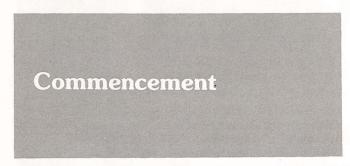




published by the Eastman Dental Center Rochester, New York William D. McHugh, D.D.S., Director Jo Helfer, Editor



Dr. Enid A. Neidle, professor and chariman of the department of pharmacology of New York University Dental School, was EDC's 1980 commencement speaker. An honors graduate of Vassar College, she earned her Ph.D. in physiology from Columbia University College of Physicians and Surgeons.

Dr. Neidle's current research concerns include patterns of drug use by dentists in various practice settings and chemical mediation in the autonomic nervous system. A respected professor, her most recent honor came this past spring when she was selected to receive one of NYU Alumni Federation's Great Teacher Awards.

In addition to her energetic commitment to professional societies and university committees, Enid Neidle has an abiding sense of community. Two of her broad extramural interests are cooking and music. She was editor of the Brooklyn Friends School Centennial Cookbook and is chairman of the scholarship auditions committee and sits on the board of directors of Brooklyn Music School.

Excerpts from her address, "A Three-Unit Bridge: Dentistry, Ethics, The Humanities," follow.

... The humanities at best have never played an important role in the preparation for dentistry, in dental education, or in dental careers. To be sure, most dental schools are affiliated with universities, but more often than not the dental school exists at a physical, psychological, and intellectual distance from the university...But a funny thing happened to education on the way to the nineteen eighties. Continued on page 3





## **Library News**

In 1947 when Dr. Basil G. Bibby was appointed EDC's second director, he asked a couple of interns to sort through "a room full of books." One of the welcome finds was Joseph Hurlock's "A Practical Treatise upon Dentition; or The Breeding of Teeth in Children," published in 1742 in London.

The volume is the cornerstone of the Basil G. Bibby Library's rare and old book collection. Though the library's main function is to serve the Center's staff and students and members of the local professional community with current dental books, journals and reference materials, it owns many early journals and a fine minor collection of classic volumes illustrating the history of dentistry. The books are kept in custom-built cabinets in a climate-controlled room off the main reading room.

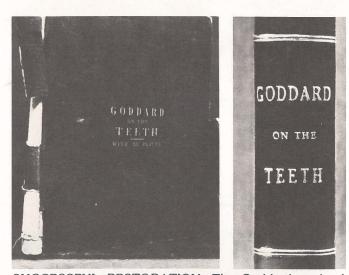
The oldest book in the group, "Libellus de Dentibus," ("A Little Book about Teeth") was published in 1563 in Venice. Its author was Bartholommeo Eustachio, an Italian physician, whose name has, of course, been immortalized in anatomy.

June Glaser, EDC's librarian, has established a Friends of the Bibby Library Fund. She says, "Contributions to the fund are used to preserve, restore and add to our present collection."

To restore a book means that the book is kept intact and as close to the original as possible; that the style of the book is maintained in the period in which it was published; and that only new materials similar to and compatible with the old are used in repairing or replacing the backing, spine, pages, plates, etc.

Two recently restored books are Thomas Berdmore's "A Treatise on the Disorders and Deformities of the Teeth and Gums," Dublin, 1769, and Paul B. Goddard's "The Anatomy, Physiology, and Pathology of the Human Teeth; with the most approved methods of treatment including operations, and the method of making artificial teeth," Philadelphia, 1844.

Berdmore was George III's dentist. One of the first practi-



SUCCESSFUL RESTORATION. The Goddard textbook (left) went to the handbinder in poor condition and was returned (right), an eminently usable volume.

tioners of dental art in England, he ridiculed charms, exorcisms and other inane and superstitious means of cure. The book was purchased on Dr. Bibby's order in 1952.

The Goddard was a popular textbook in its day. Dr. Ralph S. Voorhees, Jr., son-in-law of Dr. Harvey Burkhart, the Center's first director, donated the book to the library in 1977.

June Glaser says, "Restoration and/or rebinding of a fine old book is very expensive. Depending on the condition and size of the volume, the price may range between \$50 and \$150. In special cases for major restorations or elaborate bindings, the price may be even higher. The books must be sent to hand-binders who have the skill to preserve and perhaps enhance the value of a book which might otherwise deteriorate from neglect or age.

"The Bibby Library needs friends who might choose one or more of the following:

1) to donate money for the general maintenance of the collection;

2) to have one or more volumes restored and/or rebound in their name. An appropriate bookplate would be placed in the volume acknowledging the gift.

3) to donate books, letters, manuscripts, diaries, and day journals of early rural and town dentists, and the funds necessary to preserve these works in specially-made, acidfree boxes."

Contributions to the Friends of the Bibby Library Fund are allowable tax deductions.

EDC Friends of the Bibby Library Fund Name Address City	Basil G. Bibby Library Eastman Dental Center Rocherter, New York
State Zip	
I (we) hereby pledge to the Library Fund \$	Please mail to:
Check enclosed	Jo Helfer
Please send a bill	Development Officer
	Eastman Dental Center
Signature	625 Elmwood Avenue
Date	Rochester, New York 14620

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### Commencement. . .

### Continued from page 1

Students, in their paroxysms of rage against an establishment that had, among other things, created the Vietnam war, napalm, and Nixon, persuaded their colleges and universities that students were the proper arbiters of what they should study in college, and they succeeded in wiping out, in many of the best schools in the country, some of the most carefully conceived programs of study. Sometime after this curricular carnage these same students came to realize that the surest, perhaps the only way, to guarantee that when they had grown up they would have a career and be able to support themselves, was to secure admission to one of the professions—law, business, medicine, dentistry. And as more of them got the same idea, the competition for admission to these schools became intense. Students not only strove to excel in the courses required for their chosen profession, but they reasoned that if they took courses beyond .the requirements they would be even more attractive as candidates. And so dental students, instead of taking "The English Novel in the 18th Century" or "Kant's Critique of Pure Reason," took yet another course in cytogenetics or quantum chemistry or laser physics . . .

The dental and medical schools... filled their classes with what seemed to be highly scientifically trained men and women, who had never encountered an essay examination, who had never written a college-level paper, had never used the university library, who found the traditional vocabulary of medicine (with its Latin roots) unintelligible, and would prove in time to be unable to commit into a recognizable language their thoughts and ideas. And ironically, as preparation for the professions of medicine and dentistry, which should have at its very heart the development of a sense of values and of appropriate ethical behavior, students, in their frantic competition for acceptance, were avowedly committing breaches of ethical conduct (as for instance hiding reserve books in remote corners of the library, hiring people to write papers for them, sabotaging their classmates' experiments)...The few students intrepid enough to apply to dental school with a bare minimum of science courses were often turned away until they could prove, through the acquisition of a not necessarily first-rate master's degree, that they could handle an academic program consisting exclusively of sciences. And at this very time, pressure developed in the dental schools to put some or all of the basic sciences into the predental years, so that the dental years could be exclusively devoted to clinical instruction.

Once having achieved the eagerly sought goal of admission to dental school, as I hardly need remind you who have so successfully completed this most rigorous education, the students would take a series of prescribed, nonelective courses whose demands, both intellectual and technical, would leave them virtually no time for any outside diversions, and certainly no energy for intellectual or artistic activities. And so, in an environment entirely devoid of humanistic concerns, the student would find himself without the resources (financial, intellectual, temporal) for books, museums, opera, concerts, or poetry.

And then, when that great day came, the day of graduation, the student would emerge from the long and arduous trial to begin to achieve what he had dreamed about eight or ten years earlier. But during the course of those years, some part of his brain would have, if not atrophied, at least lain dormant, and what little stirrings of desire for the humanities that had once been there, what little understanding he might have had of some of the byways of arts and letters, would almost certainly be gone. Our dentist, on the threshold of a great career, has lost the habit of the humanities, and how he needs it!

Sociologists tell us that people choose dentistry because, among many other reasons, they want to have a career in which there exists the possibility of reasonable financial rewards, with leisure time which can be structured according to their own desires. While the financial rewards of dentistry in the future may be smaller, and may come later in the career, because of new modes of dental care delivery, it is almost certain that sometime after entering some form of dental practice, the dentist will achieve relative economic security with significant amounts of leisure time. And yet what in his education since high school has there been to help him make the best use of this time? It is no wonder that so many dentists, given that much leisure time, choose to spend it riding around in a golf cart or become emotionally involved with a basketball team or spend a lot of time calling their brokers about puts and calls. This is hardly surprising, for if one is to pursue, with intelligence not to say passion, a musical instrument, modern poetry, the theatre, English literature, ideally one should have had some formal structured introduction to these subjects by a qualified person. If it takes training to construct a precision attachment, it also takes education to appreciate properly a novel by Henry James.

... I would like to talk about how the humanities might be given a larger role in dental education and why they absolutely should.

There are several possible approaches to restoring the humanities to the undergraduate curriculum. A first approach lies in the recognition that while one must have certain science and mathematics courses to qualify for entry into dental school, it is simply not known whether one's chances of success in dental school or the likelihood of one's becoming a better dentist is improved if one has taken scores of extra science courses or has been a major in solid state physics. Now, when applications for dental school have dropped sharply, down to 1.3 applications for each available place, would be a felicitous time to try an educational experiment in which efforts were made to recruit nonscience majors into dentistry. This is not to say that such students would be exempted from the basic requirements, only that an unusual category of college students-the art history major or the English major with the prerequisite science courses-would be encouraged to study dentistry.

A second approach is to establish a place for humanities in preprofessional education. Several years ago...the Mellon Foundation gave New York University a substantial sum of money to institute programs which would have as their goal the reinvigoration of humanistic studies at the undergraduate level. A university Humanities Council was established, and one of the innovative programs it instituted was a series of seminars which provided an opportunity for students to study interdisciplinary subjects or special humanistic topics in small groups with distinguished teachers. The titles of some of these (extremely popular) seminars are instructive: Physician in literature, Doctors as bellelettrists, the Web of alchemy: the medieval roots of modern psychiatry, Professional responsibility—law and medicine...

Then the question arose as to how the humanities could be brought into the professional schools, and here again the Humanities Council functioned innovatively in offering to mount some programs and special lectures for students at the schools of law, medicine, dentistry, and business. What kinds of programs, we wondered, would be appropriate. To

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answer this, I gathered up a group of interested dental students, took them to a meeting with the Humanities Council and high officials of the university, and we asked the students—what do you want? Shakespeare some said, a course on the Bible, but overwhelmingly our dental students said "a course in art history, because we go to museums and somehow we don't know what to look for or how to look at pictures." In no time at all we had organized a small seminar on twentieth century art, which was enthusiastically attended.

This modest beginning was followed by regular offerings of six noncredit courses each semester... All these seminars were, and still are, offered after classes are over for the day, most are given within the confines of the dental school, they run about an hour and a half, and they have been attended by students ranging from first to fourth year, as well as by faculty and staff. In addition, a number of special lectures has been presented for the medical-dental community. A recent one was given by the well-known British physiologist and greatgrandson of Charles Darwin—the title was "Darwin and the Beagle."

A few words must be added about the place of ethics courses in preprofessional and professional education. A recent report from the Hastings Institute of Society, Ethics and the Life Sciences notes with regret that the majority of professional schools still offers nothing of a serious and systematic nature in ethics and urged that every student in a professional school be exposed systematically to the ethical problems of his field. A substantial number of medical schools offers ethics courses of indeterminate quality, according to the Hastings Center; the number of dental schools offering such courses is unknown and probably very small.

That the scientist-professional-humanities connection is of potential value to society has been recognized in other institutions with different kinds of programs. For instance, at the University of Texas at Galveston there is an Institute for the Medical Humanities, in which individuals with professional and humanities training conduct transdisciplinary studies designed to provide new dimensions of understanding. Some of their studies have centered on the ethical issues in human reproductive technology, evaluation of humanities studies in health professional education, and the evolution of attitudes about terminal illness and dying in American culture.

And in such institutes, such loose connections between the professions and the humanities, lies yet another possibility for creating a role for the humanities in dentistry. At the present time there is no institute for humanities at any dental institution in the country. Perhaps the Eastman Dental Center, with its unique focus on graduate dental education, with its connection to a major university, with its faculty of renowned researchers and teachers, with its carefully selected students, and with its affiliations with outlying hospitals and postgraduate training programs, should be the site of the first Institute for Humanities in Dentistry. Its beginnings could be modest-a few optional seminars given by faculty from the University of Rochester on selected humanities topics for students enrolled in the various training programs, a mandatory course on ethical issues in dentistry or dental education, and several major public lectures each year on interdisciplinary subjects. The seminar could be on virtually anything, with or without obvious dental connections, which the available faculty are qualified to teach; concepts of beauty as seen in different artists' work or different cultures; moral dilemmas in dentistry; dental symbols in literature; the dentist in literature. In fact, a professor of English at Princeton recently published a paper entitled "The telltale teeth: psychodontia to sociodontia."

The most important question in my modest proposal to

bring the humanities back into the undergraduate curriculum and into professional schools is not how to do it but why it should be done. Let us agree at the outset that humanities courses do not make humanitarians... The intellectual and scholarly activities of history and philosophy, the study of civilization and culture, the learning of music, languages, classics, and art are essential to the development of the human spirit and man's understanding of his creative potential. To train dentists without providing them with this background, as President John Sawhill of New York University has said, is to "run the risk of creating technicians unable to make creative judgments, unable to place their experiences in the context of the social, political, and economic world, and unable to recognize their own spiritual place in the universe." Furthermore, we know that in recent years we have turned out students who can neither write competently nor read with critical understanding, who are ignorant of their past, and utterly lacking in basic communication skills.

But my interest in the incorporation of the humanities into preprofessional and professional education goes beyond a concern for restoring a sense of balance and a basic literacy to the professional student. It is with the quality of the dentist's life that I am concerned and with the role of the successful health professional in our society. Robert Coles, the noted author and child psychiatrist at Harvard University has said:

The humanities at their best give testimony to man's continuing effort to make moral, philosophical, and spiritual sense of this world—to evoke its complexity, its ironies, inconsistencies, contradictions, and ambiguities.

Without doubt the humanities have an immense potential for enriching the quality and character of our lives, but it is a mistaken notion that after years of rigorous, intense, singleminded professional and scientific education, we will be able suddenly to take up the humanities in our leisure time, to fill the lacunae left by twenty years of specialized education. To believe this is to betray an insensitivity to the fact that the humanities are disciplines themselves, that we do not slip easily in and out of music, or art or literature or poetry, that to read a poem of Keats, listen to a symphony of Brahms, respond to a painting of Corot is not just given to us, as is the power of respiration, but is acquired with training, with time, and with patience.

... Dentists enjoy considerable financial rewards from their work. The median income for dentists is similar to that reported for physicians, and together these health professionals are among the highest income groups in the country. Yet here is what the former Commissioner of Cultural Affairs of the City of New York has written to me: "I can't recall a single dentist or physician on the board of any cultural institution with which I have been involved. I would say that dentists and physicians are not noted for their involvement in cultural activities and are not very generous in their contributions to cultural organizations generally."

It is a good question: why are dentists not active, not really visible, in cultural affairs? They have the money, they have the time, they have the intelligence, they surely have the commitment to their communities. I suggest it is a legacy of their narrow education; that they lost the habit of the arts, that in losing the habit, they lost the taste for them, and that without the taste there is no urgency to provide the means for supplying cultural activites in the community. And I submit that this is a tragic loss. Not only for the dentist himself is the quality of life diminished, but as well for the community whose needs depend on men and women of substance and education.

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# **Recent Thesis**



Vahid Golpayegani writes a newsy letter from "Fatemeh Tehran: (Faroozesh Banei. GenDen '73, Pedo '75, M.S. '76, Ortho '78) and I have been very busy since we left the U.S. in May 1979. Our first timeconsuming task was setting up our house while teaching at the Tehran University School of Dentistry. Then we set up our dental office. The office consists of two clinics-Orthodontics for

Fatemeh, and Pedodontics for me...Now we are really busy because we teach at the Dental School in the morning and practice in the afternoons, five days a week.

"Arash is almost 21 months old. (This letter was written in April.) He has become quite a cute smart boy now!! He goes to nursery school in the mornings and enjoys playing with children, especially with older kids."

Vahid graduated from Tehran University in 1971 and then entered the Health Corps for two years. Afterwards he worked for the Health Department in the south of Iran until 1975, when he came to EDC. In 1978, the year he was awarded his Pedo certificate, he was runner-up in the American Academy of Pedodontics postgraduate research competition.

He is athletic and relaxes by swimming, mountain climbing and bicycle riding.

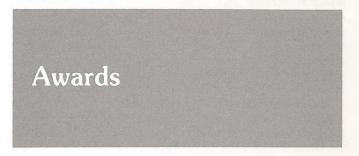
The research for his thesis was done under the supervision of Dr. Michael G. Buonocore.

### EFFECT OF WATER IMMERSION ON TENSILE AND SHEAR BOND STRENGTH OF NUVA FIL® AND CONCISE® WITH AND WITHOUT PRIMER TO THREE DIFFERENT ENAMEL LAYERS

#### By Mojtaba Vahid Golpayeagani

While many laboratory studies have demonstrated strong bonds between composite resins and phosphoric acid etched outer enamel, few studies have evaluated the strength and durability of this bonding to the inner layers of enamel. This is important because the inner layers of enamel are often intentionally or unintentionally exposed during certain operative procedures. Although it is generally agreed that more durable and higher bond strengths are achieved when a thin primer layer of a low viscosity resin is applied first to the acid etched enamel surface, some investigators do not advocate this procedure but rather feel that equally good results are obtained by bonding the composite directly to the etched enamel. The present research was undertaken to ob-

tain basic information on the strength and longevity of bonds obtained when composite resins are bonded to different lavers of enamel and stored in water for prolonged periods. Tensile and shear bond strengths were measured after application of two different composite resins, a self cure restorative, Concise, and an ultraviolet light activated restorative, Nuva Fil. These materials were used with and without application of their respective low viscosity primers to bovine enamel. A small parallel study was also conducted using the labial enamel of lower central human incisors. Concomitant microleakage studies were also conducted. The most consistent findings were: 1) reducing enamel thickness contributes to a statistically significant decrease in shear and tensile bond strength to both human and bovine enamel. The lowest bond strength values and greatest microleakage were demonstrated on the inner third of the enamel, 2) materials tested did not produce statistically significant differences in tensile and shear bond strengths, 3) on prolonged water immersion shear strength increased while tensile strength was unchanged, 4) the use of primers increased tensile bond strength, reduced microleakage and was more effective for adaptation of composites to enamel as seen by SEM and "tag" studies.



RICHARD BYRD, postdoctoral Pedo student, and DAVID LEVY, Pedo '77, who is assistant chairman of Community Dentistry and is also working on his Master's, have been awarded the prestigious American Fund for Dental Health/W.D. Kellogg Foundation Fellowships.

When the Drs. J.D. SUBTELNY, Joanne and Dan, were recently awarded the Honors of the American Cleft Palate Association, Dr. Samuel Pruzansky, director of the Center for Cranio-facial Anomalies of the Abraham Lincoln School of Medicine of the University of Illinois, noted that "for the first time a husband and wife will be honored for their lifelong contribution in research, teaching and clinical treatment."

The association bestows the award on distinguished individuals who have "made a major contribution in furthering the understanding of cranio-facial anomalies, more specifically that of cleft lip and palate."

After speaking about the Subtelnys' previous distinctions and honors, Dr. Pruzansky said, "In a good marriage, spouses complement each other and each is the better person because of the other. The Subtelnys have enjoyed such a marriage and in this marriage have raised two wonderful children, Dr. Greg Subtelny, a handsome young man who practices dentistry, and Alysa (Mrs. Jeff Sands), a bright and disarming young woman...The Subtelnys not only are distinguished as teachers, scientists and clinicians, but as parents."





VAN E. CHRISTOU, Ortho '50, one of our more constant correspondents, is now Chancellor emeritus of the University of Lethbridge in Alberta, Canada. He has practiced orthodontics in western Canada since 1950 and his interests are Greek archeology, photography and traveling in particular, sailing the Aegean Sea.

THEODORE A. DISANTIS, Pedo '67, became a diplomate of the American Board of Pedodontics and was promoted to assistant clinical professor at Case Western Reserve University.

JOEL SCHAFFER, GenDen '72, was married in February to Susan Ann Swearingen.

ROBERT L. MANDELL, GenDen '75, assistant professor of periodontology at the Medical College of Virginia, successfully defended his Master of Medical Science thesis in oral biology at Harvard Medical Center and received his perio certificate from Harvard Dental in May.

ROBERT G. JENNINGS, GenDen '77, is "practicing clinical dentistry at the Wright-Patterson Air Force Base Dental Clinic and is assistant director of the general dentistry residency program." He and his wife Carol are also "happy to announce the birth of their son, Eric Robert, November 25, 1979."

ROLAND ANTHONY ADAMS, Perio '78, M.S. '78, "is entering private practice and teaching on a part-time basis" in Australia.

### Commencement...

### Continued from page 4

Your three-unit bridge, fashioned of gold and porcelain, is a cosmetic and functional device. My three-unit bridge is one of ideas, fashioned of gossamer, which will support the spirit. Dentistry has proved its skills in fabricating the first; I think it has all the skill and imagination needed to fabricate the second, the one that will connect dentistry, ethics, and the humanities.

Alumni News Notes are due by September 25, please!

Name	Dept	Year
New Home Address		
New Business Address	New Title of	or Position
Other News		
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