curriculum. B.C. Kingsbury, one of the original trustees and a future ADA president, made a personal investment in young Dugoni by coaching him in crown and bridge techniques that first summer to help ease him into the junior year. And the future dean responded in turn by investing his own talents in the school. When Dean Sloman asked his student body president to get the student body account out of debt, Dugoni swung into action. He and classmate Irwin Marcus persuaded a local car dealer to donate a new automobile for a raffle—no small accomplishment in the immediate

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post-war years when cars were scarce and highly sought-after commodities. The students scrambled to get a ticket, the raffle sold out, and Dugoni's reputation as a clever organizer, energetic leader, and fund raiser was launched.

Dr. Redig was to hail his successor as a quintessentially dentist's dentist. The description would be utterly free of hyperbole. Dr. Dugoni had already been through Navy courses for dental assisting, lab technique, and hygiene. Now, having served a general dental internship at the U.S. Naval Dental School in Bethesda, Maryland, he would pursue first general practice and then pediatric dentistry before becoming an orthodontist. The new dean had been on the dental school faculty since 1951. The first nine years were in the department of operative dentistry. After earning a master's degree at the University of Washington in 1963, Dr. Dugoni would become a professor of orthodontics. In 1964 and 1965, he chaired the orthodontics department.

Urbane, polished, and an astute observer, Dugoni as dean would quickly burnish his old reputation as a problem solver. "He has a tremendous drive," his brother Bill told *Contact Point*. "Whatever there is to accomplish, he tackles it." There was, in fact, a lot to tackle. Managing a school meant fitting together lots of pieces. The curriculum, for example, had to be constantly updated and fine tuned. The new dean realized that the school was teaching nothing about implants. In the first years of his tenure, Dugoni arranged with the help of the Pacific Dental Research Foundation for a team of faculty members to travel to Sweden to learn about implants from the famed inventor Branemark.

And what should be the scope of the school's mandate? In 1979, Dugoni proposed a program for school-based post-graduate general practice residencies, called Advanced Education in General Dentistry, or AEGD. He also called for a specialized curriculum, later dubbed IDS, for International Dental Studies, to retrain foreign-taught dentists to U.S. standards. Although both programs would take several years to develop, they would showcase the school's educational creativity.

Even more challenging, the new dean inherited a daunting set of complex attitudes. On one hand, as Tom Cole wrote in his 1981 book *A Short History of San Francisco*, "In some senses, San Francisco is still a gold rush town, still a magnet for the footloose and dissatisfied." Society's great anguish of the 1960s and 1970s, felt so strongly in San

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Francisco, was reflected in the profession and in the school. At UOP, in particular there was a lingering morale problem, fed both by a sense of insecurity over the switch to a three year curriculum, and the perennial problems that had dogged the college since the beginning, including low faculty salaries, bare-bones budgets, and lack of endowments.

On the other hand, both city and school undeniably had élan. Both were more than survivors; they were survivors with style. Even without the excitement of Montana's Superbowl winning passes, San Francisco's buoyant native optimism still set the pace that the rest of the country watched and followed. "The streets of San Francisco's Haight Ashbury, once filled with the sounds of free rock and roll concerts, now buzz with the finely tuned hum of BMWs," one journalist told the nation. Local humorist Alice Kahn wrote about a new breed of successful San Franciscans she identified as Young Urban Professionals, or "Yuppies." The name caught on and quickly spread around the world. Dugoni intuitively began to tap into San Francisco's city ethic, one, as Cole put it, of "democratization, participation, innovation, sharing, and having fun."

Dugoni came to the deanship with a sense, as he would define it, of pride and passion. He remembered how the school had not just taught, but nurtured, him. He felt a deep pride of school, pride of profession, pride in the students, in the faculty, in the facilities. His passion was for excellence. This was a special place to work, to teach, and to learn. The fast-paced new curriculum is a precious asset, he told naysayers point blank. If you can run a less-than-four-minute mile instead of a five-minute mile, isn't that something to be proud of?

The dean proposed to nurture school pride with communication. He knew that if he could get people to understand issues, problems, and goals, they would be more willing to help solve school problems and support its goals. People are negative, he considered, only when changes they are not a party to are forced on them. So he concluded he must empower the people who are the school. Give them a chance to buy into the vision. Dugoni plunged in. He met with every staff, faculty, and administration member for a half hour. He launched a series of ongoing brown bag lunches, inviting students, junior and senior faculty members, staffers, and department chairs to meet and talk. Then he held quarterly meetings with each entire class, as he continues to do, spending an hour to field questions. He repeated the process with staff, with faculty,



The learning lifestyle gets a lift when the new student housing opens on Post Street, 1983.

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and with managers. To everyone he put the same questions, no holds barred, no repercussions: Tell me what you like about the school. Tell me what you don't like. What are the barriers to your best performance here? What do we need to accomplish?

Dugoni went so far as to open the school budget meetings to public inspection—a practice unheard of in other dental schools. "Dentists from around the country continually ask me what the cornerstone is of our educational program," he told the *CDA Journal*. "I respond with three decisive variables: the quality and commitment of our faculty, the highly motivated and disciplined students we continue to attract, and most important, the excellent lines of communication that are continually open between faculty, administration, and students."

The dean aimed to get all people involved with the school to feel a personal stake in the school's welfare. Dugoni wanted every person who walked through the doors to feel as if he or she mattered. UOP would be a special place that builds and values people. "Your recommendations and observations create meaningful changes that improve the school," he told the students. He repeated the message to instructors, researchers, secretaries and maintenance personnel. He took notes at his meetings, investigated issues, and distributed the results in memos, articles and speeches. He always took phone calls.

Under the same philosophical pressure, communications and information systems were swiftly moved from the pen and pencil stage to a network of computers, E-mail, and faxes. The school hired a team of publications experts and graphic artists. Communications consultants dressed in anonymous white clinic instructor smocks roamed the corridors to assess the interactions of professors, students and patients. Dugoni held workshop groups to improve the faculty's teaching skills. A dentist is a dentist, he would say, but teaching has its own technology and science in the development of courses and test construction. The former school debater hated podiums. Get out in front of the class, he urged lecturers. Don't talk to a piece of paper, don't talk to the chalkboard. Be dynamic. Make your subject come alive.

In an effort to enhance long-term effectiveness, Dugoni sent a group of faculty members to Duke University's Center for Creative Leadership. He revived the master's degree programs in education for the dental school's instructors, and even put in



Advanced Education in General Dentistry residents in surgery.



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Dr. Dugoni wants every  
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motion an opportunity for a master's degree in business administration. Educators with MBAs? Tomorrow's teachers will have to be good managers, he explained, of people, resources, and patients.

And success surely depended on nurturing the talents of committed managers. For decades, the school's fiscal health has been sustained by associate dean for business and financial affairs Milton Lambertson. Perhaps UOP's longest serving administrator, Lambertson, himself a UOP graduate, came to the dental school in 1970 after serving sixteen years on the Stockton campus. Assistant to the dean Patricia Wagner, recruited by Dean Redig in 1971, would guide the school through three successful accreditation reviews, in 1976, 1984, and 1993. Under her management, UOP was twice the first American dental school to implement new accreditation self study programs.

The dean brought skilled, experienced clinicians back to the school to teach. Part time faculty, some feared, would not be as loyal as the full time professional faculty whose performance was tied to a paycheck. But Dugoni felt the practical, real-world experience that one- or two-day a week teaching practitioners would bring with them would generate tremendous credibility for learning. For all his idealism, Dugoni was deeply practical. He created a department of dental practice to prepare students for success. Coursework was intensified in practice management, economics and jurisprudence. ADA Hillenbrand fellow Dr. David Nielsen frankly discussed opportunities for practice with the students, and the school established a clearinghouse to match up alumni practitioners looking for new associates.

Dugoni also set a personal goal to get involved in leadership of the profession, to set an example for his students and alumni. From Drs. Thomas Morffew to B.C. Kingsbury, Jr., to William Allen, to Bruce Valentine, the list of California Dental Association presidents through the century reads like an alumni roster of P&S/UOP. Dugoni himself joined the list, and in 1988 also became, after his old mentor Bernerd C. Kingsbury, Sr., and faculty member Dr. Burton Press, the third UOP ADA president.

Dr. Redig's ideal of humanism crystallized under Dean Dugoni's care. Dugoni felt that his major investment at all levels had to be in people, to create a sense of family for students, staff, and faculty. Student dignity was protected and groomed. To emphasize the importance of their work and to encourage professionalism, the

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students, much to their bemusement, were now always called "Doctor" in front of patients and on the clinic floor.

In his 1991 valedictory address, Steven Whitcomb told the graduating class: "You found that they (classmates, faculty and administration) have advised us justly, assisted us readily, adventured with us boldly, taken on all our problems patiently, defended us courageously, and continue to be friends unchangeably." Such a description had proved itself in many subtle ways. In 1983, with graduation only one month away, third-year student Ed Sims broke his shoulder in a motorcycle race. With only one functioning arm, he worried about how he would complete his clinical requirements. The school rallied around him. Staff members carried instrument trays to his clinic cubicle. Dental materials professor Armand Lugassy personally mixed impression material. Dr. Sims graduated on time with his class.

UOP's reputation for camaraderie became its calling card. Successful applicants discovered that the second year class had a tradition of assigning "big brothers" and "big sisters" from among its members to be individual mentors to incoming first year students. Every month until his retirement, admissions director David Adkins, who habitually memorized each new student's face so he could call every anonymous white coat cheerfully by name, would throw a group ice cream birthday party in his office. The school had style.

The city, of course, would expect no less. "San Francisco's artistic contribution probably lies in its style of doing things rather than in a high-priced finished product," wrote Tom Cole. Nevertheless, the city itself had become a high-priced product. A 1983 survey on the strength of the dollar worldwide rated San Francisco the most expensive city in North America.

Yet even in the face of skyrocketing costs, if the dental school allowed its facilities to deteriorate, it would become a liability to the university. "The fact that we have paid close attention to our physical plant is one of the reasons for our strength today," Dean Dugoni told *Contact Point*. "Many dental schools deferred building projects. Later, they found that the price tag for all the projects had grown beyond their reach. Some schools have closed because they were unable or unwilling to pay for modernizing their facility." Like the Golden Gate Bridge, which since its opening has been con-



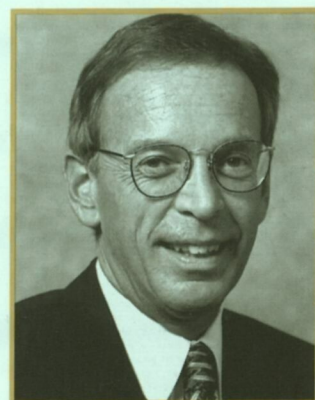
President Dugoni addresses the American Dental Association on this 1988 ADA Journal cover.



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stantly painted, from one side to the other and then all over again, the school has to be constantly maintained. But even more, it is being constantly improved. The school, under the aegis of Dr. Robert Christoffersen, embarked on a long term master plan to renovate the entire building.

Christoffersen, a sharp dresser and versatile administrator, joined the school faculty after graduation in 1967. While playing a critical role in directing the day-to-day operations of the dental school, he would also become chief architect of its metamorphosis. A student housing complex, complete with labs and a gym, was opened on Post Street. Administrative offices and a faculty lounge were remodeled, while the student lounge was beefed up with a professional food service and thrown open to patients and visitors as "Cafe Pacific." The reception area, clinics, and oral surgery and pediatric departments underwent major surgery. Plans were unrolled for strategic redesigning of the preclinical labs that were already being copied by other schools before construction was underway. "Dr. Christoffersen has been our point man for every one of these building projects," said the dean. Proud faculty members and alumni began to call UOP the "Ritz-Carlton" of dental schools.



Dr. Robert Christoffersen,  
"architect" of the new school.

The inexorable move forward was not without setbacks. In 1989 a 7.0 Richter-scale earthquake shook the city. Freeways cracked and collapsed, a Bay Bridge segment tumbled, and for the only time in the history of Candlestick Park, the crowd at the Giants baseball game fell deafeningly silent. When the faculty and administrators pried themselves out of jammed elevators to survey the damage, they found that Dr. Tocchini's building was left wondrously, structurally intact. However, the quake had broken three hundred-fifty thousand dollars worth of tile, plaster, ductwork, and air conditioning and generator parts.

But, like clouds, tectonic plates have their own silver lining. UOP public relations director Arlene Burbank noted an extraordinary human response to the disaster in *Contact Point*: "People joined together, people wanted to help one another..." The 1906 earthquake had led to the American Dental Association's founding a permanent disaster relief assistance fund for dentists. The 1989 quake led to an outpouring of UOP alumni assistance. Nevertheless, UOP didn't need an earthquake to rally its faculty, staff, students, and graduates. Funding for all of the school's spectacular, systematic physical upgrading has come from alumni donations.

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As 1996 approaches, the school's current vigor reflects Dean Dugoni's eighteen years of careful emphasis on academic excellence and capital management. Dugoni has presided over the recruitment and cultivation of outstanding educators and staff, the development of highly successful student recruitment programs and superior student scholarships, and the formation of an advanced curriculum for the 21st century. Under Dugoni's administration, UOP's fiscal status has been powerfully solidified for the future. The school enjoys dramatically enhanced annual giving, further advanced by the creation of a significant endowment base. Clinic income has been decisively strengthened.

Some four decades ago, Dr. Shailer Peterson, secretary of the ADA Council on Dental Education and dean of the University of Tennessee dental school, called P&S alumni "the most dedicated in all dentistry." They still are. But be they alumni, students, patients, teachers, researchers, administrators, or the San Francisco community, the people who stream through the halls of UOP are what make the institution come alive. The glory of the school—the accomplishments of its dentist education, patient treatment, service to the profession and community, and biomedical research—lies in its one hundred years of individual people joined together.

In his 1994 book, *Radical Surgery*, former U.S. Secretary of Health, Education and Welfare Joseph A. Califano, Jr., wrote, "Health care is above all a ministry, not an industry..." Dean Dugoni, as always, couches his humanistic philosophy in highly personal terms. "Education is not just about making a living," he said in 1995. "It's about making a life."



Remodeled executive conference room,  
first floor.



## • WOMEN IN DENTISTRY •

**M**inistering to the sick and injured is an ancient female task. A wide range of healing skills has been typical, and typically demanded, of women. In the 2nd century AD, Soranus of Ephesus described the woman healer as one having a knowledge of subjects as diverse as dietetics, pharmacy and surgery. Although the female healer is a ubiquitous historical character, the female doctor is a rare figure. The informal nature of womanly health care meant that for the most part there has been little recognition of its activities. Observed historian Laurel Thatcher Ulrich in her 1990 book on medical care in 18th century New England, *A Midwife's Tale*, "...female healers move in and out of sickrooms unannounced, as though their presence there were the most ordinary thing in the world—as it was."

Mark Twain depicts Tom Sawyer's Aunt Polly efficiently extracting Tom's aching tooth. However, a large part of dental care once involved exotic potions. Many women compiled lists of their nostrums, casual cookbooks for their own use which became textbooks when handed down. Ancient dental recipes abound. Octavia, first wife of Mark Antony, recommended treating a tooth ache by

applying a powder of barley flour mixed with honey, vinegar and salt, baked and ground up with charcoal and flowers. (Compare this to a man's formula: the Roman medical writer Pliny recommended applying ashes of mouse dung or dried lizard liver.)

The recent proliferation of studies of women in the healing arts conspicuously omit dentistry. For one thing, dentistry as a discrete health science discipline is relatively new. For another, women's roles in medical treatment historically have been very generalized. The only traditional specialization common to women is midwifery. For women, the embracement of such a narrowly defined specialty as dentistry was a long time coming.

In the United States the nascent dental profession discouraged female practitioners. When Lucy Hobbs, the first woman to ever earn a dental degree, was accepted to dental school, her admission was hotly debated. Declared an 1865 newspaper editorial, "The Creator did not see fit to endow the female of the species with the necessary strength which the practice of dentistry requires." The strength, however was immediately found. That very same year, the

Iowa State Dental Society would issue a rebuttal: "The profession of dentistry, involving as it does, the vital interest of humanity, in the relief of human suffering, and the perpetuation of the comforts and enjoyments of life in civilized and refined society, has nothing in its pursuits foreign to the instincts of women, and, on the other hand, presents in almost every applicant for operations, a subject requiring a kind and benevolent consideration of the most refined and womanly nature."

P&S graduated its first female dentist, Isabella Cook Hocking, in 1900, just four years after its founding. By 1918, 1901 alumna Elizabeth Richardson was running the school's new orthodontic clinic. Dr. Richardson's appointment came as no surprise, since P&S's women were empowered early on. The 1905 issue of *Chips* featured "A New Declaration of Independence by the Women of the C.P.S."



**Whereas**—We, the Women of the C.P.S., have entered the College of Physicians and Surgeons on equal footing with the men and are grateful for the privilege; and

**Whereas**—We not only find the companionship of these gentlemen helpful and pleasant in the extreme; and

**Whereas**—All of us are old enough (and some of us worse than that) to realize our beauty, fascination and dangerousness—those of us who are beautiful, fascinating and dangerous (and there are some of us who are not); and

**Whereas**—It often becomes necessary to hold consultations on various

subjects with the aforesaid gentlemen,

**Be It Resolved**—That in the hereafter we shall arrogate to ourselves the privileges of meeting the gentlemen on the same footing as we meet each other; and

**Resolved**—If we are found lurking in shadowy corners, on the stairway, or in our deserted rooms with



sundry gentlemen or the same gentlemen, that we have no further designs on the aforesaid gentlemen or gentleman than the extraction of ideas for the furtherance of our work, for the interest of mankind, and the satisfaction of ourselves; and

**Resolved**—That we condemn any covert glances cast at us, or jocular remarks made at our expense or at the expense of the aforesaid gentlemen or gentleman who find pleasure in our society, or consider it their or his duty to assist in our growth or the expansion of our ideas; and

**Resolved**—That it be made known that we desire to be left heart-whole and fancy free until such a time as we deem it fitting to be otherwise; and, also, that the aforesaid gentlemen or gentleman be allowed the same privileges without any extraneous influences being brought to bear to mar the peace and serenity of our associations; and

**Resolved**—That we are going to walk, talk, laugh, joke, quarrel, study, hold consultations, be as chummy as possible, and otherwise do as we please with any gentleman we can find who will act as party to the second part without caring who sees us, or feeling under obligations to apologize for our conduct or suddenly change the subject of a conversation to Physiology, Biology, Pathology, Bacteriology or any other old iology" when anyone chances by; and furthermore, be it

**Resolved**—That we are going to meet the aforesaid gentlemen or gentleman on equal footing in our

pleasures as we do in our work for the best good of ourselves, the aforesaid gentlemen or gentleman and our college, the C.P.S.

Among the seventeen signers of the Declaration was Faith Sai So Leong, the first Chinese woman to study dentistry, and the first in America to ever practice. Sent by missionaries from her native Canton to the United States to acquire an education, Leong was adopted by a local San Francisco family named Nickerson. When the girl, who had spent a good deal of time in her new city visiting a cousin who was a dentist, showed both nimble mind and fingers, the Nickersons encouraged her to pursue her interest in dentistry. Faith Leong, "a clever little girl," as the 1904 *Chips* reported, "[who] is universally esteemed and respected," held her own in the male, English-speaking enclave, and graduated in 1905.

Dr. Leong was the only woman in her class. Some thirty percent of UOP's Class of 1996 is female and estimates are that by the year 2000 half of all entering dental students will be. Nowadays, women have entered the mainstream in dentistry. Men are adjusting. A 1988 cartoon shows a man seated in a dental chair, wide eyed with shock, as a woman approaches. The caption explains: "It finally dawns on Richard why his new dentist looks so familiar. She was once a college sweetheart who he very uncere-moniously dropped for a freshman cheerleader. It seemed so long ago."

## Postscript

### What will the next century bring?

**THE FUTURE**, said writer Pierre Dac, is the past in preparation. In the one-hundred years just ended, the School of Dentistry has developed into a world-class dental educational institution. Its program, enabling students to complete four academic years of instruction in three calendar years, is unique among dental schools. In 1995 some two-thousand students will seek admission, giving UOP the largest applicant pool of any dental school in the United States. Forty-one percent of its four-hundred thirty-eight students are minorities, and thirty-six percent are women. Less than four per cent drop out, which is the lowest attrition rate in the nation. The school's students boast a ninety-five percent success rate on the National Board Dental Examination. In 1994, one hundred per cent of new graduates taking the Western Regional Board exam passed; eighty-five percent, almost twice the national average, passed the California State Board.

**WHAT DIRECTIONS** will the school take in the coming one-hundred years? UOP, of course, will have to cope with the challenges facing the profession in general, including current trends towards altered mechanisms of payment, licensure by credentials, and increased delegation of care to auxiliaries. External social and technological changes will exert their pressures. The graying of a well-educated population will result in more sophisticated patients, for instance, and scientific advances in such areas as implants and genetic engineering will be harnessed to meet their complex needs.

**UOP WILL ALSO FACE** its own particular challenges. As a private school, it will have to address the perplexities of financing the cost of excellence. Funds will be needed to continually upgrade and polish the educational curriculum and to pursue research. Dean Dugoni's goals for the future include four priorities. Two of them involve financial realities crucial for the school to thrive: to complete the renovation of the entire Webster Street building, and to establish fifty-million dollars in endowments. The other two priorities, however, can't be measured in money: they are to foster an even greater sense of family within the institution, and to create a patient-centered model of clinical care.

**ONE EXAMPLE OF CURRENT** strategic planning for the future is the restructuring of the clinic model of patient care. Patients traditionally were under student control, and therefore once considered primarily in terms of supplying the necessary units of production for graduation. Treatment still is fragmented as a result and the administration is not satisfied that patients are given the truly comprehensive care the school promises. Consequently, Dean Dugoni has hired a whole group of clinicians, general dentists in private practice, to serve several days weekly as group practice coordinators to ensure that patient needs are championed. Now, following the prescription of the 1995 Institute of Medicine study on dental education calling for renewed emphasis on primary care, generalists direct patient care in the student clinic, maintaining specialists on call.

**TO MEET ITS CHALLENGES HEAD ON**, as the school is already doing with its increased emphasis on patient-centered clinical care, UOP relies on its unequalled strengths: camaraderie, flexibility, performance, and service. In fact, service—to students, to practitioners, to the profession, and to the community—is the watchword of the School of Dentistry and the core principle behind its mission as it heads into the 21st century.



### Suggestions for further reading

On the social history of medicine in America one might start with Richard W. Shryock's classic work *Medicine and Society in America, 1660-1860* (Ithaca: Cornell University Press, 1972). To bring the reader up to date, Paul Starr delivers a superb account of the evolution of medical training, which dentistry paralleled in many respects, in *The Social Transformation of American Medicine* (New York: Basic Books, 1982).

For overviews of the development of dentistry, Malvin Ring's spectacular *Dentistry: An Illustrated History* (St. Louis: Mosby, 1985), Walter Hoffmann-Axthelm's *History of Dentistry* (Chicago: Quintessence, 1981) and Milton Asbell's *Dentistry: A Historical Perspective* (Bryn Mawr, PA: Dorrance, 1988) are excellent references. Organized dentistry's evolution is charted in Robert McCluggage's *A History of the American Dental Association, 1859-1959* (Chicago: American Dental Association, 1959).

Tantalizing hints of early dentistry in California appear in Henry Harris's *California's Medical Story* (San Francisco: Stacey, 1932). An account of Charles Boxton's political adventures may be found in *A Debonair Scoundrel* by Thomas Lately (New York: Holt, Rinehart and Winston, 1982). *McTeague: A Story of San Francisco* (1899) by Frank Norris (New York: Norton, 1977) among other accomplishments paints a vivid picture of life in turn-of-the-century San Francisco.

A detailed study of wartime dentists is delivered in Irene Bober-Moken's article, "American Military dentists as prisoners of war in the Pacific Theatre during World War II," *Bulletin of the History of Dentistry*, 42(1): 3-12, March, 1994.

Frank J. Orland chronicles *William John Gies: His Contribution to the Advancement of Dentistry* (Gaithersburg, MD: William J. Gies Foundation, 1992). Kara Pratt Brewer's *Pioneer or Perish* offers a history of UOP under the administration of President Robert Burns (Stockton: University of the Pacific, 1997).

### Production Notes and Credits

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#### Historical Photos:

Pages 5 through 11— Early P&S infirmary, baseball team spirit, Dr. McDowell's full time faculty, early operatory, lecture hall, 14th Street school, 14th Street school classroom, main clinic (1964).

Pages 112 through 119— *Contact Point* covers, today's main clinic, microbiology, remodeled pediatric clinic, classroom of the 1990's, pre-clinical lab (1996), Dr. Dugoni's administrative team, the current campus.



# CONTACT POINT

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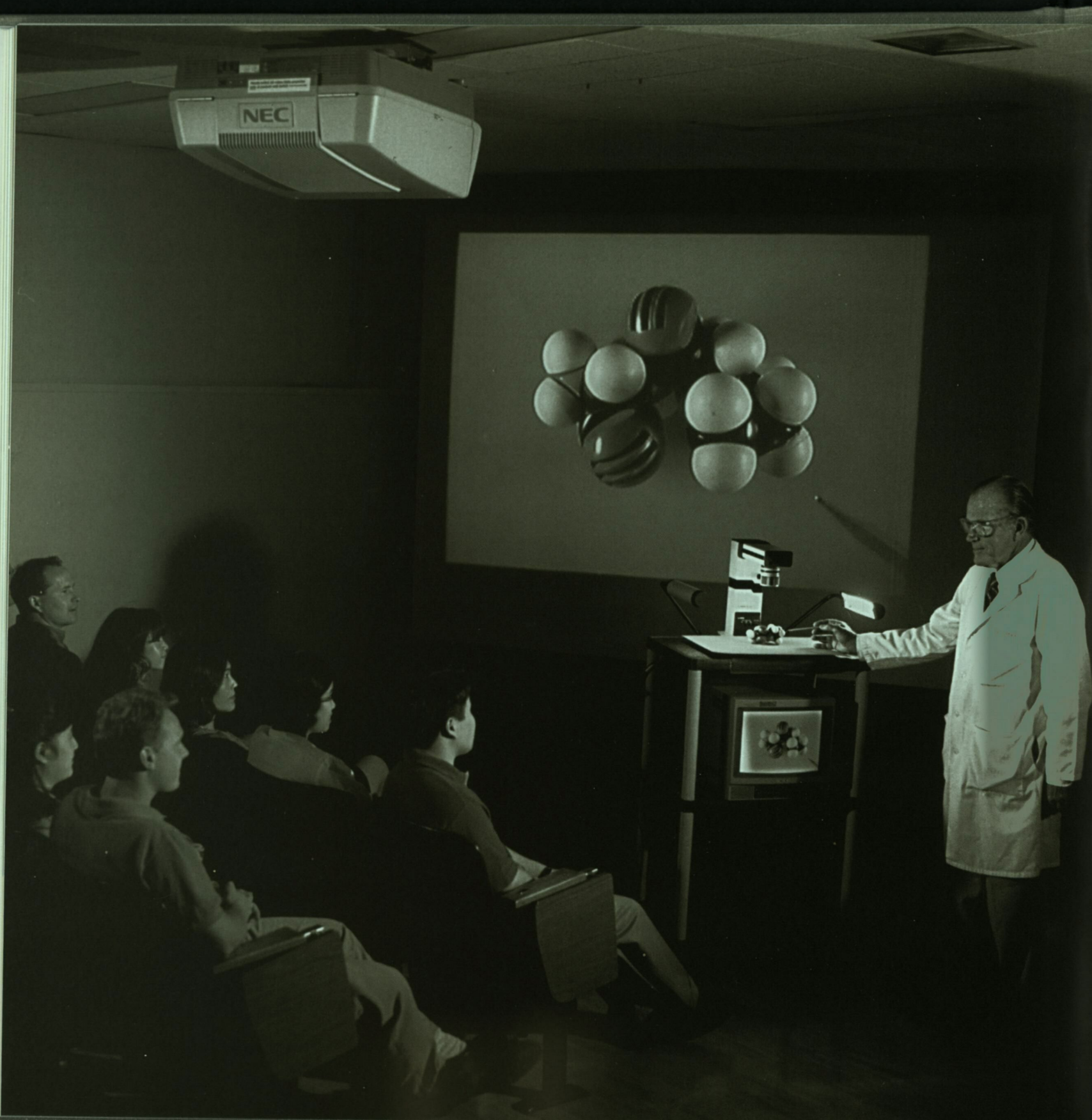
**RESPONDING  
TO THE  
CHALLENGE OF  
AIDS**















Standing (left to right): Ronald F. Borer, DDS; David W. Chambers, EdM, PhD, MBA; David B. Nielsen, DDS, MA; Robert H. Christoffersen, DDS, MA  
 Seated (left to right): Eddie K. Hayashida, DDS; Milton C. Lambertson, BA; Arthur A. Dugoni, DDS, MSD; William Harman, MA, PhD





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