



INTRODUCTION

CALIFORNIA'S DENTAL SCHOOLS HAVE CHANGED

The Future of the Dental Profession Emerges From Its Dental Schools

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Five of the nation's 55 dental schools are in California. Although they differ in size, sources of funding, and emphasis, they are among the very best in the United States. Generally, they share the same four-part mission: education, research, patient care, and support of the practicing profession.

The balance of that mission has not remained constant. Education has become complex and expensive, research has assumed greater prominence, and support for the profession has dimmed. In 1926, the Carnegie Foundation for the Advancement of Teaching issued its Bulletin No. 18: the Gies report on dental education. This was the landmark report that clearly established that dentistry would be a separate profession from medicine. It was based, in part, on personal visits Dr. Gies, a biochemist, made to every school in the U.S. and Canada. The three California dental schools, the University of Southern California; the University of California, San Francisco; and the College of Physicians & Surgeons (Pacific), were described in full detail. Comparison with the recent ADA *Survey of Dental Education* statistics is instructive.

Eighty years ago, the three California schools graduated 460 dentists, about one for every 8,700 Californians. Today, our five schools graduate 575, or one for every 43,700 citizens in the state. California is a net importer of dentists. Last year, about 1,200 dental licenses were granted. California schools produced less than half of that number. Three-quarters of graduates from California schools are Golden State natives, the same in 1925 and 2003. Almost one-third of California's

young men and women who become dentists receive their training in schools outside the state. Four percent of dental students in 1925 were from other countries.

Dental education has become expensive. The average cost to educate a dentist in the United States (annual budget of all schools divided by number of graduates) is \$82,000 per year. In 1925, the average for California schools was \$330. Using the CPI as an inflation adjuster, the current cost is still almost 25 times as great.

In 1925, the schools in California paid their clinical science faculty members an average of \$857 per year. Obviously there were many part-time faculty members in that group since the average salary for all Americans was \$1,300 in that year. Seventy-five years later, when the average American earned \$16,300, dentists teaching in school averaged \$53,100. Today, that is about one-third of the net income of general practitioners. The missing figure is the net income of 1925 dentists, although it is unlikely that it would have been more than 10 times the national average as it is now.

The quality of graduates three-quarters of a century ago appears to have been more acceptable to the profession. Among



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California schools in 1925, the state board failure rate was 4 percent; it varies from three to five times that today.

There seem to be no differences between 1920 and 2005 in the role of patient care in dental education or the types of patients treated. They remain individuals of lesser means who have generally more challenging oral condi-

tions. Three-quarters of a century ago, the three California schools based their education on an average of 150 patient visits each year per enrolled student. Today, nationally, that figure has risen by 7 percent to 161. Because the number of years of instruction has risen from three to four, the real increase in patient experience for today's graduates

is more like 45 percent. Across America today, dental schools provide 2.9 million patient visits annually.

In the 1920s and 1930s, commercialism had a bad odor in dentistry. In some states, dentists could lose their licenses for attending courses sponsored by manufacturers. Dental companies were prohibited from attending, let alone exhibiting, at dental society meetings. Almost all continuing education was provided by schools or through study clubs. About 4 percent of the budgets of the California schools at that time were devoted to this type of support for the profession. Today, the percentage is less than 1 percent, across all dental schools. Schools are being pushed out of this service function to the profession by the institutes and by organized dentistry.

Professional development in schools has been replaced by research. In 1925, only one of the three California schools, UCSF, had any budget devoted to research. The P&S faculty had published a single paper in the year Dr. Gies visited and none the year before. They had, however, made a cash donation to UCSF for research purposes amounting to 4 percent of that school's research budget. There were a few more papers published at USC and Gies took pains to note that a major research theme at the only school in the south of the state was "investigations into the validity of commercial claims made by dental suppliers." Today, the research budgets of American dental schools is 11 percent of all expenses, some \$215,000,000 annually. Three of California's dental schools – UCSF, UCLA, and USC – are among the strongest in the nation. The California schools combine for almost 20 percent of the entire dental school research budget in this country. Adjusted for inflation, this is an 800-fold increase in 80 years.

If we can read the future of dentistry in California from the strength of its schools today, we might conclude that the state is having to increasingly bring in dentists and to provide for their continuous education while schools continue to subsidize care for the underserved and develop the knowledge that will advance the profession. **CDA**