WINTER • 1987

# JOURNAL

# AMERICAN COLLEGE OF DENTISTS


## New Fellows Inducted
## Dentist Health Status and Risks
## Evaluating Faculty Performance

# *Purposes and Objectives of the American College of Dentists*

The American College of Dentists in order to promote the highest ideals in health care, advance the standards and efficiency of dentistry, develop good human relations and understanding, and extend the benefits of dental health to the greatest number, declares and adopts the following principles and ideals as ways and means for the attainment of these goals.

(a) To urge the extension and improvement of measures for the control and prevention of oral disorders;

(b) To encourage qualified persons to consider a career in dentistry so that dental health services will be available to all and to urge broad preparation for such a career at all educational levels;

(c) To encourage graduate studies and continuing educational efforts by dentists and auxiliaries;

(d) To encourage, stimulate and promote research;

(e) To improve the public understanding and appreciation of oral health service and its importance to the optimum health of the patient;

(f) To encourage the free exchange of ideas and experiences in the interest of better service to the patient;

(g) To cooperate with other groups for the advancement of interprofessional relationships in the interest of the public;

(h) To make visible to professional persons the extent of their responsibilities to the community as well as to the field of health service and to urge the acceptance of them;

(i) To encourage individuals to further these objectives, and to recognize meritorious achievements and the potentials for contributions to dental science, art, education, literature, human relations or other areas which contribute to human welfare—by conferring Fellowship in the College on those persons properly selected for such honor.

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# FROM THE EDITOR'S DESK

## The Search for *SELECT* Students

Perhaps taking a page from the United States Marine Corps, which continuously looks for a "few good men", the American Dental Association and the American Association of Dental Schools have established a national recruitment project to attract highly qualified students to careers in the dental profession. This project has been named the *SELECT* Program.

The program is well organized. Each dental school, each state dental association and each component society will have "Recruitment Coordinators". Dentists in every community will be designated as "Recruitment Partners" to recruit quality students. Every concerned dentist should assist in this program.

The Select Program has two objectives: (1) to promote an accurate and positive image of the profession and (2) to encourage highly qualified individuals to consider careers in dentistry. Select's focus is on developing the quality of individuals in the applicant pool so that dental schools may choose only the most qualified students for admission. It concentrates on the quality of applicants and is designed to augment, not replace, local recruitment activities.

The dental profession is presently trying to adjust to the effects of the tremendous increase in the number of dental graduates that took place between 1965 and 1975, creating a dental manpower surplus and causing a busyness problem for practicing dentists. During that time, the number of applicants to dental schools rose from 6844 in 1965 to

Keith P. Blair

15,734 in 1975, a 130 percent increase.

Because the field of dentistry was becoming saturated with dentists by 1975, the flow of applicants to dental schools began to reverse itself, so that by 1986 only 5724 students applied to dental schools, a 60 percent decrease from 1975. It is projected that this decrease in the number of applicants will continue through the rest of the century.

The decrease in the number of applicants between 1975 and 1986 has produced a new problem with the applicant pool. In the 1970's, dental schools had over seven applicants for every freshman position. In 1987 the pool was so low that three out of four applicants were admitted to dental schools. This lack of selectivity is a matter of concern. Of even greater concern, and much more alarming, is the grade point average of applicants which has also steadily declined in recent years to the extent that some educators are referring to the problem as a crisis in dental education.

Because of the surplus of dentists in the profession, students are now being guided toward careers in other fields such as engineering and computer sciences. Since 1975, the number of biology graduates has steadily declined also, and most health professions draw their applicants from biology majors.

It is expected that the number of dental graduates will continue to decline significantly over the next 10 to 15 years and could fall to as low as 3000 per year, down to about the same level as in the early 1950's. According to projections, there can definitely be a shortage of dentists if these trends continue.

Other factors greatly affecting the decline in the number of dental school applicants are the considerable cost of dental school tuition and the fact that the average dental student acquires an education debt of over $37,000. by graduation time.

It apparently will be up to the nation's dentists to help preserve the quality of the profession by guiding the most qualified individuals toward careers in dentistry. This is what the *SELECT* Program is all about.

The American College of Dentists strongly supports the Select Program and earlier this year provided an unrestricted grant to the program. It is hoped that Fellows of the College will take the lead in the search for a few "*SELECT*" students each year.

It is a program that can work, but it must have the participation of the dental profession. △

Keith P. Blair

# Leadership

## President-Elect's Address October 9, 1987—Las Vegas, Nevada

**Robert W. Elliott, Jr.**

It is a pleasure and honor for me to have the opportunity to speak to you and it's my privilege to offer my congratulations and that of the Board of Regents to all of you.

To those who are candidates—congratulations on your selection for fellowship in the college.

To those who are sponsors—congratulations for recognizing the worthiness of your candidate, just as you were nominated in past years by those who recognized your accomplishments. To those who are neither candidate nor sponsor, congratulations for assisting in this convocation by your presence and participation.

Each and every one of you here have much in common. But of great significance is one characteristic you all share: that you are leaders, and leadership is the subject of my brief remarks this morning.

I would like to give you a thought or two to carry home with you and put into action.

What is leadership and what or who are leaders?

We all recognize leaders; George Washington, Abraham Lincoln, Winston Churchill, Martin Luther King, Golda Mier, George Patton, and Margaret Thatcher to name a few of those who are widely recognized.

At first glance, these men and women seem to have little in common. They are from separate eras, various professions and different sexes. Yet I believe they share

Robert W. Elliott, Jr.
1987 ACD President

something with you recognized by Theodore Roosevelt; and that is *great enthusiasm* and *great devotion.* Let me quote him:

> "It is not the critic who counts, or how the strong man stumbled and fell, or whether the doer of deeds could have done them better. The credit belongs to the man who is actually in the arena, whose face is marred by dust and sweat and blood, who strives valiantly, who errs and comes short again and again, who knows the great enthusiasm, the great devotion, who spends himself in a worthy cause and if he fails, at least fails while daring greatly so that he'll never be with those cold and timid souls who will never know either victory or defeat.

You are here because as I said, "You know the great enthusiasm, the great devotion". As past president Olsen said two years ago, "You have the right stuff".

You are devoted to your family, your god, your country, and your profession. Today you are being recognized for sharing your talents and advancing and improving those things in which you believe.

What is it that made you leaders? Who motivated you? No one motivated you? *You motivated yourself!*

What causes one to assume the role of leader?

We are told by psychologists that there are four basic drives in life and the satisfaction of these results in "behavior" or motivation. These four are:

1) Self preservation, the fight to survive, the satisfaction of physical needs. (Food, clothing and shelter).
2) Romance, the need to give and receive affection.
3) Importance, the need for personal fulfillment. (Ego satisfaction and recognition).
4) Self-realization, after the first three are satisfied we ask ourselves, "The world says I'm OK, what do I say? Am I giving all I can give?" This derives from the spiritual self and we are motivated to work for others.

You who are here today have achieved what is denied to most. You have satisfied your physical needs, give and receive affection, are important and know as a leader that it is up to you to make others feel important, and you have satisfied the fourth basic need: you are realizing your full potential, you are giving to others.

As a group you are truly blessed, you have recognized that leadership is not just for me, but for *the common good.*

Let me name some leaders who exemplify this, with whom you are linked:

Moses—brought God's 10 Commandments from Mt. Sinai, he never entered the promised land.

John Kennedy—he said, "Ask not what your country can do for you, ask what you can do for your country."

Patrick Henry—in support of freedom for the colonies said, "As for me, give me liberty or give me death."

John Paul Jones—in response to the Barbary Pirates who had been demanding payment not to harass our ships, though it meant going in harms way for he and his crew, "millions for defense, not one cent for tribute."

**All Put The Common Good First**

As leaders you are looked to for guidance and so you are:

1) The first to make decisions.
2) Possessed of the hardihood to assume responsibility.
3) Willing to take the blame.
4) Quick to share the rewards with your colleagues, and
5) Ready to address each new task with vigor.

Today those of you who are candidates for fellowship will be recognized for your leadership. Tomorrow you will join your colleagues, not resting on your laurels but addressing each new task with vigor.

Dentists as leaders are found in every walk of life, in such arenas as education, religion, scouting, and local, state and national govt. (both legislative and executive) to name a few.

And speaking of government, perhaps we can digress a moment on this 200th anniversary of our constitution to look at a profile of the leaders who wrote this magnificent document.

The following is taken from an article by Dale Walker in the retired officers magazine—our founding fathers—only four of them were 60 or older (Ben Franklin at 81 was the oldest by 15 years) Jonathan Dayton at 26 was the youngest, many were in their thirties and the average age was 43. More than a third were college graduates—and two thirds had studied in college. More than half were lawyers, about half were military veterans and 80 percent were serving or had served in Congress. They were merchants, bankers, farmers, and property owners, but most were what we would call middle of the road in their politics. They knew the political theory of ancient Greece and Rome, and had read deeply into Herodotus, Thucydides and Polybius. They were educated in the history of the Greek city-states in which unchecked democracy led to class warfare, anarchy, and ultimately dictatorship.

200 years later we have numbers of dentists who are involved in government, many are Fellows. They sat and are sitting in the National Congress, and in state legislatures, have been mayors of our towns and cities and are and have been county commissioners. Their responsibilities are awesome.

I say awesome, when one considers the following written by professor Alexander Tyler over 200 years ago while our thirteen original colonies were still a part of great Britain, before our constitution, (he was writing of the fall of the Athenian Republic over 2,000 years earlier). "A democracy cannot exist as a permanent form of government. It can only exist until the voters discover that they can vote themselves a generous gift from the public treasury. From that moment on, the majority always votes for the candidate promising the most benefits from the public treasury, with the result that a democracy always collapses over loose fiscal policy, always followed by dictatorship. The average age of the world's great civilizations has been 200 years. These nations have progressed through this sequence: from bondage to spiritual faith; from spiritual faith to great courage; from courage to liberty; from liberty to complacency; from complacency to apathy; from apathy to dependency; from dependency back again into bondage."

I am confident that the dentists in

government legislative and administrative positions will continue to work to prevent such a sequence from taking place in our country, 200 years after the signing of the constitution.

**Returning To A Dental Focus**

Martin Luther King said: "A problem solved brings us face to face with another problem." Dentistry has never lacked problems.

I'm going to ask that you take some specific leadership actions when you return home in response to some of these.

Let us look at the concern relating to the future practitioners of dentistry. I believe we all agree that we must keep our profession strong and vital. To achieve this our dental schools need students of the highest caliber.

In 1986 30 percent of the applicants to dental school had a grade point average of less than 2.8. There were only 1.3 applicants for each available freshman seat. To address this concern the ADA and the AADS have initiated a project named **Select.** Our American College of Dentists gave a $5,000 unrestricted grant in support of this effort. This program is focused on improving the quality of the applicants to dental school. It is not aimed at increasing enrollment. State dental societies and dental schools have already appointed Select coordinators who will, in concert with the Select Chicago office, administer the program. What is needed is **recruitment partners**. Recruitment partners will identify and confer with individuals who are interested in our profession and who are highly qualified to enter it. Recruitment partners are ideally role models.

I am asking each and every one of you, when you return to your offices, to call the select coordinator in your area and volunteer as a recruitment partner. Your Section Secretary has been provided with a complete information packet on the select program including the list of coordinators. Nothing is more important to the future of our profession than the quality of young men and women that enter it. Nothing is more important to the success of this program than the participation of the leaders of the profession and the very best role models—**you**. Please volunteer when you return home.

Another area of interest that needs your attention is the American College of Dentists Foundation. Recent efforts have included the publication of the book, "The Hillenbrand Era—Organized Dentistry's Glanzperiode." Authored by Clifton and Lois Dummett, it is a treasure house of information and should be on every dentist's reading list and required reading for every dental student.

The Foundation gave a grant of $3,500 to the University of Minnesota for the development of an ethics curriculum to help dental students identify, reason about, and adequately resolve ethical problems in their chosen profession.

The Foundation distributes a copy of the pamphlet "Dentistry, A Health Service" to every student in 54 dental schools in the United States and Canada. This booklet is a guide to the highest ideals of dentistry.

Only the interest from foundation funds or special grants is used to support foundation projects. We ask that you support your foundation if possible.

There is one last request that I have to make. That is, just as you have been nominated for your leadership, please identify others who are worthy of fellowship and nominate them as your sponsor nominated you. There are many young dynamic men and women in our midst waiting to be encouraged by such an honor.

Remember, the framers of our constitution averaged 43 years of age. Nominate not only those who have accomplished greatly but those who are also young and on the leadership track.

We as leaders must continue our work to implement the programs and objectives of the college. Volunteer to work in your Sections, for this is where the goals of the College are achieved. Your actions speak more eloquently than your words. You are the College and, as a leader, your colleagues will emulate your actions.

We of the Board of Regents pledge to you our every effort will be for the most responsive management with fiscal restraint in furthering the objectives of our college.

Congratulations again, and mindful of our accomplishments, we take our hats off to the past—but take our coats off as we face the future.

God bless. △

# DENTIST HEALTH STATUS AND RISKS

**Jack D. Zwemer***
**J. Earl Williams****

For many years it has been assumed by dentists that dentistry is a highly stressful profession and that dentists have a higher vulnerability to disease and premature death than other occupational groups. This concern has recently led to increased demands by dentists for help in the form of workshops, seminars, and position papers on the health status and health risks of dentists. One of the most effective instruments for determining health status and assessing the magnitude of health risks among dentists is an actuarial profile of the profession. The purpose of this study, therefore, was to review the available data from U. S. studies on dentist longevity, on major causes of dentist death, and on standard mortality ratios in order to ascertain both the health status and principal health risks experienced by members of the profession.

While numerous publications have cited statistics on dentist mortality, there have been surprisingly few studies with original data on this subject. An exhaustive review of the American literature revealed the existence of just 13 original studies on the mortality experience of U. S. dentists[1-13] (Table 1). Seven studies include data from the entire United States with the remaining studies describing mortality in selected states.

Because of the historical nature of the population group and the available usable data, this study had to be confined to white male U. S. dentists with comparative data on all adult white U. S. males. All data on white males was secured from Vital Statistics of the United States, U. S. Public Health Service, National Vital Statistics Division.

## Findings

**Life Expectancy**. Six available studies present data on the life expectancy of white male dentists compared to the life expectancy of all adult white males in the United States (Table 2). During the reporting period 1946-48 the average age at death of white male dentists was virtually the same as the age at death of all adult U.S. white males (65 years). In the period from 1951 to 1972, however, the average age at death for dentists had increased to 71.5 years. This was about three years longer than the longevity of all adult white U.S. males. The longevity advantage of dentists seems to be increasing.

**Causes of Death**. Four studies conducted by the American Dental Association over the last 30 years have identified the ten leading causes of death among white male dentists.[2,3,8,11] These causes of death as identified and listed according to the *Manual of the International Statistical Classification of Diseases, Injuries, and Cause of Death* (Sixth and Seventh Revisions) published by the World Health Organization are:

Diseases of the circulatory system (Heart)
Neoplasms (Cancer)
Diseases of nervous system and sense organs (Nerves)
Accidents, poisonings and violence (Accidents, Suicides)
Diseases of digestive system (Digestive)
Diseases of respiratory system (Respiratory)
Diseases of genito-urinary system (GU)
Allergic, endocrine system, metabolic, and nutritional diseases (Allergic)

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Infective and parasitic diseases (Infective)
Symptoms, senility, and ill-defined conditions (Senility)

The ten leading causes of death are the same for dentists as for all adult white U.S. males (Table 3). Furthermore, the distribution (or percentage) of deaths by cause are virtually the same for dentists as for the adult white males. Thus circulatory disease is responsible

**Table 1. Sources of Data on Mortality of U. S. Dentists**

| | Reference | Years | Scope | Number of Dentist Deaths | Source of Information |
|---|---|---|---|---|---|
| 1 | ADA, 1949 | 1946–48 | U.S. | 2,383 | Obituary notices and ADA membership lists |
| 2 | ADA, 1956 | 1951–54 | U.S. | 3,576 | Death certificates from 44 state health departments |
| 3 | ADA, 1962 | 1955–60 | U.S. | 6,739 | Death certificates from 40 state health departments |
| 4/5 | Guralnick, 1962, 1963 | 1950 | U.S. | 596 | See bibliography |
| 6 | Blachly, et al 1963 | 1950–61 | Oregon | 9 suicides | Death certificates from state of Oregon |
| 7 | Glass, 1966 | 1921–60 | New England | 4,021 | Death certificates from New England States |
| 8 | ADA, 1968 | 1961–66 | U.S. | 6,070 | Death certificates from 35 state health departments |
| 9 | Milham, 1972 | 1961–72 | Washington | 21 suicides | Death certificates from state of Washington |
| 10 | Rose et al, 1973 | 1959–61 | California | 20 suicides | Death certificates from state of California |
| 11 | ADA, 1975 | 1968–72 | U.S. | 4,190 | Death certificates from 31 state health departments |
| 12 | Orner et al 1976 | 1960–65 | U.S. | 8,874 | Death certificates, ADA obituaries, death notifications |
| 13 | Simpson et al, 1983 | 1968–80 | Iowa | 8 suicides | Death certificates from state of Iowa |

**Table 2. Average Age at Death**

| Reference | Dates | Dentists (yrs) | Male Pop. (yrs) |
|---|---|---|---|
| ADA, 1949 | 1946–1948 | 65.4 | 65.3 |
| ADA, 1956 | 1951–1954 | 67.5 | 66.1 |
| ADA, 1962 | 1955–1960 | 69.3 | 67.9 |
| Orner et al, 1976 | 1960–1965 | 69.38 | — |
| ADA, 1968 | 1961–1966 | 71.2 | 68.5 |
| ADA, 1975 | 1968–1972 | 71.5 | 68.7 |

for approximately fifty percent of all deaths in both groups. Neoplastic conditions cause about 1/6 of all deaths in both groups. Accidents including violence and suicide account for 6% of dentist deaths compared to 7% of all white male deaths in the 1975 study.[11]

**Standard Mortality Ratios**. Additional insight into the comparative risks of dentists and of all adult white males can be secured by computing the standard mortality ratios (SMR). This simply involves:

$$\text{SMR} = \frac{\text{Observed death rate in white male dentists}}{\text{Expected death rate in adult white male population}} \times 100$$

Some of the Standard Mortality Ratios (SMR) were stated by the authors in their original studies. The remainder of the SMR for specific causes of death were calculated as follows:

$$\text{SMR} = \frac{\text{Mortality rates} \times \text{percent deaths by cause for dentists}}{\text{Mortality rates} \times \text{percent deaths by cause for males}} \times 100$$

The mortality rates in the formula were taken from Orner's study[12] and the percent deaths by cause were based upon each study source. For example, the SMR for diseases of the circulatory system based upon the ADA 1962 study[3] were calculated as follows:

$$\text{SMR}_{\text{Circulatory Disease}} = \frac{8663.00/100{,}000 \times 53.46\% \text{ (age adjusted)}}{12{,}167.83/100{,}000 \times 49.63\% \text{ (age adjusted)}} = 77$$

Obviously, a SMR less than 100 is an advantage to dentists. Inspection of the data shows that dentists have a standard mortality ratio of less than 100 for virtually all causes of death (Table 4). While historical trends in standard mortality ratios cannot be rigidly defined by a few studies, the indications are that dentists have an increasing advantage over the general male population with respect to deaths from circulatory disease. With the exception of Guralnick's[6] findings, these ratios have decreased from 91 in the 1940's to 71 in the early 1970's. On the other hand, dentists seem to be slowly approaching the same level of risk over time as other adult males with respect to death from accidents/violence and from digestive, respiratory, and infective and parasitic diseases. Finally it is clear that dentists tend to exceed the general male population in deaths by suicide.

## Discussion

It would have been interesting to compare the data on mortality of

**Table 3. Causes of Death and Percentage of Deaths by Cause**

| Causes of Death | Subjects | ADA, 1956 | ADA, 1962 | ADA, 1968 | ADA, 1975 |
|---|---|---|---|---|---|
| Heart | Dentists | 54.29 | 53.46 | 51.62 | 51.74 |
| | Pop. | 48.15 | 49.63 | 49.30 | 51.71 |
| Cancer | Dentists | 16.11 | 16.64 | 16.63 | 17.70 |
| | Pop. | 15.53 | 16.21 | 16.91 | 17.73 |
| Nerves | Dentists | 10.73 | 11.71 | 12.13 | 9.03 |
| | Pop. | 11.21 | 11.22 | 10.35 | 9.07 |
| Accidents, suicides | Dentists | 5.09 | 5.20 | 5.79 | 6.19 |
| | Pop. | 8.04 | 6.90 | 6.85 | 7.10 |
| Digestive | Dentists | 3.61 | 4.20 | 3.78 | 3.38 |
| | Pop. | 4.08 | 4.19 | 4.19 | 3.08 |
| Respiratory | Dentists | 2.93 | 3.25 | 4.56 | 6.48 |
| | Pop. | 3.53 | 4.79 | 5.92 | 5.82 |
| G-U | Dentists | 2.38 | 1.97 | 1.61 | 0.86 |
| | Pop. | 2.74 | 2.06 | 1.72 | 1.03 |
| Allergic | Dentists | 1.94 | 1.76 | 1.69 | 1.56 |
| | Pop. | 2.06 | 1.88 | 1.91 | 1.54 |
| Senility | Dentists | 1.02 | 0.66 | 1.04 | 1.74 |
| | Pop. | 1.07 | 0.89 | 1.02 | 1.04 |
| Infective | Dentists | 1.02 | 0.54 | 0.51 | 0.47 |
| | Pop. | 2.50 | 1.34 | 0.95 | 0.65 |
| All other | Dentists | 0.88 | 0.61 | 0.64 | 0.85 |
| | Pop. | 1.09 | 0.89 | 0.88 | 1.23 |

U. S. dentists with the data on dentist mortality from other countries. This approach was dropped, however, because of differences between the U. S. and foreign studies in classifying the cause of death and therefore, the rates by cause. Even in some of the U. S. studies the causes of death were variously defined. Thus death by stroke was classified under "circulatory disease" in some studies and under "nervous disease" in others.

Since the original data on dentist mortality was derived from multiple sources and often involved only partial reporting it was not subjected to traditional statistical analysis. The data were subjected to descriptive analysis which permitted arithmetic comparisons and the discovery of secular trends. Thus the life-span of dentists prior to 1945 tended to be somewhat

**Table 4. Standard Mortality Ratios**

| Reference | Heart | Cancer | Nerves | Accidents | Suicide | Digest. | Resp. | Gu | Allergic | Senility | Infect. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Glass, 1966 (1921–1960) | 91 | 75 | 94 | 49 | 123 (100)* | — | 64 | — | — | — | — |
| Guralnick, 1962, 1963 (1950) | 102 | 91 | — | 53 | 142 (31)* | — | — | — | — | — | — |
| ADA, 1956 (1951–1954) | 80 | 74 | 68 | 45 | 89 (73)* | 63 | 59 | 62 | 67 | 68 | 29 |
| Blachly et al, 1963 (1950–1961) | — | — | — | — | 191 (9)* | — | — | — | — | — | — |
| ADA, 1962 (1955–1960) | 77 | 73 | 74 | 54 | — | 71 | 48 | 68 | 67 | 53 | 29 |
| Rose et al, 1973 (1959–1961) | — | — | — | — | 218 (20)* | — | — | — | — | — | — |
| Orner et al, 1976 (1960–1965) | 72 | 73 | 73 | 59 | 100 (177)*<br>92 ADA<br>132 Non-ADA | — | 46 | — | — | — | — |
| ADA, 1968 (1961–1966) | 75 | 70 | 83 | 60 | — | 64 | 55 | 67 | 63 | 73 | 38 |
| Milham, 1972 (1961–1971) | — | — | — | — | 300 (21)* | — | — | — | — | — | — |
| ADA, 1975 (1968–1972) | 71 | 71 | 71 | 62 | — | 78 | 79 | 59 | 72 | 119 | 51 |
| Simpson et al, 1983 (1968–1980) | — | — | — | — | 160 (8)* | — | — | — | — | — | — |

*() Actual number of reported dentist deaths by suicide
Note: The SMR in the ADA studies of 1956, 1962, 1968, and 1975 were calculated using the formula described in the text.

lower than the average life expectancy of all adult white U. S. males. This may have been the result of adverse working conditions for dentists. Since 1945, however, dentist longevity has been increasing more rapidly than the life-span of all adult white U. S. males—suggesting a reduction in occupational risks for dentists.

The risk of death from suicide, however, remains higher for white male dentists than for adult white males in general. Fortunately, these rates have apparently not been rising. A national study in 1956 reported that death by suicide represented 2.04 percent of all dentist deaths while a comparable study in 1975 reported that suicides represented 2.03 percent of dentist

deaths.[2,11] Indeed Orner's analysis showed that overall dentist suicide death rates were the same as suicide rates for all adult white U. S. males (SMR = 100). He further showed that suicide rates among ADA members were lower (SMR = 92) than the rates for non-ADA members (SMR = 132).[12]

In comparison with the number of total deaths from all causes, the actual number of reported suicide deaths is rather modest. For example, in Milham's study there were only 21 reported suicides over a period of 10 years.[9] In Orner's nationwide study there were 177 suicides over five years.[12] These figures, of course, may reflect substantial underreporting due to a general reluctance to acknowledge such deaths. In any event, death by suicide is particularly tragic and the trends observed in these studies could well help the profession to better discover and address the problem.

## Summary and Conclusions

A review of available data on U. S. dentist longevity and mortality reveals that dentists tend to live longer than the average adult white males but dentists succumb to the same diseases and in much the same proportions as do other white males with the single exception of death by suicide.

Actuarial data on dentist longevity and mortality should assist efforts to target areas of major health risk for dentists. Since most of the available actuarial data is at least 15 years old, there is an urgent need to renew the collection of actuarial statistics on dentists. Such an ongoing effort should begin to monitor the longevity and mortality of female dentists and of nonwhite dentists as well.

Additional data on those health problems which cause the death of dentists should help in the effort to reduce major health risks and thereby to elevate the health status of the profession. △

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# Evaluating Faculty Performance

## The Perceptions of Dental School Faculty In Evaluating Faculty Performance

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Considerable attention has been directed to the subject of faculty performance in schools of dentistry. The ability of faculty to advance toward academic promotion and tenure, especially in the presence of fiscal austerity, decreasing applicant pools and the increased number of tenured faculty is the focus of increasing concern in today's dental schools.[1] The typical advanced dental training program fails to prepare individuals for an increasingly demanding career in dental education. For this reason, individual dental schools must provide their faculty members with formal training in pedagogy and enhance the faculty's ability to conduct and report independent research. With the increasing importance of a commitment to excellence, dental faculty members should constantly endeavor to improve teaching methods and research skills which will ultimately provide their students with the best pedagogy and knowledge available.

Unfortunately, many faculty members resist participation in any faculty development program because they think it may imply that past teaching and/or research methods have not been effective. These feelings, along with the declining enrollment in dental education, have compelled schools of dental education to provide more carefully designed faculty programs for improving research methodology and teaching. Students are actively seeking good instruction and relevant courses. As Loheyde has stated, "Students of the 1980's are not satisfied sitting at the feet of scholars with great minds."[2]

Students began to insist upon relevance and excellence in teaching in the 1960's which started a fundamental shift in faculty emphasis from the mastery of content and research to the improvement of teaching.[3] In general, academic reward systems stress research and publication; excellence in teaching is assumed. Wilson, et al, in a survey of faculty members in six colleges and universities in three states found that 92 percent of the faculty believed that teaching effectiveness should be "quite important," or "very important," in decisions regarding salary and promotion. Only 39 percent indicated that teaching effectiveness actually has a high importance in administrative decision-making concerning promotion and tenure. Thirty-four percent believed it was of little importance in salary and promotion decisions.[4] Van Den Berghe commented on the reward system, noting that the higher one's rank and prestige, the less one is required to teach. He concluded: "Teaching is a necessary evil and an annoying distraction from more profitable ventures."[5]

During the early 1970's, with the advent of fiscal austerity and declining enrollment, universities began to examine the importance of faculty performance. The inability to hire new faculty members, coupled with the high percentage of tenured faculty and extended retirement age, found an increasingly older faculty in a financially declining environment.[6] It was this realization that encouraged higher educational institutions to promote programs to improve faculty performance. This early period of retrenchment focused on the following three guiding principles: (1) the primary function of the faculty is to teach; (2) teaching competence is not instinctive and innate; and (3) faculty can, and must, learn to improve their classroom performance.[6]

Efficient management of the responsibilities of teaching, scholarship, and service has been the subject of debate among dental faculty for years. Career advancement in academic dentistry demands success in all three areas, but faculty usually perceive that those who evaluate faculty performance believe that the most important is research and scholarship. Meanwhile many faculty perceive that the pressure to "publish or perish" appears to be detrimental to the quality of dental education.[7]

Faculty improvement programs in schools of dental education for the enhancement of teaching, re-

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search and service have a relatively short history. Although there has been discussion in the literature concerning the subject, there is a paucity of research on the effects of such programs. Improvement and evaluation of faculty performance are two of the most important and difficult responsibilities of an institution of higher education. Probably no other activities have more potential for strengthening or weakening individual departments over a period of years.[8]

Most dental schools should have official documents which provide specific information about evaluation process. These documents should outline who will be coordinating the evaluation, how often evaluations will take place, and how these evaluations will be used.[9] The emphasis on research productivity, specifically in the form of number of publications, is often perceived as the dominant factor in evaluation of faculty performance.[10-14] This many be because it is easy for promotion and tenure committees to quantitatively evaluate an individual's success in publishing. Evaluating improvement in a faculty member's teaching effectiveness is more difficult.

Effective programs for improving faculty performance can strengthen dental educators and improve teaching and research methodology.[15] Bleger and Cooper stated, "The American college teacher is the only high-level professional man on the American scene who enters upon a career with neither the prerequisite trial of competence, nor experience in the use of the tools of his profession."[16] The need for dental schools to conduct effective faculty evaluation programs is real, and it appears that most programs are not fulfilling potential faculty members' needs in pedagogy and research.[17]

## The Problem

If effective improvement and evaluation of faculty performance is a major issue in today's dental schools, two questions arise concerning this process:[14] (1) What criteria should be used to evaluate faculty performance, and (2) does the faculty perceive and rank criteria the same as they perceive those who evaluate faculty performance? The purpose of this study was to determine how faculty would perceive a list of 12 faculty performance criteria and then to make a judgment on how those who evaluate faculty performance would perceive the same list of criteria.

## Significance

This study focused on performance criteria through the perceptions of faculty and not through the actual perceptions of those who evaluate faculty. The significance of only obtaining faculty perceptions was to assess the degree of incongruence between faculty perceptions of performance criteria and the perceptions of those who evaluate faculty on the same criteria. An obvious conclusion would be that if incongruence exists, then it would be difficult for faculty to perceive a constant and stable goal. Equally obvious is that faculty need to be congruent in their perceptions if they are to establish a set of performance criteria that is consistent with those who evaluate faculty performance.

## Methods

During the spring 1986 semester, a survey was conducted at a large midwestern school of dentistry. The school has active programs which encourage faculty to improve in all three traditional areas of teaching, research and service. This specific school was selected because of its large and diverse faculty and academic programs.

The 12 faculty performance criteria used in this study were as follows:[18] personal qualifications; classroom, clinical, laboratory teaching; research and/or creative activity; campus committee work; number of publications; supervision and service on student research committees; quality of publications; student advising; public or community service; activity in professional societies; personality factors; and consultation.

One hundred faculty (62 full-time and 38 part-time) were asked to rank, in decreasing order of importance, 12 performance criteria and then to rank the same criteria as they perceived those who evaluate faculty performance would rank the same 12 criteria. The Spearman rank order correlation coefficient was used to evaluate the correlation between these two perceptual rankings.[19]

The 100 faculty were divided into three groups for the purpose of clarifying a particular group's preferences. The groups were as follows: full-time faculty (62), part-time faculty (38), and a combined full-time and part-time group (100). The rationale for the three groups was concern over the large part-time group which might skew the results if they were not identified separately.

## Results

The level of agreement between the combined faculty (full-time and part-time, $p < .05$) and full-time faculty ($p < .02$) indicated a significant relationship between the way combined faculty perceive faculty performance criteria and the way they perceive those who evaluate faculty performance ranking the same criteria (Table 1). There was no significant correlation found for part-time faculty when they were evaluated independently from the full-time faculty.

Although the general level of agreement between perceptual rankings for faculty of evaluation criteria demonstrated significant agreement, several important discrepancies in rank order were identified. Part-time faculty, as shown in Table 2, demonstrated a dramatic discrepancy in the importance of teaching (Rank 1) and the number of publications (Rank 11) as perceived by faculty ranking faculty performance criteria. However, the combined group (full-time and part-time), full-time and part-time groups all indicated remarkable agreement in ranking teaching number one and personal qualifications as two.

Part-time faculty ranked personality factors as number three while full-time and combined faculty ranked research and/or creative activity number three. All of the groups ranked number of publications in the lower one-half of the 12 faculty performance criteria: combined, 9; full-time, 7; and part-time, 11.

There was close agreement between all three groups, as shown in Table 3, concerning teaching (combined, 2; full-time, 3; part-time, 2) and the number of publications (combined, 3; full-time, 2; part-time, 3), as faculty perceive how those who evaluate faculty performance would view performance criteria. There was total agreement among the three groups (combined, full-time and part-time) concerning the ranking of personal qualifications (Rank 1), research and/or creative activity (Rank 4), quality of publications (Rank 5), and campus committee work (Rank 6).

When data in Table 2 and Table 3 are compared, several factors become evident. Faculty perceived that those who evaluate faculty performance would rank personal qualifications as number one, while faculty perceived teaching as number one and personal qualifications as number two. As shown in Tables 2 and 3 respectively, both perception groups ranked research and/or creative activity as a high priority (Rank 3 and 4 respectively). Also, faculty perceived themselves assigning a higher ranking than the rank they perceived would be assigned by others who would evaluate this particular criteria. The most noticeable discrepancy in perceptual ranking was in the importance of number of publications. As shown in Table 3, faculty perceived those who evaluate performance under the combined group (full-time and part-time faculty) to rank number of publications higher (Rank 3) than the combined faculty perceived, as shown in Table 2 (Rank 9). Both combined groups in Table 2 and Table 3 ranked quality of publications equally (Rank 5). Also, the combined and full-time faculty groups, as shown in Table 2 and Table 3, gave the same rank for public or community service (Rank 10) and for campus committee work (Rank 6). There is an extreme divergent view between Table 2 and Table 3 concerning personality factors. Faculty perception of personality factors, as shown in Table 2, were much higher (combined, 4; full-time, 5; part-time, 3) than their perception of those who evaluate faculty ranking this particular factor (combined, 9; full-time 9; part-time 9).

**Table 1 Results of Spearman Rank-Order Correlation Coefficient evaluating level of agreement between actual and perceived ranking of evaluation criteria.**

| Faculty Ranking | Spearman Correlation | Significance |
|---|---|---|
| Combined | .69 | $p < .05$ |
| Full-Time | .75 | $p < .02$ |
| Part-Time | .54 | * |

*Not Significant

## Conclusions

It is apparent from this study that faculty express a significant overall level of agreement on these 12 faculty performance criteria. Also, it is evident that they do not perceive individual performance criteria at the same level of importance as they perceive those who evaluate the performance of faculty. All faculty groups, as shown in

**Table 2 Group means and ranking of faculty evaluating performance criteria.**

| | Group Means and Ranking | | | | | |
|---|---|---|---|---|---|---|
| | Combined N = 100 | | Full-Time Faculty N = 62 | | Part-Time Faculty N = 38 | |
| Faculty Performance Criteria | Mean Score | Ranking Score | Mean Score | Ranking Score | Mean Score | Ranking Score |
| Personal qualifications (academic degrees, personal, etc.) | 2.67 | 2 | 2.75 | 2 | 2.52 | 2 |
| Classroom/clinical/laboratory teaching | 2.15 | 1 | 2.00 | 1 | 2.39 | 1 |
| Research and/or creative activity (independent of . . . publication) | 4.82 | 3 | 4.53 | 3 | 5.28 | 4 |
| Campus committee work, service to the university | 6.88 | 6 | 6.62 | 6 | 7.28 | 7 |
| Number of publications | 7.71 | 9 | 7.08 | 7 | 8.83 | 11 |
| Supervision of student research, including serving . . . on master's and doctoral committees | 7.34 | 7 | 7.51 | 8 | 7.05 | 5 |
| Quality of publications | 6.35 | 5 | 5.66 | 4 | 7.47 | 8 |
| Student advising | 7.44 | 8 | 7.61 | 9 | 7.15 | 6 |
| Public or community service | 8.14 | 10 | 8.41 | 10 | 7.68 | 10 |
| Activity in professional societies (hold office, . . . edit journal, etc.) | 8.32 | 11 | 8.75 | 11 | 7.60 | 9 |
| Personality factors (relates easily to students and . . . fellow faculty) | 5.73 | 4 | 6.19 | 5 | 4.97 | 3 |
| Consultation (government, business etc.) | 10.40 | 12 | 10.82 | 12 | 9.71 | 12 |

Table 2, selected teaching as number one, personal qualifications number two and research and/or creative activity as number three, except for the part-time faculty who ranked this criteria number four. Meanwhile, as shown in Table 3, all faculty perceived those who evaluate faculty performance as selecting personal qualifications number one, teaching number two, except for the full-time faculty group (rank 3), and number of publications as number three, except for the full-time faculty (rank 2).

It seems logical from the data in this study that the initial place to start in developing performance criteria is for faculty and those who evaluate faculty to forge an agreement on the specific ranking of criteria for evaluation. If faculty are being evaluated by those who they think perceive performance criteria differently from them, improving performance will continue to be difficult. However, if faculty are evaluated according to the same criteria as the criteria perceived by those who evaluate faculty performance, it becomes possible to work toward a common goal of improved faculty performance.

The idea of matching expected criteria to performance criteria is a simple concept; however, it is usually difficult to fully obtain. It is evident from this study that this particular faculty did not perceive performance criteria the same as they perceived the criteria evaluated by those who evaluate faculty performance.

The findings of this study pertain to this particular faculty and to this specific institution. However, the authors suspect that faculty generally would not perceive faculty performance criteria the same as those who evaluate faculty performance regardless of where the study was conducted.

**Table 3 Group means and ranking of faculty perceptions of criteria for those who evaluate faculty performance.**

| | Group Means and Ranking | | | | | |
|---|---|---|---|---|---|---|
| | Combined N = 100 | | Full-Time Faculty N = 62 | | Part-Time Faculty N = 38 | |
| Faculty Performance Criteria | Mean Score | Ranking Score | Mean Score | Ranking Score | Mean Score | Ranking Score |
| Personal qualifications (academic degrees, personal, etc.) | 2.98 | 1 | 3.04 | 1 | 2.86 | 1 |
| Classroom/clinical/laboratory teaching | 3.65 | 2 | 3.88 | 3 | 3.26 | 2 |
| Research and/or creative activity (independent of . . . publication) | 4.18 | 4 | 4.20 | 4 | 4.13 | 4 |
| Campus committee work, service to the university | 6.45 | 6 | 6.19 | 6 | 6.86 | 6 |
| Number of publications | 3.89 | 3 | 3.75 | 2 | 4.10 | 3 |
| Supervision of student research, including serving . . . on master's and doctoral committees | 7.93 | 8 | 8.01 | 8 | 7.78 | 7 |
| Quality of publications | 5.84 | 5 | 6.03 | 5 | 5.52 | 5 |
| Student advising | 8.92 | 11 | 9.17 | 11 | 8.50 | 10 |
| Public or community service | 8.66 | 10 | 8.53 | 10 | 8.66 | 11 |
| Activity in professional societies (hold office, . . . edit journal, etc.) | 7.23 | 7 | 6.87 | 7 | 7.81 | 8 |
| Personality factors (relates easily to students and . . . fellow faculty) | 8.19 | 9 | 8.27 | 9 | 8.05 | 9 |
| Consultation (government, business etc.) | 9.99 | 12 | 9.87 | 12 | 10.18 | 12 |

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MICHAEL G. NEWMAN
*Los Angeles, California*

LINDA C. NIESSEN
*Perry Point, Maryland*

EDWARD M. O'KEEFE
*Salem, Virginia*

GEORGE R. OLFSON
*Grants Pass, Oregon*

JAMES R. ORCUTT
*Ithaca, New York*

EDWARD J. O'SHEA
*Setauket, New York*

MICHAEL R. PANZER
*Stockton, California*

ROBERT W. PARR
*Redwood City, California*

GILBERT W. PAYNE
*Pittsburgh, Pennsylvania*

CHARLES H. PERLE
*Jersey City, New Jersey*

CARL J. PERLMUTTER
*Newton Center, Massachusetts*

WILLIAM F. PIERCE
*Dyersburg, Tennessee*

RONALD G. PRESSWOOD
*Houston, Texas*

GORON PRIOR
*Richmond, Virginia*

DENNIS N. RANALLI
*Pittsburgh, Pennsylvania*

MARTIN S. RAYMAN
*San Rafael, California*

ARTHUR C. REED
*Houston, Texas*

F. RAHELE REZAI
*Washington, District of Columbia*

JAMES B. ROANE
*Norman, Oklahoma*

THOMAS A. ROBERTS
*Brunswick, Georgia*

EDWARD W. ROGERS
*Milwaukee, Wisconsin*

SUZANNE ROTHENBERG
*Brookline, Massachusetts*

JACQUELINE A. ROY
*Utica, New York*

J. GORDON RUBIN
*New York, New York*

ROBERT A. RUCHO
*Charlotte, North Carolina*

CHARLES T. RUHL
*Atlanta, Georgia*

JOSEPH A. SALVO
*Colorado Springs, Colorado*

FRANK SANTOS, JR.
*San Antonio, Texas*

HAIM SARNAT
*Tel Aviv, Israel*

THOMAS SCHIFF
*St. Louis, Missouri*

JOHN W. SCHMIDT
*San Francisco, California*

HOWARD D. SCHNEIDER
*Wellington, Kansas*

STERLING SCHOW
*Dallas, Texas*

CHARLES F. SCHREIER, JR.
*Water Mill, New York*

FRANK V. SEARL
*Havre, Montana*

PAUL L. SEGAL
*Providence, Rhode Island*

SONOKO SEKI
*Kanagawa-Ken, Japan*

ALAN G. SELBST
*Houston, Texas*

ANDREW J. SEVERSON
*San Diego, California*

GEORGE W. SFERRA, JR.
*New York, New York*

JOHN L. SHANNON
*New Orleans, Louisiana*

HOVHANNESS I. SHNORHOKIAN
*Pittsburgh, Pennsylvania*

DOUGLAS P. SINN
*Dallas, Texas*

CHARLES L. SIROKY
*Phoenix, Arizona*

HOWARD M. SKUROW
*Swampscott, Massachusetts*

CURTIS F. SMITH
*Bellingham, Wisconsin*

WILLIAM D. SNEED
*Charleston, South Carolina*

ROBERT M. SOMMERFELD
*Northbrook, Illinois*

STEPHEN T. SONIS
*Boston, Massachusetts*

GEORGE C. SOTEREANOS
*Pittsburgh, Pennsylvania*

WILLIAM J. SPENCE
*Toronto, Ontario*

WALTER D. STINSON
*Atlanta, Georgia*

DALE E. STRINGER
*Riverside, California*

CARLOS L. SUAREZ
*San Juan, Puerto Rico*

ALAN J. SWIMMER
*Lafayette, California*

RONALD L. TANKERSLEY
*Newport News, Virginia*

GEZA T. TEREZHALMY
*Cleveland, Ohio*

RODNEY P. THOMAS
*Providence, Rhode Island*

RONALD G. TIETZ
*San Antonio, Texas*

HILLARD L. TORGAN
*Woodland Hills, California*

PAUL M. TORGERSON
*Rapid City, South Dakota*

PERRY H. TRESTER
*Vancouver, British Columbia*

TERRY M. TROJAN
*Albany, Georgia*

JOHN W. UNGER
*Grosse Pointe, Michigan*

JOHN R. VACEK
*Littleton, Colorado*

HENRY J. VAN HASSEL
*Portland, Oregon*

STEPHEN C. VAN TASELL
*Fairfield, Iowa*

FRANK J. VERTUCCI
*Gainesville, Florida*

RONALD VOSS
*Hacienda Heights, California*

ROBERT C. WALLIN
*Santa Monica, California*

WILLIAM P. WALSH
*Houma, Louisiana*

JAMES F. WARD
*Rome, Georgia*

DWIGHT R. WEATHERS
*Atlanta, Georgia*

LESLIE S. WEBB, JR.
*Richmond, Virginia*

EMILE M. WEBSTER
*Washington, District of Columbia*

N. CARL WESSINGER
*Clinton, South Carolina*

JAMES F. WESTMAN
*Duluth, Minnesota*

DANIEL J. WHITNER, JR.
*Atlanta, Georgia*

GEORGE H. WILLIAMS, III
*Baltimore, Maryland*

JOSEPH WILLIAMS
*Boston, Massachusetts*

VINCENT D. WILLIAMS
*Iowa City, Iowa*

LEWIS W. WILLIAMSON
*Honolulu, Hawaii*

CHARLES S. WILLIS
*Durham, North Carolina*

J. RICHARD WITTWER
*Newport Beach, California*

LARRY M. WOLFORD
*Dallas, Texas*

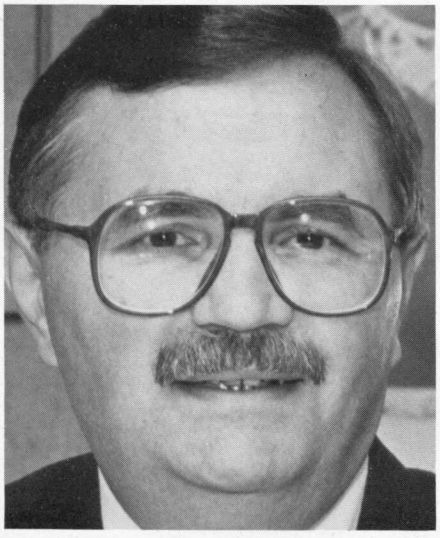
GERALD Z. WRIGHT
*London, Ontario*

ROY T. YANASE
*Torrance, California*

SUSAN L. ZUNT
*Indianapolis, Indiana*

# NEWS OF FELLOWS

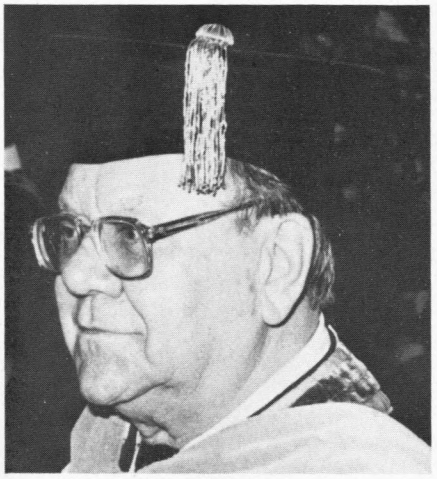
**Dominick P. DePaola** will assume the position of Dean of the Dental School at the University of Medicine and Dentistry of New Jersey in January, 1988. Dr. DePaola has spent the last 6 years at the University of Texas Health Science Center at San Antonio, where he served as Dean of the dental school for 4½ years and was also interim Dean of the Graduate School of Biomedical Sciences.



Dominick P. DePaola

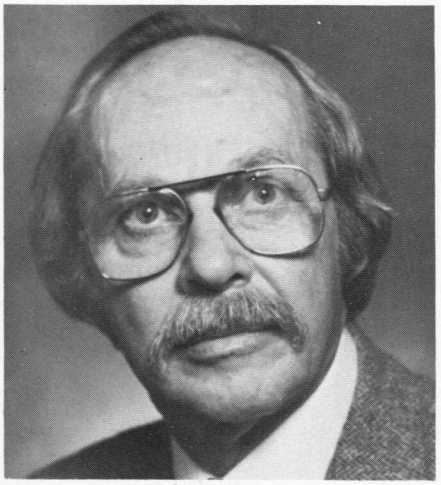
**Clifton O. Dummett** of Los Angeles has received the prestigious Hayden-Harris Award of the American Academy of the History of Dentistry, presented annually to that individual who has made outstanding contributions to dental history. His recent book, *The Hillenbrand Era: Organized Dentistry's Glanzperiode* was published in 1986 by the American College of Dentists. Dr. Dummett has had an illustrious career in dentistry as a dental editor, historian, educator, administrator and practitioner. He is a professor of community dentistry at the University of Southern California where he initiated the department of Community Dentistry.

**Edward J. Forrest,** Dean Emeritus of the University of Pittsburgh School of Dental Medicine, was the recipient of the school's Distinguished Alumnus Award for 1987. Dr. Forrest, a Professor of Orthodontics, became the Pittsburgh Dean in 1961, built its present school in 1967 and developed innovative programs including off-campus continuing education programs. The new continuing education center at Pittsburgh will be named in his honor.



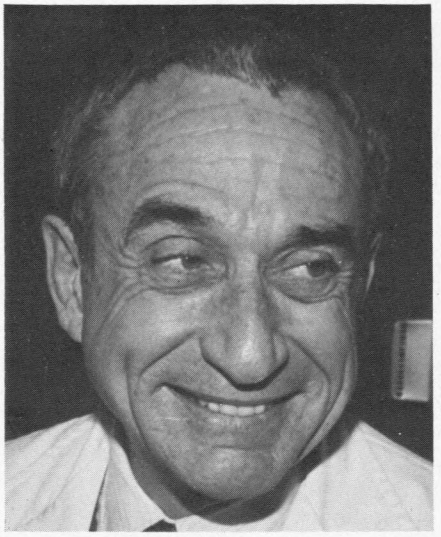
Edward J. Forrest

**Jacob M. Eisenson** was recently honored by being presented the 1987 Distinguished Service Award of the Colorado Dental Association. Dr. Eisenson was recognized for his more than 35 years of devoted service to the Colorado Dental Association. He has held all offices of the Association and has served on numerous councils and committees.



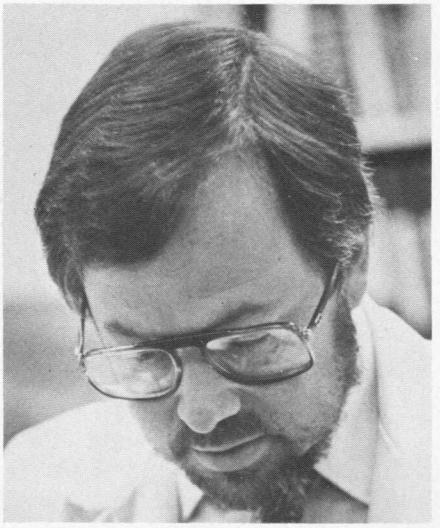
Jacob M. Eisenson

**Harold Gerstein** recently received the Marquette University Teaching Excellence Award for 1987. Dr. Gerstein served as the Chairman of the Department of Endodontics at the Marquette University School of Dentistry from 1977 until his retirement in August of 1987. A Diplomate of the American Board of Endodontists, Dr. Gerstein served as the President of the American Board of Endodontists in 1985-86.



Harold Gerstein

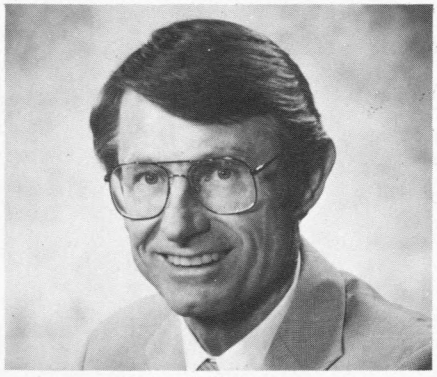
**John S. Greenspan,** an oral biologist and pathologist at the University of California at San Francisco, is program director for an Oral AIDS Center in the UCSF School of Dentistry that will serve as a major regional and national resource. The new center will study oral manifestations of AIDS and will focus on



John Greenspan
Photo: UCSF/David Powers

research, clinical care and education about the disease. The five-year program on research is funded by a $2.7 million grant from the National Institute of Dental Research. The dental school, assisted by a grant from the American Fund for Dental Education, will support clinical care and education.

**Roland W. Hansen** of Rolling Hills, California, was recently elected Vice President of the American Society of Dentistry for Children. Dr. Hansen is a visiting lecturer in the Department of Pediatric Dentistry at the University of California Los Angeles and is a past president of the California Society of Pediatric Dentists.



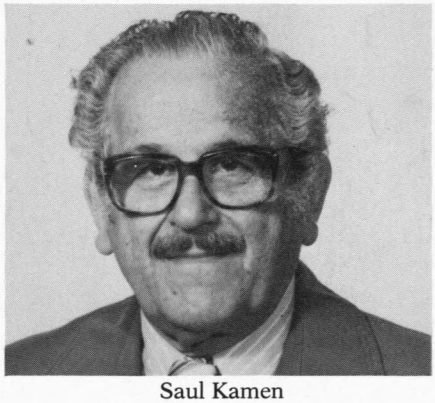
Roland W. Hansen

**Joseph P. Lambert** recently retired after 35 years as a member of the faculty of the Baylor College of Dentistry. Dr. Lambert served as Chairman of the Department of Removable Prosthodontics for 30 years and has been the recipient of a number of teaching awards.

Joseph P. Lambert

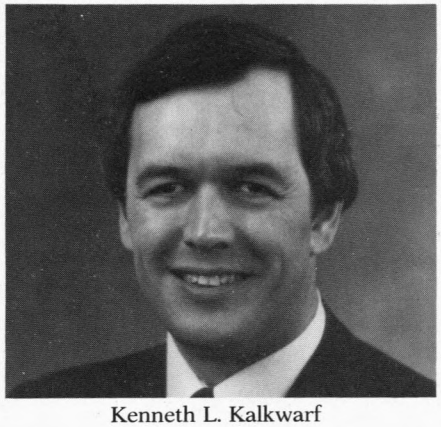
**Anthony L. Checchio** of Philadelphia was the recipient of the 1987 Distinguished Service Award of the American Association of Oral and Maxillofacial Surgeons during its 69th Annual Meeting in Anaheim, CA. He was honored for his outstanding leadership and service to this group. Dr. Checchio is Clinical Professor of Oral and Maxillofacial Surgery at Temple University Dental School and is in private practice in Philadelphia.

**Saul Kamen** was recently honored at his retirement as Chief of Dental Services of the Jewish Institute for Geriatric Care in New York. Dr. Kamen served at the 527 bed geriatric center since its founding in 1972 and was responsible for establishing the first residency in geriatric dentistry in a nursing facility. A past president of the American Society of Geriatric Dentistry, Dr. Kamen is now a professor of Dental Health at the School of Dental Medicine, State University of New York at Stony Brook, as well as on the faculties of several other universities.



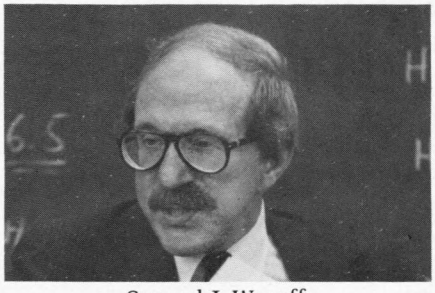
Saul Kamen

**Kenneth L. Kalkwarf** was recently appointed Associate Dean for Advanced Education at the University of Texas Health Science Center at San Antonio. Dr. Kalkwarf has held faculty positions at the University of Oklahoma and the University of Nebraska. Prior to his present appointment, he served as Director of Graduate and Post Graduate Periodontology at the University of Nebraska.



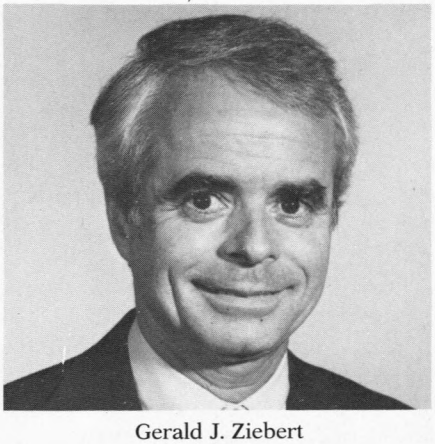
Kenneth L. Kalkwarf

**Samuel J. Wycoff** is to serve as co-director of a University of California San Francisco Training Program in oral epidemiology. The training program which is the first of its kind, is supported by a $500,000 grant from the National Institute of Dental Research. Dr. Wycoff is the professor and chairman of Dental Public Health and Hygiene, at the University of California San Francisco School of Dentistry.



Samual J. Wycoff

**Gerald J. Ziebert** was recently presented the Faculty Teaching Excellence Award at Marquette University School of Dentistry. Dr. Ziebert has served as a member of the faculty of Marquette University School of Dentistry since 1963 and is presently the Chairman of the Department of Fixed Prosthodontics. He is a diplomate of the American Board of Prosthodontics and a past chairman of the Wisconsin Section of the American College of Dentists.



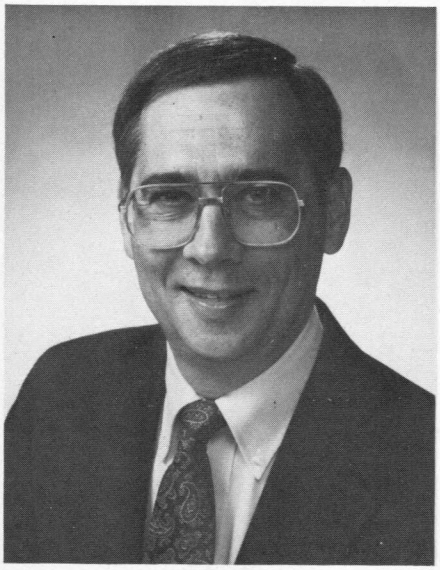
Gerald J. Ziebert

**Henry J. Sazima** recently retired from the U.S. Naval Dental Corps after 35 years of service. At the time of his retirement, he was Deputy Commander for Readiness and Logistics on the staff of the Commander, Naval Medical Command and held the rank of Rear Admiral. A Diplomate of the American Board of Oral and Maxillofacial Surgery, he received several decorations during his illustrious career including the Legion of Merit with gold star, the Meritorious Service Medal with gold star, the Joint Service Commendation Medal, the Navy Commendation Medal with gold star and the Vietnam Service Medal.

Rear Admiral Henry J. Suzima, DC, USN

**Prem S. Sharma** was recently installed President of the American Society of Dentistry for Children at the Society's annual meeting in Tucson, Arizona. Dr. Sharma is the Associate Dean for Academic Affairs at Marquette University School of Dentistry and the Chairman of the Wisconsin Section of the American College of Dentists. He is also an Associate Editor for the ACD Journal.

**Ronald D. Woody** was recently elected a Board Examiner and member of the American Board of Prosthodontics. Dr. Woody is the Professor and Director of Graduate Prosthodontics at the Baylor College of Dentistry where he has been since 1984. Prior to coming to Baylor, he was the Director of Dental Education and Chief and Director of Fixed Prosthodontics for the General Dentistry Residency Program at Madigan Army Medical Center, Tacoma, Washington and Chief and Director of the Fixed Prosthodontics residency program at Letterman Army Medical Center.

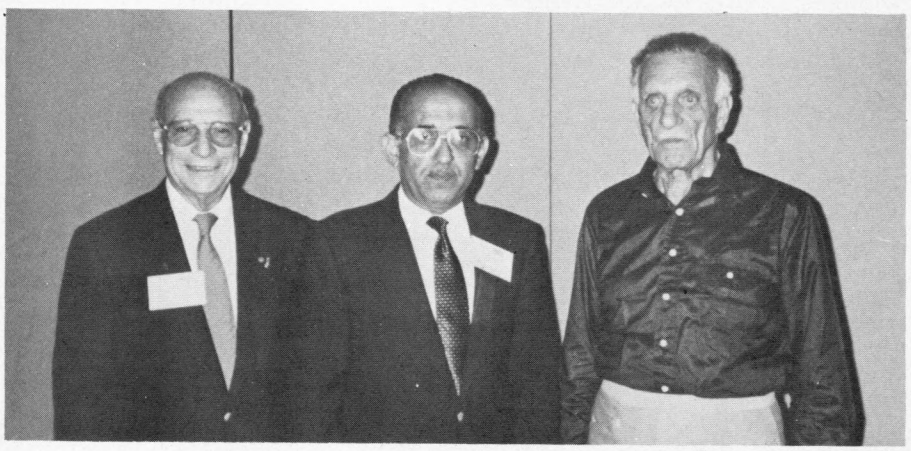


Ronald D. Woody

**Anthony S. Mecca,** in his 60th year of teaching at the New York University College of Dentistry, has been recognized by having the school's Department of Oral and Maxillofacial Surgery named in his honor. He was praised for his pioneering contributions to the areas of analgesia and oral surgery and his excellence as an educator. Dr. Mecca maintains a private practice in New York City.

## CORRECTION

In an earlier issue of the Journal, it was incorrectly reported that Dr. Paul Goldhaber, Dean of the Dental School at Harvard University, was the President of the American Association of Dental Schools (AADS) in 1985. Dr. Goldhaber was President of the AADS previously, but in 1985 he was the President of the International Association for Dental Research, not President of the AADS.



Dr. Sharma was installed by Dr. Abraham Kobren, past president of the American Dental Association and by Dr. Samuel D. Harris of Detroit, Michigan, who, founded the American Society of Dentistry for Children 60 years ago. Dr. Kobren is a Fellow and Dr. Harris is a Life Member of the American College of Dentists.

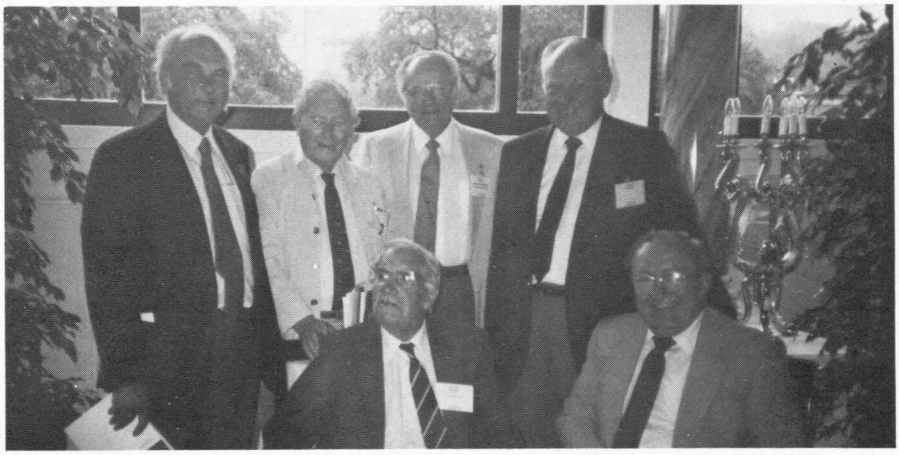
# SECTION ACTIVITIES

### Fellows of the American College of Dentists attend Annual Meeting of the American Dental Society of Europe

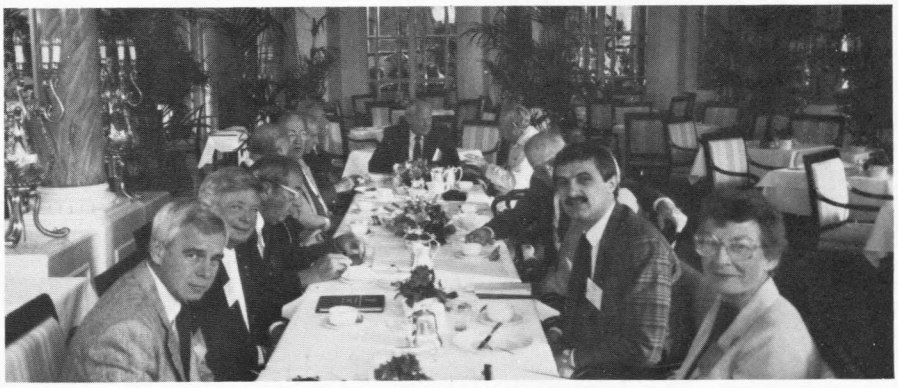
Several Fellows of the American College of Dentists met at a breakfast session while attending the annual meeting of the American Dental Society of Europe at Interlaken, Switzerland, June 26, 1987.

Present from Europe were: Donald D. Derrick, London; Louis Fitting, Switzerland; Gerald H. Leatherman, London; Pierre Marois, Paris; G. Scott Page, London and Jean P. Roger, Paris.

Present from the United States were: ADA President Joseph A. Devine, Cheyenne, Wyoming; James A. Englander, Milwaukee, Wisconsin; George Kearns, Lake Forest, Illinois; Cliff Loader, Bakersfield, California; Helyn Luechauer, Hollywood, California; Norman H. Olsen, Chicago, Illinois and Al Wasserman, San Mateo, California.



Photographed at the Annual Meeting of American Dental Society of Europe are standing from the left: Drs. Donald D. Derrick, Gerald Leatherman, Albert Wasserman and American College of Dentists' past president, Dr. Norman H. Olsen. Seated are: Drs. G. Scott Page and, on the right, Dr. Joseph A. Devine, ADA President.



Some of the Fellows of the American College of Dentists at the breakfast meeting in Interlaken, Switzerland.

## Colorado

The Colorado Section of the American College of Dentists conducted a joint meeting with members of the International College of Dentists during the 101st Annual Session of the Colorado Dental Association in Vail recently. Dr. William Hawkins, President of the International College of Dentists addressed the meeting. The Colorado Section annually recognizes a dental student for outstanding performance in the promotion of professional goals to the community. The presentation of the award is made during the University of Colorado School of Dentistry's annual award ceremonies.

Photographed at the Colorado section meeting are from the left: Drs. Ralph L. Lambert, Vice Chairman; David H. Wuerking, Chairman and Jacob W. Eisenson, Secretary/Treasurer.

## Wisconsin

The Wisconsin Section of the American College of Dentists held its Fall meeting at the Marquette University School of Dentistry on November 2, 1987. The business meeting was followed by a very well-attended lecture on Substance Abuse, delivered by Herbert R. Hedge, D.D.S. of Otumwa, Iowa. In attendance were several Fellows of the College and other practitioners and guests, as well as a large number of dental and dental hygiene students.

The Wisconsin Section also arranged and conducted a lecture on dental ethics which was delivered to the freshman dental class at Marquette University School of Dentistry. The students were also presented with the American College of Dentists' booklet, "A Guide to Professional Conduct".

# A TREASURY OF DENTISTRY

## DENTIST INVENTORS

**Gardner P. H. Foley**

This is a report on the inventive genius and mechanical ingenuity of American dentists as revealed by their non-dental inventions. Here are presented a large array of "dental truants": some of them are well known to their dental brethren; while others made small accomplishments and are known only to the curious seekers of dental trivia. Some of the out-of-office inventors achieved recognition for contributions not patented. Of some of the subjects of this discourse there is only meager information; but if helpful biographical data are available, they are recorded.

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In 1939 Dr. Lytle S. Adams, of Irwin, Pa., received the Modern Pioneers Award from the National Association of Manufacturers. Dr. Adams was honored for his contributions to the efficiency of air-mail service. With the aid of the Adams pickup device, it became possible for an airplane pilot to drop one bag of mail as he approached a pickup station and to pick up another while continuing to fly at speeds from 90 to 125 m.p.h.

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While living on the family farm in Bradford County, Pa., till 18, Dr. Edward H. Angle (Pa. C. of D.S., 1878) demonstrated his mechanical ability by constructing many devices useful in the agricultural environment. A nostalgic note in Angle's obituary recalled that "at the age of 11 he made a hayrake that has been the standard in this country ever since."

---

Dr. Howard Van Antwerp (U. of Mich., 1890), besides his honors as President of the Ky. S.D. Asso. and President of the Ky. S. Horticultural Soc., was the inventor of a drag line scraper system for excavation (commercial).

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Dr. W. E. Baxter (Louisville, 1890), President of the Ky. S. D. Asso., was, besides being a composer and author, a holder of 15 commercial patents.

---

Dr. Henry Blinn (1824-1905) is a somewhat mysterious member of this inventor phalanx of "dental truants." He was associated with the Shaker Village in Canterbury, N.H., and was classified as "dentist and inventor."

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William G. A. Bonwill (1833-1899) is one of the greatest of dentist inventors, having made many significant dental inventions. But Bonwill is also noted for his non-dental inventions. He invented an important improvement in the grain reaper by incorporating a self-binding action into it. He also invented an improved kerosene burner and improvements in the safety pin and shoe fastener.

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When the great Washington Monument was being built, the designers could not discover a way to tip the shaft with metal. Eventually it was a dentist, Dr. C. C. Carroll, who had discovered a process for casting aluminum, who cast the tip of the shaft.

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Dr. Lewitt E. Custer (Ohio C.D.S., 1887) made many electrical inventions of important dental uses. He also invented a method of wireless control for torpedoes and balloons.

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Dr. Hezekiah E. Depp, a pioneer in the development of Missouri dentistry, invented several fuel-saving devices for steam and air engines.

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Dr. William L. Dismukes (1851-1935), of Nashville, Tenn., invented the sandpaper disk but never patented his discovery. "At the time I conceived the idea of making the disks, I had already been granted thirteen patents by the U.S. Patent office and having gone to considerable expense in securing them, and not deriving any returns on my investments, I was discouraged with patents." However, he was the patentee of the first folding bed. According to an interview in 1928: "Two of his ideas that were patented sixty years ago are now used in the construction of all automobiles."

---

There is an account in the *Knickerbocker Magazine* (July, 1855) of a dentist's invention so unusual in a lay periodical that it merits exact quotation.

> We have heretofore spoken of the 'Anti-Choking Arch-Valve Pump' as a great and important invention, by a distinguished and popular dentist of this City, Mr. Nehemiah Dodge. The pumps of this patent, we are not surprised to learn, are destined to supersede all others. The Board of Underwriters unanimously and strongly recommend them, over those in common use, for general adoption, with a special approbation, recommending them to ship-owners and sea-captains. California ship captains pronounce them, after long voyages, the 'best pumps ever used,' and attest that they never choke.

---

Dr. Edward J. Douhet began practice in Cleveland in 1882. He soon became involved in the development of inventions for the improvement of the bicycle designs of a changing era. He invented the double diamond frame "safety" bicycle and designed the drop frame ladies' safety for the Snell Cycle Fittings Company of Toledo. He designed and developed the Garford saddle for high wheels. From Dr. Douhet's designs were made the first tubular attachments to convert the old high wheel type of racing sulky to the pneumatic wheel.

---

Dr. Edwin J. Dupeire, of New Orleans, who died in 1910, invented a parlor baseball game that attained a national popularity.

---

Dr. William H. Elliott (1816-1895) began practice in Plattsburg, N.Y. In 1846 he went to Montreal, where he continued practice until 1856, when he gave up dentistry to continue his experiments in firearms. His inventions were manufactured by the Remington Arms Co. He continued with Remington until 1882 when he became associated with the Colt Co., which brought out his lightning operating rifle. The Elliott revolver, patented December 17, 1861, was manufactured by Remington at Ilion, N.Y. It was used in the Civil War by both the Army and the Navy.

---

Dr. E. J. Finney invented the trolley system of propelling streetcars. He is also credited with the invention of the storage battery. At the time of his death in January, 1900, he was working on a system to raise water from deep wells based upon the siphon principle.

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Dr. David Genese (Penn. C.D.S., 1876), of Baltimore, achieved a wide reputation as a teacher, writer, and inventor. He was granted thirty-four patents for dental, chemical and musical instruments, processes and mechanical devices.

---

Dr. Samuel P. Grant of Danville, Ky., invented in 1899 a paper bag that could be fastened securely by a string around the bag's neck.

---

Dr. Charles H. Graves (U. of Cal., 1944), of La Jolla, Cal., soon after his discharge from the Navy in 1946 began a career in invention that led to his switch from dentistry to full-time "truancy." Dr. Graves has had an amazingly fruitful and versatile series of interests. As president of the Charles Corporation, an auto manufacturing company, his primary concern was with the production of an electric car. He also became vice-president of the Stinson Aircraft and Engineering Co., of San Diego. Dr. Graves expanded his activities by becoming a real estate developer: industrial parks and home subdivisions in Southern California. One of his most interesting inventions was a toothbrush with toothpaste in the handle that could be forced out as needed.

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Dr. Samuel Greif (C. of D. and D.S. of N.Y., 1914), a well-known writer on subjects related to dentistry, invented a "Device for Writing the Oriental Language on Occidental Typewriting Machines and Vice Versa."

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Dr. T. B. Hamlin (1810-1874), like many of the early American dentists, was encouraged by his recognized skills as a jeweler to enter the practice of dentistry. At 19 he was employed by a watch-making firm in Albany, N.Y. At 24 he opened a jewelry store in Lee, Mass., but illness forced him to go south to New Orleans. While there he invented a pivoting tool that achieved universal use by watch-makers and repairers. Dr. Hamlin began the practice of dentistry in 1835. In 1847 he began practice in Nashville, Tenn. He was given an honorary degree by the Baltimore C. of D.S. in 1846. He became a "truant" in bee culture and wrote a highly regarded book on the subject.

---

Dr. W. E. Harper (1863-1938), a Northwestern graduate of 1891 who practiced in Chicago, invented the Harper sample holder for sampling silks and dresses, the universal trimmer, and the Harper wire and stitching machine for binding books.

To be continued in the next issue.

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## NOMINATION FORM REQUEST

Name _____ F.A.C.D.

Address _____

City _____ State_____ Zip_____

_____

Signature

A nomination portfolio to be used in nominating to Fellowship is obtained from the Executive Office upon the signed request of any Fellow in good standing.

February 1, 1988 — Closing Date for 1988 Nominations

# INSTRUCTIONS FOR CONTRIBUTORS

### INTRODUCTION

The Journal of the American College of Dentists is published quarterly in order to promote the highest ideals in health care, advance the standards and efficiency of dentistry, develop good human relations and understanding, and extend the benefits of dental health to the greatest number. It is the official publication of the American College of Dentists which invites submission of essays, editorials, reports of original research, new ideas, and statements of opinion pertinent to dentistry. Papers do not necessarily represent the view of the Editor or the American College of Dentists.

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