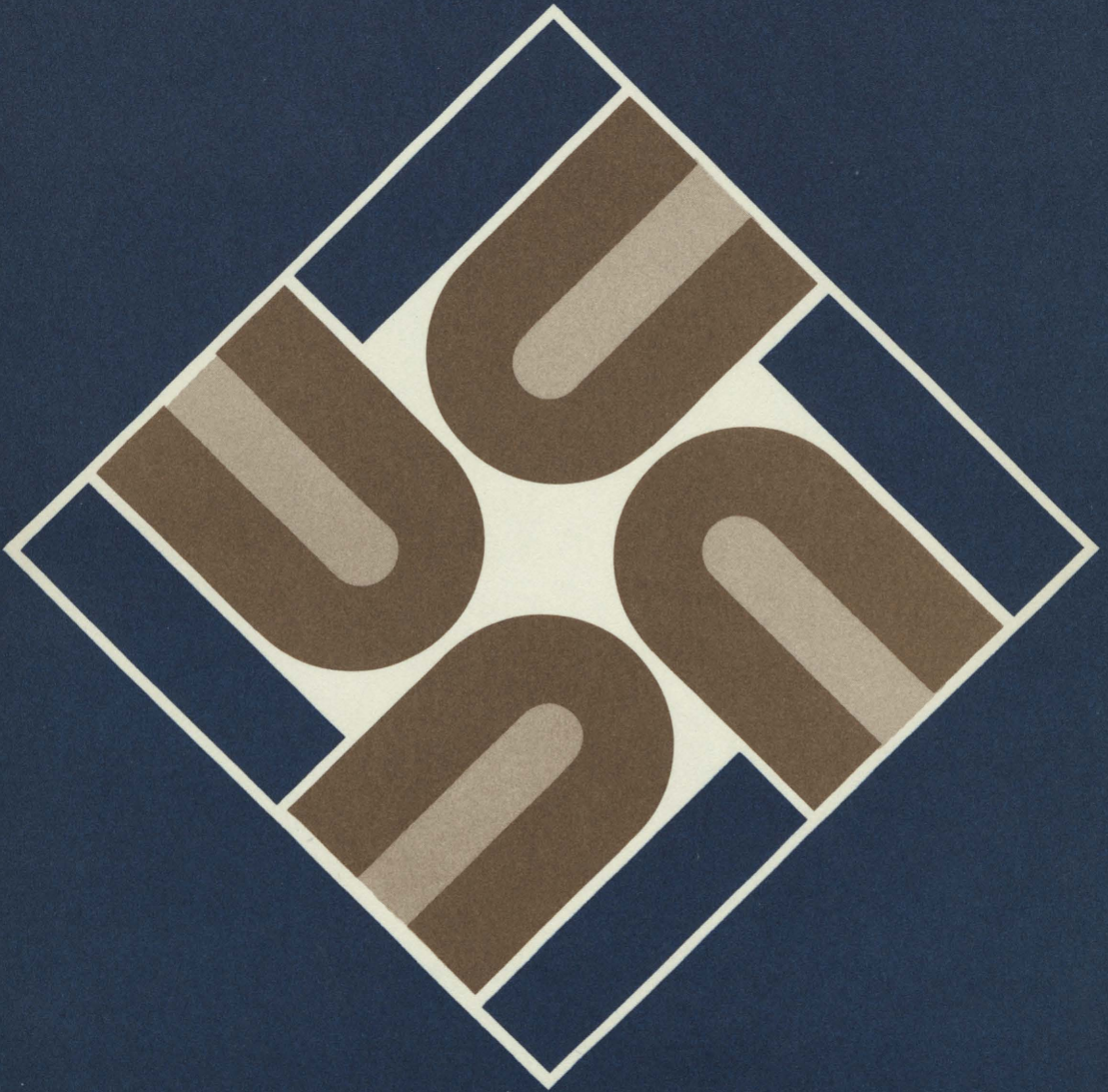


Alumni Bulletin

SCHOOL OF DENTISTRY

Fall Issue 1972



Indiana University - Purdue University at Indianapolis

Indiana University
School of Dentistry
ALUMNI BULLETIN

Alumni Bulletin

SCHOOL OF DENTISTRY
Fall Issue 1972

THE Graduate Program in Dentistry: A Challenge
Dentistry in America
A New State Dental Practice Act
Dental Management: A New Approach
Dental Education: A New Vision
Dentistry: A New Profession
Dentistry: A New Career
Dentistry: A New Lifestyle
Dentistry: A New Future
Dentistry: A New World
Dentistry: A New Tomorrow

ALUMNI BULLETIN
FALL 1972
VOLUME 1, NUMBER 1

Indiana University - Purdue University at Indianapolis

A national organization of dental schools and dental professionals, the American Dental Association, is the largest and most influential organization in the dental profession. It is the only organization that represents the entire dental profession, from the general dentist to the specialist, and from the student to the retired dentist.

Indiana University School of Dentistry ALUMNI BULLETIN

Contents

| | |
|---|----|
| THE CHANGING PROFILE OF DENTISTRY—A CHALLENGE | 4 |
| DENTISTRY IN DENMARK | 9 |
| A LONG SPAN ANTERO-POSTERIOR BRIDGE: A CASE REPORT | 13 |
| DENTAL MANAGEMENT OF A YOUNG ADULT WITH HEREDITARY ECTODERMAL DYSPLASIA: A CASE REPORT | 17 |
| NOSTALGIA FROM BEA'S | 22 |
| INDIANA UNIVERSITY SCHOOL OF DENTISTRY ALUMNI ASSOCIATION | 24 |
| CHANCELLOR'S COMMENTS | 25 |
| NOTES FROM THE DEAN'S DESK | 26 |
| MANY VARIED PROGRAMS IN CONTINUING EDUCATION OFFERED IN 1972-73 | 35 |
| HONORS PROGRAM HELD IN MAY | 38 |
| DENTAL HYGIENE | 40 |
| DENTAL AUXILIARY EDUCATION | 40 |
| STARKEY'S COLUMN | 46 |
| ALUMNI NOTES | 51 |
| THE BOOKSHELF | 60 |

R. W. PHILLIPS
PAUL BARTON
EDITH GLADSON

EDITOR
ASSOCIATE EDITOR
ASSISTANT EDITOR

Alumni Officers:

Daniel R. Lindley, President Wilber C. Boren, Sr., Vice-President
Byron E. Price, President-Elect Robert L. Bogan, Sec., Treas.

A free and non-profit bulletin issued by Indiana University School of Dentistry, Indianapolis, Indiana, for the purpose of keeping its alumni informed of the activities and progress of the School.

The Changing Profile of Dentistry —A Challenge

*Ralph W. Phillips, Assistant Dean for Research
and Research Professor of Dental Materials*

The great body of knowledge in all of the sciences and professions has made this the era of the highly skilled and the specialized, as illustrated by a recent issue of *SCIENCE* in which the following papers appeared: "Criminalistics," "The Science of Geochronology," and "A Physiologist Looks at Engineering." Botany is plant biology, bacteriology is microbiology, and physical chemistry has been sub-classified into chemical physics. A mere decade ago terms such as solid-state physics, histochemistry, behavioral sciences, biophysics, and data processing were foreign to the curriculum of most universities. Human behavior is now being reduced to numerical figures which can be coded and re-analyzed, in the hope of discovering corrective measures for those aspects which are regarded as socially undesirable. Thus research has caused satellites to splinter from the parent bodies of science—inevitably to establish new universes requiring their own unique skills and disciplines.

Dentistry is no exception to this proliferation of scientific effort. For example, ten years ago 372 papers were presented at the annual meeting of the International Association for Dental Research. This year over 1000 papers were submitted for the annual meeting. The first U.S. dental publication appeared in 1840, *The American Journal of Dental Science*. Now there are over 400 periodicals in the *Index of Dental Literature*. However, it should not be inferred that this accelerated growth in dentally oriented research has been accompanied by a parallel up-grading in its *quality*. Too often we are impressed by the well-equipped laboratory and forget to seek the well-equipped mind. Lord Bowen remarked, "A great deal of

philosophy is like a blind man in a dark room looking for a black cat that isn't there," and we could say the same thing about research.

Nevertheless, the effect which research has had upon the present nature of dental therapy is decidedly substantial, albeit the changes which have occurred in the practice of dentistry, via research, have been so gradual and methodical that they transpire almost undetected or appreciated, by either the profession or the public. May I cite a few. Probably the most striking has been the extension of various methods of fluoride utilization. Rampant caries is rare among children in cities with a fluoride water supply. Since premature loss of primary teeth is one of the major causes of malocclusion in children, children drinking fluoridated water have less need for preventive and corrective orthodontics. Research on the etiology of dental caries and periodontal disease has clarified the role of bacterial colonies, increasing public and professional awareness concerning the meaning of plaque and demand for control services.

Pathology has recognized a broad spectrum of genetic diseases and the oral manifestations of these diseases. Acknowledging that oral cancer and many other systemic diseases with oral manifestations are in the realm of responsibility of the dentist, biopsy and cytologic smears are routinely used as diagnostic tools. Through an increased liaison with physicians and hospitals a better delivery service has been provided to the handicapped and retarded through a new emphasis upon genetics. In the same vein, recognition, diagnosis and improved management of syndromes of the head have made it possible to provide successful treatment of discomfort arising from disorders of the temporomandibular joint through psychology, patient behavior and psycho-

Paper presented at the annual meeting of the Indiana State Dental Association, Indianapolis, May, 1972.

therapy rather than by empirical occlusal adjustments.

The development of ultra-speed rotary cutting tools has reduced the time for cavity preparation as much as 75 per cent. Combined with superior local anesthetics, the way was paved for "quadrant dentistry" where in a short period of time, at the same appointment, operative dentistry could be done on a number of teeth without pain. Of equal importance to the dentist are the trained assistants now available to him and the variety of functions they perform. These skilled personnel, coupled with redesigned equipment, have increased output of the individual dentist, improved the accuracy of his work and the span of his professional career.

Since the foregoing examples are detectable evidence of the fruits of research, what does the future hold—have we plateaued or will the present programmed research lead to even greater changes in the profession than those I have just noted? A review of current research is arduous, simply because of its volume. Decidedly more difficult is the task of identifying the studies which in turn will transform dental science therapy and the delivery of services. It occurred to me that it might be of interest to go back exactly one decade and examine the published research of 1962 in the light of 1972 dental practice. Which, if any, of the investigations reported at that time did indeed result in a change in the comprehension of dental disease or in the mode of treatment? With such information as a backdrop one might have a better appreciation of the time lag that exists between the research laboratory and in vivo application. Furthermore it provides source materials for making a more appropriate judgement as to whether the research now in progress will, in the foreseeable future, likely alter the nature of dental practice.

It is relatively easy to focus on certain studies that have attained their intended goal, at least to a certain extent. In the year 1962, experimental composite resin systems were first reported, as were the spherical amalgam alloy systems. In that era, etching technics for acrylic resin were suggested as a possible mechanism for im-

proving the mechanical retention of acrylic resin restorations. Composite resins, spherical amalgam alloys and etching technics are now commonplace in the operative procedures of many dentists. The need, and suggested avenues of research, for the development of pit and fissure sealants were also being first reported at that time. At least two commercial sealants are now available.

In those reports emphasis was placed upon research designed to cure pulpitis. The subsequent success of direct and indirect pulp capping has now virtually eliminated this problem. Periodontal therapy has reached the degree of perfection predicted at that time. Removal or recontouring of alveolar bone is carried out with much less frequency while procedures designed to fill bony defects with new osseous material have now gained wide acceptance.

In 1961 a number of unexplored research areas were enumerated. Although many are still neglected, such as neurophysiologic studies and aging of the oral structures, progress in others has been substantial. For example, research in the field of community dentistry, delivery of health services and the interaction of the profession with society comprises an important segment of the current literature and holds the attention of the profession. As a specific example, the International Association for Dental Research now has incorporated within its structure a new group of behavioral scientists.

These observations are on the positive side. Now on a less optimistic note—

In a comprehensive analysis of the 1962 literature I made the following observation: "The problem of periodontal traumatism continues to evoke debate." It must be acknowledged that the statement is valid also in 1972. The significance of periodontal traumatism in the etiology of periodontal disease is still unknown. There remains a need to design and conduct experiments so that the possible codestructive factors of inflammation and trauma from occlusion can be understood.

Research on agents to suppress or inhibit bacterial colonization on the teeth has not yet resulted in an effective, safe agent for general use by the population.

This statement is also true for calculus preventive agents.

At that time surface wetting agents were being proposed as a mechanism for preventing adhesion of foodstuffs but it is now known that plaque formation begins immediately after tooth cleaning and, once formed, the biochemical substances inside the plaque are more important than those outside. For similar reasons, caries susceptibility tests, which were once touted as the clinician's scientific approach to caries etiology, have proven to be too remote to the basic biochemical mechanism to be diagnostic.

In 1962 the concept of dental caries as an infectious and transmissible disease excited the imagination of profession and public alike. Articles in the newspapers cautioned lovers on the potential hazards of kissing—especially in regard to tooth decay! In the process of delineating the various cariogenic strains of bacteria in animals, it was proposed by many that a vaccine against dental caries might be a reality. Although considerable information has since accumulated concerning oral microorganism metabolism, plaque formation, strain differences and even the complicated serum-saliva molecular transport system, we are today no closer to that vaccine than we were when it was first proposed over 10 years ago.

"Whatever happened to the salivary glands?" might well be the rallying cry of dental researchers in this decade. In the early 60's, a flood of work appeared relating salivary glands and dental caries to the endocrine system, to the general body growth and development, and even more esoterically for dentistry, to certain aspects of embryonic growth. These investigations seemed to be pointing the way to a whole new field of interrelationships between the oral cavity and the entire organism. Unfortunately, quicker than it came, research effort in these areas literally disappeared, leaving their significance and ultimate destiny speculative.

Thus, as in all research, there have been failures and successes, even though we are closer than we were a decade ago to the ultimate goal of any health profession—to eliminate the very need for

its existence. In general, the theory and practice of dentistry have profited immeasurably. However, it is also obvious that investigations can seldom be structured to assure a *major* breakthrough; advances occur more often by research accidents than by design. Thus it is apparent that even a considered critique of the 1972 ongoing research may be quite misleading and fail miserably in identifying the studies which in time will prove to have been the most productive. It is in that context that the following predictions are made, with an equal measure of tolerance on your part and courage on mine. Thus a future profile of dentistry—

Overriding every other consideration will be the increased demands for dental care in the 1970's. More people will have dental care plans available to them. Furthermore, we must realize that the educational level of the public will also be raised, virtually all high school graduates having gone to college. These better educated young people will become a vital force in molding the profession by demands for dental care for themselves and for their children.

Although complete control of dental caries will not likely occur in the foreseeable future, further progress will be made in containing the disease. This will include chemical or bacteriological means for plaque control, the identification of more effective fluoride treatments and immunological approaches. New indices for monitoring dental caries, as well as periodontal disease and oral hygiene, will be found. With an understanding of pathogenesis and with confidence in measures to control caries-conducive infections, dentists will treat extensive lesions conservatively. Decalcified and slightly invaded dentin will be treated with remineralizing compounds. Already under intensive research are adhesive film forming resins that might be applied by the dentist or incorporated into a dentifrice to provide a barrier against the caries process. Such adhesive systems will also become available for attaching orthodontic brackets directly to enamel.

The time is near when esthetic biologically kind adhesive composite restoratives

will replace many of the now commonly used materials, making it possible to modify dramatically the nature of cavity preparation now required and extending the useful life of the restoration. It is not unrealistic to predict that a composite may be used for all dental restorations, making possible the fabrication of a fixed bridge at one appointment. New polymers will open vast horizons in maxillo-facial prostheses and for implants.

Fifty per cent of all individuals over 40 years of age have lost at least one tooth from periodontal disease; by age 65 the percentage rises to almost 100 per cent. A large part of present research in this field is directed toward the development and refinement of technics for repair of gingival and osseous defects. In the future preventive agents and technics will receive top priority. Various plaque combatting agents, probably in the form of mouthwashes, will be developed to supplement or take the place of the toothbrush and dental floss. These preparations will indirectly affect the amount of calculus formation. There may well be long-acting agents which will coat the teeth and prevent the adherence of plaque to the enamel surface. Efforts will be directed toward the development of a chemotherapeutic agent or agents that can be placed in the communal water supply to combat plaque formation.

In periodontal practice 15 years from now, I envision a major change in patient population. Reliable statistics tell us that almost all pre-teen and teenage children have some gingival inflammation, the earliest manifestation of periodontal disease. Epidemiologic studies have shown that when one critically examines the 16 to 18 year-old population, many of these young people have actually lost alveolar support. This knowledge is not commonplace because this type of critical examination is not practical, or at least is not carried out in the average dental office. In the future the periodontist will spend a considerable part of his professional effort in treating the pre-teen and teenage patient. There is no better time to eliminate the disease and prevent the severe problems that are now seen in the thirty to sixty year-old group. Today the teen-

ager is going to the orthodontist to have his malocclusions corrected. In 15 to 25 years, as large or perhaps a larger part of the teenage population will be securing what I would refer to as preventive periodontal care.

The cyanoacrylates are probably only the first step in development of materials to stimulate wound healing in general and oral wound healing in particular. Such adhesive preparations will replace sutures and bandages. The time will probably come, as predicted in science fiction movies, when we will use some type of biological system involving living cells which will heal wounds within a matter of minutes.

Laser research in dentistry has lagged but sooner or later will probably develop to the point of practical use in oral surgical procedures, as well as operative dentistry, or to alter by fusion the physico-chemical properties of intact enamel to render it more caries-resistant. Research in transplantation technology has progressed to the point that tooth banks will become a practical reality. Current and future research on the viral etiology of human cancer will soon make it undeniably clear that human cancer including oral cancer is a viral disease. Once this has been accomplished, means will be sought for the eradication of oncogenic viral nucleic acid from the human organism. Whether future research in the autoimmune diseases will play any role in dentistry remains to be seen.

It is eminently clear that the more infectious, traumatic and nutritional diseases we conquer, the more we expose the iceberg of heritable disease. At the turn of the century when tuberculosis, smallpox, influenza, and many other infectious diseases were striking down our population, there could be but academic interest in the rare heritable disorders. Actually, they were not rare, only overwhelmed in epidemiologic significance. Today, with environmental causation being successfully attacked on all fronts, the inherited disorders are assuming increasing importance in the drive to expand man's longevity. Dental caries is a perfect example of this phenomenon. As previously noted, topical and systemic fluoridation, plaque con-

trol, diet regulation and posteruptive enamel remineralization techniques are rapidly reducing the severity of the carious attack in a large percentage of our population. As a result, we are seeing increasing numbers of individuals and families with inherited diseases of the dentition. It is easy to project that as fewer and fewer persons present themselves to the dentist for full mouth extractions due to rampant caries, more inherited disorders of the dentition will be recognized. For example, cleft palate and lip represent the second most common birth defects, affecting one out of every 750 live births in the U.S. Furthermore, such disorders are seldom treated by routine restorative techniques with a satisfactory end result, and one can visualize in the future a specific area of restorative dentistry teaching which will emphasize these special problems. By surgical or pharmacological means, it should be possible to alter the genetic make-up in such a way that an individual would not have third molars, would have compatibility between tooth size and jaw size and would have a genetic predisposition to non-carious teeth.

Because of this changing concept in the mode of dental therapy, and the responsibilities thrust on the profession to provide better delivery of care, the utilization of auxiliaries will be expanded. Regardless of the direction taken, it is only logical to conclude that instead of the dentist being burdened individually with the time and money consuming jobs of bookkeeping, personnel management and certain technical procedures, he should be placing these responsibilities in the hands of trained experts. Meanwhile, working closely with trained auxiliary personnel, dentists will be concentrating individually and collectively on preventing as much dental disease as possible and treating the remainder after it occurs.

Thus one can envision that several decades hence a new mode of dental practice will have emerged. The mouth will, through research, have incidentally become a part of the medical body. My reservation is that success in the *application* of important new knowledge to public use may not be much greater in 30 years than it is today. I would hope that

current attention to the studies of factors that motivate populations to seek or accept health care will rapidly move from attention to results. Although one must acknowledge a more intimate interrelationship between technology and society, the communication between the scientific world and that of the laymen which it serves is frequently one of passive acceptance.

One often hears about the influence of science on philosophy, literature, history and the arts; yet in fact some non-scientists react on this proposal almost with hostility, stemming from a suspicion that science is a facile catchword or almost priestly incantation. C. P. Snow, who is both a scientist and a novelist, has observed that the scientist and non-scientist are of "two cultures," separate and distinct. He goes on, "I have been provoked and have asked a company of non-scientists how many of them could describe the Second Law of Thermodynamics. The response was cold, also negative. Yet I was asking something which is about the scientific equivalent of, 'Have you read a work of Shakespeare's?'" In this sense, then, dentistry and its scientists should develop more precise and effective means for transmitting their findings to a population that must be made sensitive to newer therapies for the treatment of oral diseases.

As knowledge pushes back even further the parameters of the unknown, it is further the responsibility of the profession to maintain excellence in its practice and research. For as John Gardner has said, "An excellent plumber is infinitely more admirable than an incompetent philosopher. The society which scorns excellence in plumbing because plumbing is a humble activity and tolerates shoddiness in philosophy because it is an exalted activity, will have neither good plumbing nor good philosophy. Neither its pipes nor its theories will hold water."

I have discussed with you some of the implications and a few of the problems being generated from the ever-increasing volume of research in the science of dentistry. But the danger still remains that we may forget the individual, that
(Continued on page 68)

Dentistry in Denmark

*David Bixler, Associate Professor of Basic Sciences
and Chairman of Oral Facial Genetics*

At the request of the Alumni Bulletin, I have jotted down the following information, impressions, and opinions on the state of dental education and dental practice in Denmark. Some notes on the general quality of life in Denmark are also included. All of the material is based on my observations and experiences during a special research leave which I was given for one year in Copenhagen during 1968-69, and a subsequent visit in the summer of 1972 to initiate a new phase of that original research project.

Scandinavian dentistry, in general, appears to be firmly in the grip of socialism. The government pays for all dental treatment through a national health service plan, and the private practitioner is paid for his effort by the government. Incidentally, dentistry does not enjoy the professional prestige there that it does in the U.S. When I applied for credit at several stores in Copenhagen, I was surprised to find out how much more receptive the credit department was to listing my profession as a "Professor" rather than "Dentist." Typical incomes ranged from \$10-\$15,000 a year in 1968, although that figure is higher now, with orthodontists and periodontists doing somewhat better. Interestingly, orthodontics is the only recognized dental specialty in Denmark! Prosthodontics is almost entirely accomplished by laboratory technicians since they have a "denturist" law enabling persons with limited certified training to take impressions, set up teeth, and so on.

There are two dental schools, one in Copenhagen and the other in Arhus, about 200 miles away. At Copenhagen there are about 800 students taking the normal 5-year course. In the Danish educational system there are 8 years of elementary education and, if the applicant is accepted, 4 years of high school, which in many areas is college level achievement compared to our system. After this the stu-

dent goes to the University or directly to a professional school.

Sixty per cent of the dental students are young women, most of whom will end up being elementary school dentists (more on this point later). There is heavy emphasis on basic science training, which appears to be thorough and of high caliber. The clinical years are spent mostly in pedodontics, periodontics and orthodontics but with an average of only about 6-7 months clinical experience in operative dentistry and crown and bridge per student. This, of course, is considerably below that of most U.S. dental schools, and accounts for the general lack of interest and professional achievement in the restorative areas of dentistry. The equipment is modern, so this is certainly not a limiting factor. However, since office expenses and other overhead expenses are high, it may be that dentists cannot afford the more modern equipment.

Each dental school has its own dean (designated Rektor), who presides over all academic matters and faculty meetings. The dean is elected by the professors from their own number and his period of office is five years, after which he may be re-elected for only one additional term or return full-time to his professional duties. The business of running the dental school is handled by a chief administrative officer with the title of Inspector, who is appointed by the Ministry of Education. The term of office for the Inspector is indefinite, and his professional training is usually in law. Such an individual provides continuity for the functioning of the school, when the deanship is in fact changing every five or ten years.

The curriculum may be conveniently divided into two parts—a preclinical portion and a clinical portion. Most of the first-year courses are those usually taken by pre-dental students in the United States, except for the dental technique

and anatomy courses. Thus the 5-year dental curriculum in Denmark is analogous to a 1-year pre-dental plus 4-year dental curriculum in the U.S. The second year is almost exclusively anatomy, biochemistry, and physiology, and this strong emphasis on basic science is reflected later in the clinical teaching. In fact, Danish dental education appears to be a good mixture of basic and clinical sciences. Also, today's curriculum places heavy emphasis on oral diagnosis-oral medicine and gives less time to the restorative arts of dentistry.

The academic year extends from August 1 to July 31 with formal lectures scheduled from September through December, and from February through May. Examinations are typically held in January and June. July and August are summer vacation time. After the student has completed his first two years, he is eligible to take a series of seven examinations, known as "kursusprove." The general areas tested are physics, chemistry, anatomy, genetics, and tooth morphology including gnathology. The "kursusprove," in all respects, is like a final examination except that it is graded either pass or fail. The typical student studies hard for these exams and often drops out of school for a semester to study for them. Usually about 50 per cent pass them all the first time they are taken. Results from a recent series of "kursusprove" show that inorganic and organic chemistry have the highest failure rate (about 50 per cent), although histology is also a stumbling block. If an examination is failed, the student must wait six months to repeat it, and eventually he must pass them all before being certified to begin his clinical years.

On a happier note, once the student is promoted to the clinical training period, he seldom experiences any difficulty in finishing the prescribed requirements within the six semesters allotted. Before the student actually begins his treatment of patients, he receives training in the correction and treatment of functional ailments of the masticatory apparatus, including occlusal equilibration and functional analysis using study casts. Un-

fortunately, too many U.S. schools consider such subject material advanced for the neophyte clinician and thereby miss an opportunity to present this valuable material when his new habits are being established and his new dental concepts are being integrated.

Introduction to the clinical operative procedures takes place in the fall, usually September, and it is generally mid-October before the new "clinician" has finished his preparations on extracted teeth and begins to treat patients. No requirements for a specified number of restorations are given, and it is typically during the 7th semester (roughly equivalent to our junior year) that the student's clinical record is first evaluated in detail. The quality of the treatment rendered is the primary consideration. However, a student who is obviously lagging behind in his clinical experience will be counseled to increase his number of restorations in order to develop increased clinical proficiency.

During this third year of his professional education, the average student spends about 10 hours per week treating patients, of which two or three hours are spent giving dental prophylaxes. However, by the fifth year a typical 7-hour day is spent treating patients.

Two points of difference in clinical training are noteworthy. The oral surgery department teaches general anesthesia to its undergraduates, and most interestingly, nitrous oxide-oxygen analgesia. Also, all students spend part of the last two semesters giving orthodontic treatment. Cases selected for the students are routinely able to be completed in the allotted one-year period, although instructors (one for each 4-5 students) have been known to finish cases for graduating students!

Although students are occasionally absent from their clinic schedules, attendance is not rigidly checked. Lectures are offered on a voluntary attendance basis. The students are encouraged to obtain information from various sources and to develop their own techniques by any of several acceptable procedures. This situation is in contrast to that too often found in North American dental schools, where the student is told "Just do it! Don't ask

any questions about it!", the implied but unstated element being "Don't think." In the Danish teaching system a continuous effort is made to encourage the student to make his own decisions. The result often seems to be the somewhat earlier development of intellectual maturity.

At this point, I should like to note that dentistry is well suited for women in Denmark. The majority of Danish women work, as do their American counterparts, and those in dentistry frequently establish themselves with the state-supported school clinics. In this fashion they enjoy frequent vacations at the same time as their children, are at home at comparable hours, and generally avoid the problems and restrictions of private practice.

Dental education, like all other education in Denmark, is virtually without cost to the student. There is a state fund for grants and loans, and students may borrow up to about \$400 a year. The student is expected to have some sort of job during his vacation time, and with the combination of these grants and loans and money obtained by working, his costs for dental school are virtually eliminated. No tuition is charged. The College furnishes all instruments, and in the clinic the instrument kits are assigned to a dental chair and are used concurrently on alternative days by several students. Personally, I prefer the system of having each student own his instruments and take care of them, but the sharing system is a financial necessity when the College must pay for them.

Students are responsible for purchasing all noble metals used in their treatments, and unfortunately are responsible for inducing the patients to pay for them. There is no charge to patients for service, and this philosophy of treatment is not without reason. Gratuitous services are typically of the highest tradition in a profession whose objective is total service to the patient and the training of students. Obviously, this policy is quite welcome to many department heads, because then there is no economic limitation to the diagnostic and treatment procedures which may be prescribed. Equally important, there is no compulsion to produce clinical

income. One may well argue whether or not the offering of such free services to patients will, in fact, instill an appreciation for the treatment rendered. Nevertheless, this philosophy persists as a part of the Danish culture in many areas.

Since the typical Dane is outwardly relaxed and easy-going, there is not a great deal of competitive "push" to further the profession. However, the almost 50% income tax imposed on everyone, regardless of income, is undoubtedly responsible for a good part of the relaxed attitude towards work that seems to prevail over the country. Don't let me mislead you; the Dane works hard and conscientiously while on the job. It's just that work days are somewhat shorter and vacations more frequent. I have heard that when the heavy income tax was first imposed a few years ago, a great number of people emigrated to Australia, England, and other countries, including the U.S.

All of the public elementary and secondary schools, and many private schools, participate in a preventive medicine and preventive dentistry program. In the former, the school doctor, who incidentally sets your child's broken leg if it happens at school, performs all necessary inoculations for the children. Preventive dentistry, as well as restorative dentistry which is required by the school, is performed by or under the supervision of the school dentist—usually one of the young women previously mentioned. The preventive program consists mainly of a topical sodium fluoride treatment by mouthwash twice a year.

The caries experience in Denmark is not high and one sees many adults with a full complement of natural teeth. This was remarkable to me since there is no communal fluoridation and the diet appears to be cariogenic. Perhaps the high intake of seafood and dairy products contributes to the reduced caries experience.

My own work in Denmark consists of studies of families with persons having cleft lip and cleft palate. I have been working with the man whose own work on the heredity of this problem is universally quoted and in this I consider myself most fortunate. His name is Dr. Poul

Fogh-Andersen. He is a very energetic plastic surgeon who does the surgery on all cleft lip and palate cases in Denmark (about 100-150 cases a year). The surgical methods, facilities, and anesthesia are comparable to those in our own major hospitals. Cleft lips are repaired at 2 months of age and cleft palates at about 2 years. Once a week the cleft palate team meets at the State Speech Institute, examines and interviews parents of new patients, reviews the treatment plan of old ones, and determines the secondary procedures necessary for cosmetic and functional restoration. Dr. Fogh-Andersen's results in general are excellent and the Institute team of consultant specialists, consisting of Dr. Fogh-Andersen, an orthodontist, an ENT physician, two speech therapists and a social worker, has good rapport with the patients.

My specific research project was to examine families with multiple persons affected with cleft lip and palate for any evidence of incomplete gene action in the non-cleft, close relatives. Such craniofacial and dental abnormalities indicating the presence of genes for clefting could then be used to make better recurrence risk figures and thereby improve our genetic counseling of prospective parents. (Dr. Ed Shields, a 1970 graduate of IUSD, is now living in Copenhagen, where he continues this research project as part of his Ph.D. training in Medical Genetics.)

Speaking of parents, illegitimacy is not uncommon in Denmark. At first glance one might guess that this reflects a general breakdown of moral standards. I don't believe this is the case; instead, I think we are simply dealing with a different sociologic view of marriage. Another of the "myths of Denmark" is that of the "loose" Danish women, which is nonsense. The principal difference between Danish and American women seems to be, as best I could surmise on *very* limited data, that the Danish woman is much more open about her sex life—but quite selective. Abortion is legalized but still difficult to obtain. The Genetics Institute where our

cleft lip and palate studies are based is frequently consulted for genetic reasons to perform an abortion since a complete record of all inherited diseases is recorded there for the entire population. Since there is no social stigma to illegitimacy there are no orphan homes as we know them. Mothers frequently keep their babies (I notice a similar trend in the U.S.) and the state helps raise them. The birth rate in Denmark is somewhat low (about 17 live births/1000 population) and when one considers the cost of living this is quite understandable.

Denmark is primarily an agricultural country, and its industrial goods often must be imported. This fact, plus the heavy income tax, has helped inflate the cost of living up to and above that in the U.S. Gasoline is 74 cents a gallon, hamburger about \$1.35 a pound, fresh peaches or apples 20-25 cents each. Automobiles are almost prohibitive in cost, with a 100% tax on their purchase. A new T-Bird would sell there for 12-14,000 dollars! Some items are very reasonable, however. Dairy products, eggs and fish are inexpensive and tops in quality, much better than any I've had in the U.S. Bicycle riding is ubiquitous and almost without cost after the initial purchase.

Nightclubbing costs are about the same as in the U.S. but certain kinds of entertainment are cheaper. Movies cost from 50 cents to \$1.50, depending on where you sit, and almost all of them are English or American films with Danish subtitles. (One night my family and I watched a Japanese movie on television and it had Swedish subtitles. That was really wild!) About half of the Danes speak *some* English but not enough to carry on a conversation. In the University community English is spoken fluently. My family and I all took Danish lessons and Dr. Shields is now learning too. We all hope to be able to use our knowledge of the language again in further visits to this beautiful country and its charming and interesting people.

A Long Span Antero-Posterior Bridge: A Case Report

*Richard D. Stackert and Paul I. Lew, Assistant Professor of Fixed and Removable Partial Prosthodontics**

This is a report of the construction of a nine-unit antero-posterior porcelain-fused-to-gold bridge. The patient was a 36-year-old female Caucasian who presented to the dental clinic wearing a seven-unit anterior bridge extending from the right maxillary first bicuspid to the left maxillary cuspid. She had worn this bridge for fifteen years, but complained that it was now becoming loose and she was afraid it might break. Upon clinical examination, the bridge could be moved labially and lingually with finger pressure. Also the margins of the full gold crown on the bicuspid were defective.

At the first appointment the diagnostic impressions were taken and a clinical examination was done. The tissue on the lingual of the proposed abutments was slightly loose and flabby as a result of wearing the defective bridge. The periodontal pockets around the proposed abutment teeth were 3 millimeters deep. The clinical crowns were all very short, and with such a long span of missing teeth it was decided to use two abutments on each side. For esthetic purposes it was decided to use all porcelain fused to gold.

At the second appointment the old bridge was removed by cutting up the lingual of both retainers and springing them with a slight torque of a small screwdriver. The upper right first and second bicuspid were then prepared for porcelain-fused-to-gold crowns. The old bridge was relined with Trim-kit and recemented with Moyco temporary cement. A single celluloid crown form lined with Trim-kit was cemented on the second bicuspid.

The next appointment was used for preparation of the upper left cuspid and

right second bicuspid and the labial surface of the left cuspid. Since the crowns were so short it was imperative to extend the preparations as far into the sulcus as possible for maximum retention. It was also important to parallel the preparations as much as possible to insure retention of the bridge. (Figs. 1 and 2) In order to get a good color reproduction in the porcelain, the labial or buccal surface of the preparations was reduced until the first bicuspid. The path of insertion used ledge was the width of a 557 bur. An

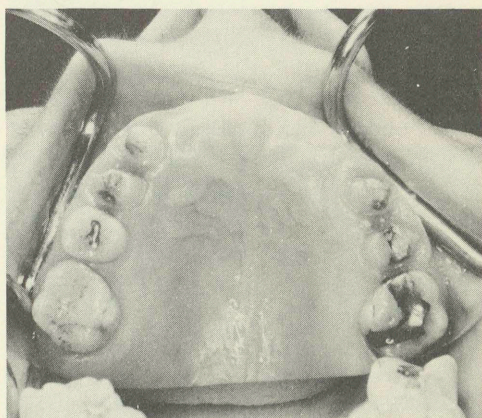


Fig. 1. Abutment teeth prepared.

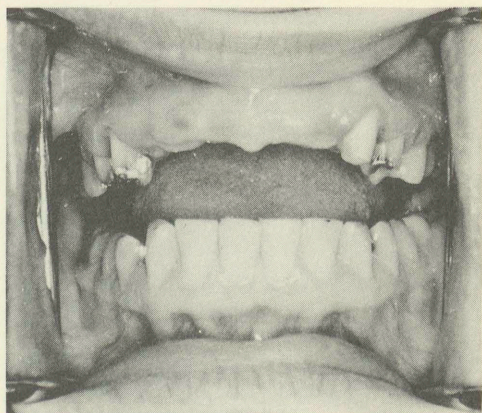


Fig. 2. Abutment teeth showing occlusal clearance and arch relationship.

* This paper originated with Dr. Stackert's prizewinning entry in the Senior Essay Competition for 1972. Dr. Lew was his adviser on the project.

was parallel to the distal surface of the alginate impression of the prepared teeth was taken so that a temporary bridge could be constructed in the laboratory and placed at the next appointment. For the present the old bridge was relined again and another celluloid crown used for temporaries.

The alginate impression of the prepared teeth was poured in stone and on this model the temporary bridge was made. (Fig. 3) This model was coated with alcote and an impression of the diagnostic model was taken in alginate. This impression was filled with Trim-kit in the area of the abutments and pontics and allowed to sit until the Trim-kit reached a dough stage. The impression was then placed over the stone model of the abutments and held with firm finger pressure for three minutes and then placed in warm water to accelerate the set. After approximately ten minutes the impression was removed and the temporary bridge with flash remained on the model. It was then removed and the flash trimmed away using a white acrylic bur. (Fig. 4) The bridge was then pumiced and final-lustered.

At the next appointment the area of the abutments was anesthetized and prepared for an impression by cleaning away the temporary cement and pumicing the teeth to make sure they were completely free of debris. The area was isolated with cotton rolls and dried with air before packing around each abutment with Gingi-pac string. The string was left in place for five minutes before the impression was taken. Light bodied rubber base was injected around the abutments after removing the retraction string and a custom tray was filled with regular body rubber base and seated in the mouth. The tray was held in place without movement for 10 minutes before removal. The acrylic temporary bridge was then cemented with Moyco.

The impression was poured with Vel-mix for dies and allowed to set for 45 minutes. The dies were then removed and the working model poured also in Vel-mix. The case was mounted on a Whip-

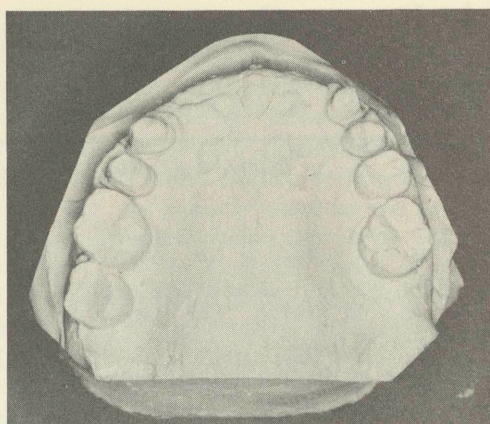


Fig. 3. Stone model of abutment teeth.

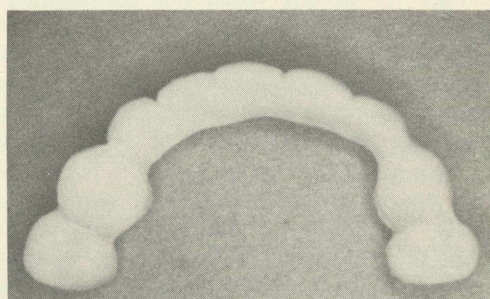


Fig. 4. Acrylic temporary bridge.

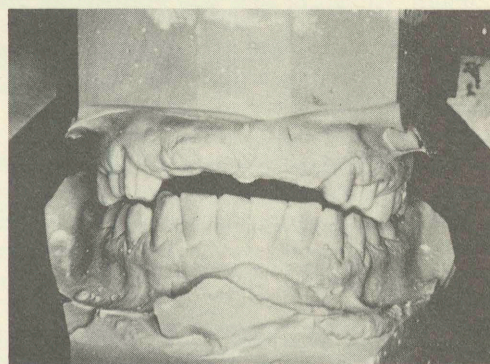


Fig. 5. Case mounted on articulator.

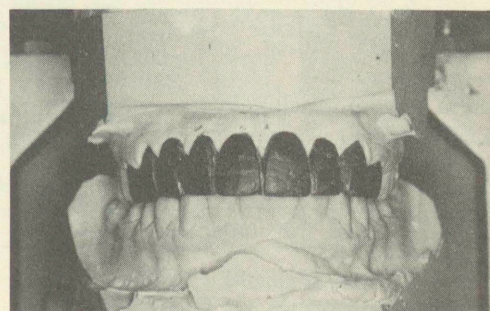


Fig. 6. Wax patterns carved to full contour.

ferred from the patient. (Fig. 5) The abutments and pontics were waxed to full contour (Fig. 6) and then the patterns were cut back to allow for a veneer of porcelain. (Fig. 7) The bridge was invested, sprueing each crown separately, and the pontics were cast as one piece. (Fig. 8) The castings were finished to the carborundum stone stage and placed on the working model where a soldering index was taken. The soldered bridge was then placed on the working model, the occlusion adjusted, and the crowns and pontics prepared to receive porcelain. (Fig. 9)

Since this was a long span bridge replacing the upper anterior teeth, a shade was taken matching the lower anterior teeth, which were shade 62. The cuspids were made slightly darker, shade 65, and the bicuspid shade 69. This served to break the monotony of the bridge. These shades were later modified at delivery by selective staining. Before the final contouring and glazing the bridge was tried in the mouth. (Fig. 10)

The bridge was tried in, checked for fit, and the occlusion adjusted at the next appointment. (Fig. 11) The final contouring was done at chairside by rounding the incisal edges and opening the embrasures. The lateral incisors were shortened and the incisal edges of the cuspids made slightly more pointed. The cusp tips of the bicuspid were also made more prominent. (Fig. 12) When the contour was satisfactory the bridge was stained to create characterization. The embrasures were stained with gray to give the teeth individuality. The incisal edges were made more translucent with a stain of blue and gray. The cervicals and proximals of the cuspids and bicuspid were stained orange and brown to make them appear darker. The stain was then fired and the bridge completed. (Fig. 13)

The bridge was cemented and the patient was seen at a 24-hour post-op. The occlusion was checked and all burnish marks that occurred in centric relations were removed. The burnish marks due to lateral excursions were not touched. The patient was instructed in the use of

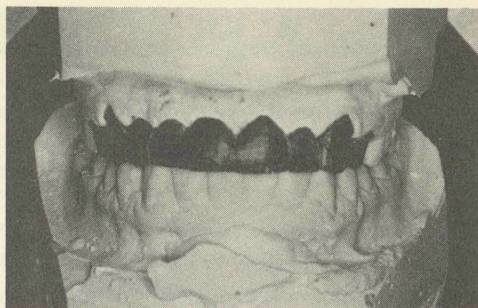


Fig. 7. Wax patterns with windows cut.

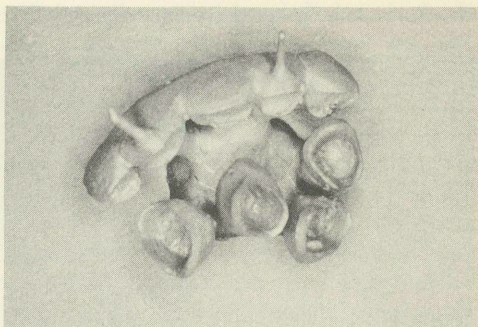


Fig. 8. Castings showing method of sprueing.

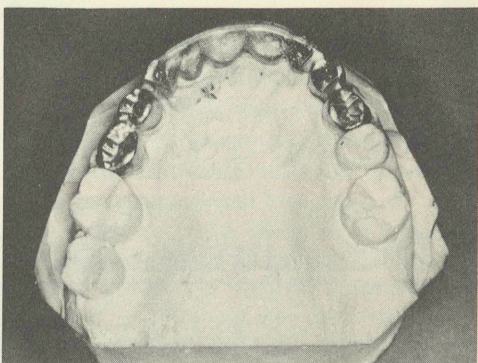


Fig. 9. Bridge soldered, occlusion adjusted.

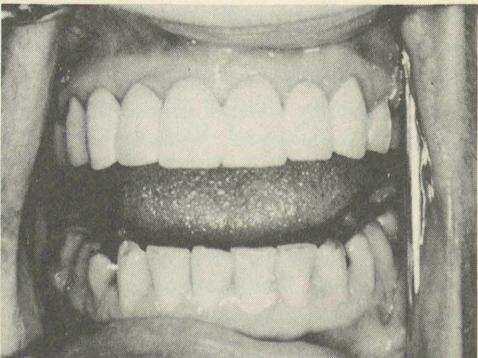


Fig. 10. Bridge tried in, before final contouring and staining.

Zons to thread floss underneath the bridge mix articulator and the articulator adjusted using the jaw relation records trans- and between the abutments. She was also instructed to massage the gingiva on the labial of the cuspid by gently placing her finger on the gingiva above the labial margin and moving it down onto the crown to keep from getting recession in this prominent area of the arch.

The patient was seen one week post-op, when the occlusion and hygiene were checked and the patient was dismissed.

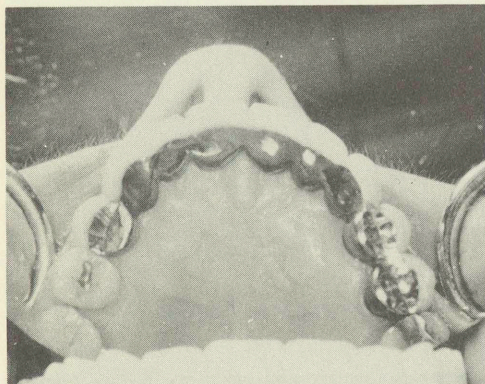


Fig. 11. Occlusion adjusted in mouth.

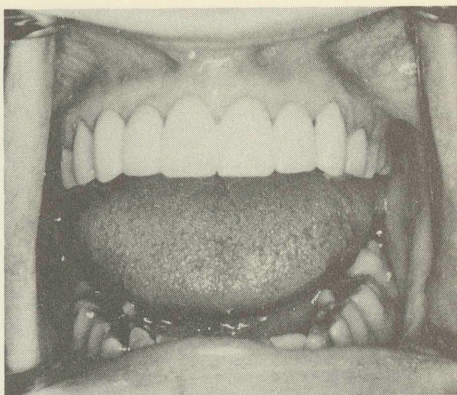


Fig. 12. Bridge after final contouring.

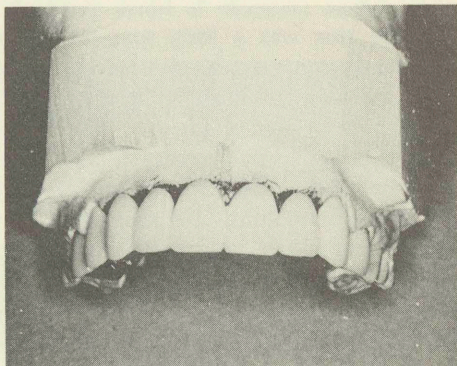


Fig. 13. Bridge stained and completed.

Three Alumni Receive Honors

Three well known alumni of the Indiana University School of Dentistry have recently received additional honors from their professional colleagues.

Dr. John L. Campbell, class of 1939, has been named President-elect of the West Virginia Dental Association; Dr. Carl Stoner, Class of 1944, has been installed as President of the Connecticut State Dental Association; and Dr. Daniel M. Laskin, Class of 1947, is the 1972 recipient of the Distinguished Service Award of the American Society of Oral Surgeons.

Dr. Campbell, who is Past President of the IU School of Dentistry Alumni Association, is Professor and Chairman

of Oral Surgery at the West Virginia University School of Dentistry. He has been with the School since 1960.

Dr. Stoner, a native of Connecticut, is Past President of the Connecticut Society of Periodontists and has lectured in South America and Israel. He is a consultant to the U.S. Coast Guard Academy and Norwich Hospital.

Dr. Laskin is editor of the Journal of Oral Surgery, the Newsletter, and News Briefs. Since 1968 he has represented the American Society of Oral Surgeons on the Review Commission on Advanced Education in Oral Surgery and is now its Chairman.

Dental Management of a Young Adult With Hereditary Ectodermal Dysplasia: A Case Report

*Thomas A. Layman, Instructor of Operative Dentistry, and Donald M. Cunningham, Co-Chairman of Fixed and Removable Partial Prosthodontics, and Chairman and Associate Professor of Oral Rehabilitation**

In dentistry we often find ourselves confronted with the unusual case. This report deals with such a situation: an attempt to treat the dental manifestations of hereditary ectodermal dysplasia.

A brief review of the literature shows that true hereditary ectodermal dysplasia is a specific disease syndrome. It is characterized by a malformation of certain structures derived embryologically from the ectoderm, usually with complete or partial absence of the sweat glands. Variations on this theme do exist so that many forms of the disease are common.

Typically, these patients have smooth, dry skin with or without sweat glands. Those without cannot perspire and consequently cannot endure warm temperatures. Sebaceous glands and hair follicles are often absent, and the hair of the scalp and eyebrows tends to be fine and scanty. Many times these patients exhibit very protuberant lips.

Dentally, the ectodermal dysplasia patient may exhibit anodontia or oligodontia. If teeth are present, they are usually malformed, often being either truncated or cone-shaped.

There is usually little extraoral treatment that can be done; however, intraorally, both cosmetic and functional dentistry can generally be performed.

This case report concerns a seventeen-year-old female Caucasian. She was a senior in high school at the time the treatment was started, and seemed to be a very well adjusted person with a bubbling personality, truly an extrovert. Conversations with the patient and her family and an examination of records showed

that while no other members of her family exhibited any ectodermal disorders, there was a history of missing teeth on the maternal side.

Clinically, the patient was of somewhat small stature for her age, although within the normal limits of variation. While she did not suffer from hyperthermia, some dryness of the palms of her hands was noticed. Her hair was not scanty, but its texture was fine. She did exhibit the characteristic protuberant lips because of a redundancy of vermilion tissue, and because of this, the lips often looked dry and cracked.

Intraorally, this patient presented conditions of particular dental interest. While she was only partially edentulous, a marked microdontia was evident. Most of the teeth she had were deciduous with no permanent successors, although in a few places permanent teeth had erupted. This patient had received prior treatment for cosmetic reasons primarily, and while this paper is concerned mainly with current treatment and her present oral condition, we will digress a little later to discuss her previous treatment and how she presented at that time.

On examination the existing teeth were as follows: maxillary arch—right and left deciduous cuspids and first molars and permanent lateral incisors and second premolars; mandibular arch—right and left deciduous lateral incisors, cuspids, first molars, right second molar, and right permanent first molar. The anterior spaces had been corrected with fixed bridges. (Figures 1, 2, and 3)

During the course of treatment there was some concern by different individuals as to whether this case truly represented hereditary ectodermal dysplasia or rather

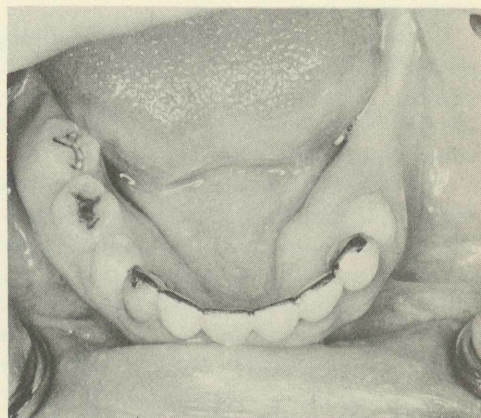
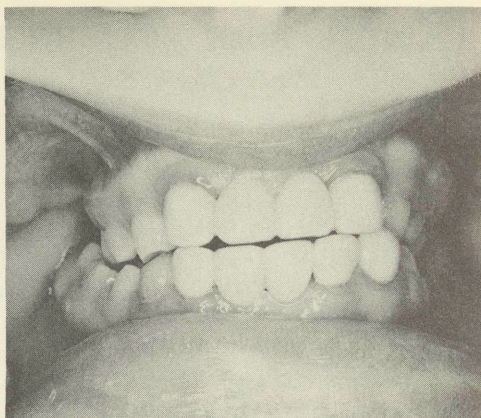
* This article was adapted from Dr. Layman's Senior Essay in the School of Dentistry in 1971. Dr. Cunningham was his faculty advisor.

a case of severe oligodontia coupled with microdontia. Certainly this was not a textbook case of the disease, as many of the characteristics were missing and some were not as pronounced as they might be. Yet some ectodermal dysfunctions were present, however slight, and because of these and the oral manifestations, it is felt that this case does represent hereditary ectodermal dysplasia, at least in a border-line form.

Upon first seeking treatment in 1964, the patient had all of her mandibular deciduous teeth, except the left second molar and the right permanent first molar. In the maxillary arch, she had permanent lateral incisors and deciduous cuspids, first molars, and second molars bilaterally. All of the anterior teeth were cone-shaped. The maxillary second premolars were in the process of formation and eruption, but the maxillary permanent central incisors were congenitally missing. In the mandibular arch, the central incisors were extremely mobile and lacked proper bony support. For this reason, they were extracted.

Because of the growing importance of esthetics to a girl of eleven, fixed bridges were constructed. These bridges used as abutments the permanent lateral incisors in the maxillary arch and the deciduous laterals and cuspids in the mandibular arch. The bridges were constructed of acrylic resin veneered to gold and had served the patient well until the first time she was seen here. Wear and discoloration of the resin veneers and gingival recession were evident. (Figures 1 and 3).

After a thorough clinical and radiographic examination and analysis of articulated diagnostic casts in our clinic, a treatment plan was formulated. It was felt that both upper and lower bridges needed to be replaced and partial dentures made. However, it was apparent that both oral surgery and periodontal surgery were needed. The patient had bilateral mandibular tori which, unless reduced, would prevent the use of a conventional partial denture with a lingual bar of adequate size and strength. (Figure 3) After consultation, it was decided that it would be in the patient's best interest to remove sev-



Figures 1-3

Patient's preoperative condition. Note the previously constructed resin-veneered bridges and their wear, the midline discrepancy, and the bilateral mandibular tori.

eral teeth. Right and left maxillary deciduous cuspids and first molars and the mandibular right deciduous first molar were extracted because of their root resorption and poor prognosis for future retention. The lower left deciduous molar was ankylosed and could be used as an abutment for the partial denture, improving esthetics greatly.

Because of the small size of the teeth, any lengthening of the clinical crowns would materially increase retention for the crown restorations. Also, soft tissue contours were such that some surgery would be needed to enable the patient to maintain them in good health. Thus after periodontic consultation, it was decided that a gingivectomy and gingivoplasty were indicated.

The patient was hospitalized and the surgery was performed under general anesthesia. All of the surgery was done at one time, relieving the patient of periodic painful episodes and also hastening the anticipated time for the start of the prosthetic phase of management. Surgical results were excellent and postoperative recovery was uneventful.

Approximately four weeks after surgery, the prosthetic phase of the patient's treatment was started. Existing upper and lower bridges were removed, preparations refined and finish lines extended below the free margin of the gingival. Good-fitting acrylic temporaries were then made and cemented. This allowed for the complete healing of the gingival tissues. At subsequent appointments, the lower left deciduous first molar was prepared for a veneered full crown, and the lower right deciduous second molar and the lower right permanent first molar were prepared for full gold crowns. (Figure 4) In the maxillary arch, the two permanent second premolars were prepared for thimble crowns. (Figure 5) Acrylic temporaries were made for all prepared teeth and the gingiva was allowed to heal.

Full arch impressions of all preparations were made in custom acrylic trays, with silicone rubber as the impression material. Working casts were made, dies trimmed, and stabilized baseplates made. The case was mounted on the Whip-Mix articu-

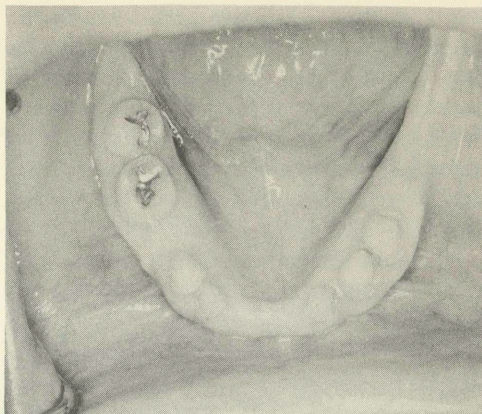


Figure 4

Completed preparations of the mandibular teeth. Note post-surgical results obtained by removal of the tori.



Figure 5

Completed preparations of the maxillary teeth. Observe the small size of the teeth here and in Figure 4.

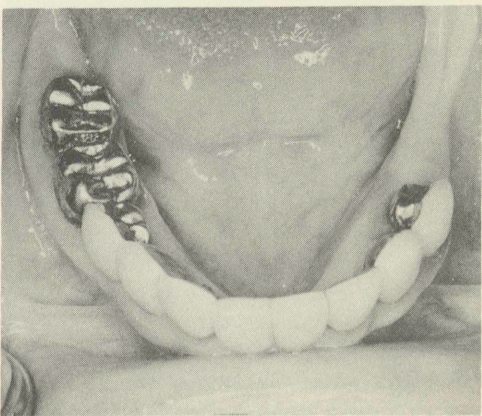


Figure 6

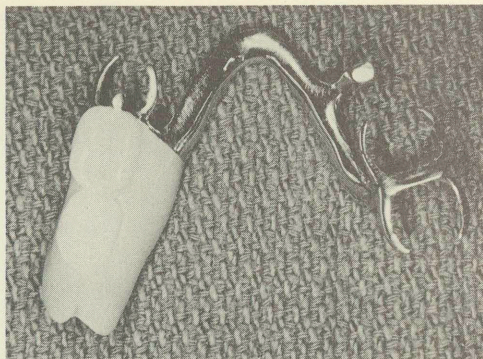
Nine-unit porcelain-fused-to-gold fixed bridge soon after cementation in the mouth. The full gold crown farthest posteriorly is on Tooth No. 30 and is a single unit.

lator using a face-bow transfer for the maxillary cast, and the mandibular cast was mounted to the maxillary cast in centric relation utilizing the stabilized baseplates. Eccentric interocclusal wax records were taken using copperwax wafers, and the condylar elements of the articulator were set accordingly.

Porcelain-fused-to-gold bridges were constructed in the laboratory. In the mandibular arch, a nine-unit bridge was made using porcelain veneered crowns and pontics from the left deciduous first molar around to the right deciduous second molar, where a full gold crown was used. A full gold crown was constructed for the right permanent molar. (Figure 6) A Class II mandibular partial denture was made crossing the occlusion between the right deciduous second molar and the permanent first molar. Back-to-back cast circumferential clasps were used here with ten-thousandths of an inch mesiobuccal undercut on the deciduous second molar and ten-thousandths of an inch distobuccal undercut on the permanent first molar. A cast-wrought combination circumferential clasp was used on the left deciduous first molar with ten-thousandths of an inch mesiobuccal undercut. An auxiliary occlusal rest was used for an indirect retainer and was placed on the pontic replacing the right deciduous first molar. The crown contour of the left deciduous cuspid was so made that if the left deciduous first molar were to be lost, this tooth could be physiologically clasped as an abutment for a new partial denture. (Figures 7 and 8)

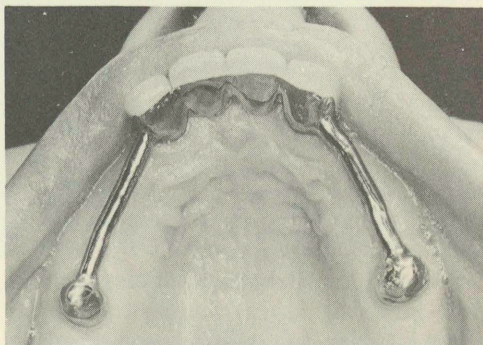
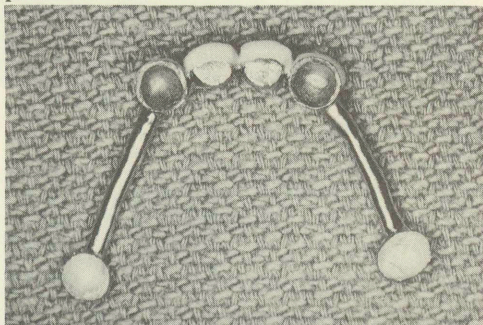
In the maxillary arch, a four unit bridge was made from the left permanent lateral incisor to the right permanent lateral incisor. Baker* bars were used to cross arch splint the premolars which were restored with thimble crowns. (Figures 9 and 10) It was felt that this cross-arch bracing gained through the use of the Baker bars would effectively increase the retention of the remaining teeth. A superimposed partial denture was made utilizing an internal clip attachment on each side. (Figures 11, 12 and 13)

* Englehard Industries, Inc., Baker Dental Division, Newark, N.J.



Figures 7-8

Figure 7 shows the Class II partial denture that was made. Figure 8 shows it in place in the patient's mouth.

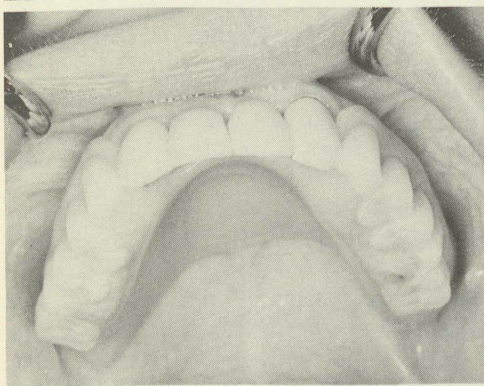
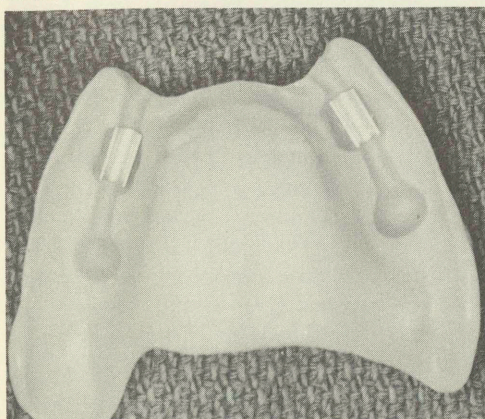
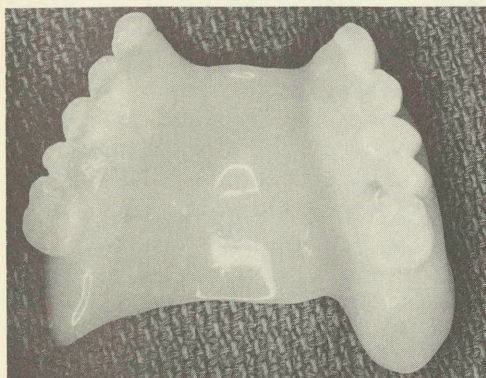


Figures 9-10

Figure 9 is a view of the underside of the four-unit splint with the Baker Bars attached. Figure 10 shows the splint cemented in the mouth.

It was decided to supply teeth posteriorly only as far as the first molars, both in the maxilla and the mandible. This was done for two reasons: (1) the patient had been getting along well with even fewer teeth than that, and (2) the size of her mouth limited further extension. (Figures 14 and 15)

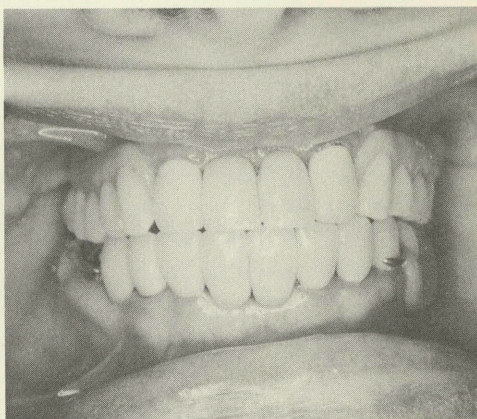
Much can be said one way or the other



Figures 11-13

Figure 11 shows the superimposed partial denture. Figure 12 shows the underside of the partial denture with the internal snap-on attachments. Figure 13 shows the partial denture in place.

about the treatment of this patient. There may be many who wonder if this form of treatment is not a bit heroic, but if even five or ten years can be gained in the life of the patient's teeth, is it not worth it? Is it not worth the effort to save this young patient for at least a while longer from the tragic fate of wearing complete dentures the rest of her life?



Figures 14-15

An intra-oral view of the occlusion developed is shown in Figure 14. Figure 15 shows perhaps the most important aspect to the patient—the completed case in its natural surroundings—a smile.

Nostalgia From Bea's

*Mrs. Bea Gordon, Manager of the College Inn**

If the people who think they have it rough today, with inflation and costs still rising, had gone through the Depression they might think they are lucky with conditions now. When I first started at the College Inn in 1931, I made a big salary of \$9.00 a week and this was for seven full days. As you can see by the menu from 1932, food was plentiful and cheap. Of course, by 1932 the Depression was in full swing, business was bad, and my salary was cut to \$4.00 a week.

My husband was a technician and didn't make much money, but every pay-day (his) we'd go to the Grocery (we didn't have supermarkets then) and buy \$25.00 or \$30.00 worth of groceries and that would last us all month. Of course we bought meat and milk every week when we could afford it. Speaking of groceries reminds me of the lady who recently reported that someone had broken into her car and stolen \$50.00 worth of groceries. The policeman asked her where she had put them and she said "in my glove compartment," and I can believe that.

We had table service at the Inn then, which meant a lot of leg work and I also worked until 10:00 p.m. a lot. When I worked the late shift I was off all afternoon.

The customers, "bless them," complained even then because there wasn't enough meat in the nickel sandwiches or griped when they had to pay a nickel more for tomato and lettuce. It was very, very rare if you got a tip, but once in a while I did get a nickel or dime. In those days that amount would buy a big candy bar or cake. Back then, we didn't have all tables and chairs. Across the east wall, we had a counter and stools and where the steam table is now, we had another counter and stools and a complete soda fountain.

* Mrs. Gordon, who came to the College Inn in 1931, received a Special Recognition Award from the Dental Alumni in September, 1969.

The windows in front were all small panes and a *big pain* to wash them. We had a wall and French doors that went across the front of the Inn (about where the second small window is on the east side). At the front were two large cases where we kept candy-gum-cigarettes and the cash register. You paid by guest check as you went out. At the front were also beautiful chairs and drapes and the floor was a burgundy colored Linoleum. It was later removed and terrazzo put in.

There was a stairway at the front on the west side of the Inn and an outside stairway at the rear. The one at the rear was later removed and another was put in at the side with a side entrance. Later the builders of the Dental School had to come back and put a sidewalk in as the students had beaten a path from their side door to ours.

All the tables were heavy white glass and all the chairs were wooden. I sure wish we had them now as that type is very rare. We also had old fashioned lights that hung from chains and were white glass with removable crystal bottoms. I still have two of them. In fact, I have several things that I really treasure. As my customers say, "those aren't the only antiques around the place," but like I always say, Katie and I may not be the fastest workers around, but we do show up regularly—.

Over the years we have had some weird breakfast orders. One Medic used to have a chocolate sundae for breakfast. Another had a burned hot dog (no bun) and a lemon Coke to start the day. One student came in every day and had 15 cups of black coffee—no more, no less. Also a student nurse would have a peanut butter and jelly sandwich every day for breakfast, and she would open it up and fill it full of mustard. I always asked her to sit way up front so I wouldn't have to see her eat it.

The menus were always typed the evening before and if you ordered a lunch

TODAY'S



SPECIALS

Choice of Tomato Juice or Cream of Tomato Soup .10

- A LA CARTE -

| | |
|--|------------------|
| Vegetable Plate with Rolls and Drink | .35 |
| Meat Loaf with Spaghetti Sauce - Rolls | .20 |
| Tenderloin on Bun .10 | Green Beans .10 |
| Harvard Beets .10 | New Potatoes .10 |
| Carrot Strips Buttered .10 | Baked Beans .05 |

- COLD PLATES -

| | |
|--|-----|
| Roast Beef - Cottage Cheese - Vegetables Salad - | |
| Potato Chips - Rolls and Drink | .35 |
| Ham Salad Sandwich - Potato Salad - Drink | .25 |
| Smoked Tongue and Braunschweiger - Deviled Egg - | |
| Cucumber and Beets - Rolls | .30 |
| Fruit Plate with Raisin Bread | .30 |

- SANDWICHES -

| | |
|--|-----|
| 1. Braunschweiger on Rye | .10 |
| 2. Pimiento Cheese and Relish on Whole Wheat | .10 |
| 3. Egg Salad Sandwich | .10 |
| 4. Cream Cheese on Cinnamon Bread | .15 |
| 5. Bacon and Tomato with Lettuce | .25 |
| 6. Minced Beef and Relish with Tomato | .15 |

- SALADS -

| | |
|--|------------------|
| Tomato stuffed with Spanish Slaw | .20 |
| Grapefruit and Orange with French Dressing | .20 |
| Fruit Cup and Melon .15 | Garden Salad .15 |
| Tomatoes and Cucumber .15 | Potato Salad .10 |

- DESSERTS -

| | |
|--------------------------|-----------------------------|
| Home made Cake .10 | Fresh Red Raspberry Pie .10 |
| Red Raspberry Sundae .15 | Apple Pie .10 |
| Iced Cantaloupe .10 | Blueberry Pie .10 |
| Watermelon Hearts .10 | Iced Coffee .10 |

A menu from the good old days.

you had to take it as it was written, no substitutions. Of course, we didn't have the business we have today. The Dental School wasn't built till 1933, so our customers were Medics and office employees. When the Dental School was opened we had student help at noon. We had fun

and I still keep in touch with several of my "part time help." Things were just getting better when World War 2 started, but that's another story. I can just hear a few of you wise guys saying, "World War 2? Who is she kidding? She probably knew Woodrow Wilson personally."

Indiana University School of Dentistry Alumni Association

John L. Campbell, President

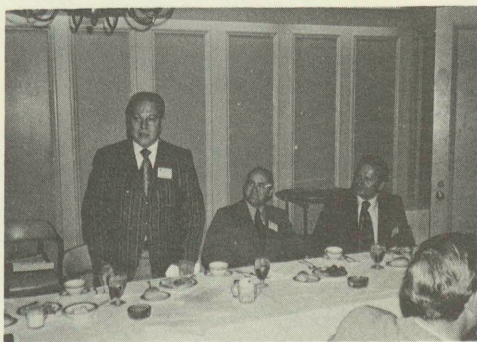
In reflection, I wonder where the time has gone in regard to my Presidency. It has been a time-consuming but a challenging period for those of us involved in the activities of the Alumni Association. There are some achievements and highlights of the past year that we should be particularly proud of, and these should be brought to your attention. Dental Hygiene was given equal status in our Alumni Association in two different instances. First, Mrs. Carmine Griffis McDonald, Class of 1963, became an official member of the Board of Directors. (Mrs. Carla Totten, Class of 1955, had been serving as an ex-officio member of the Board.) Secondly, the first Alumni Day for Dental Hygiene graduates from Indiana University was held April 8, 1972 with great success. We extend to them all good wishes for the future years.

The Board of Directors meeting held at the Hilton Hotel during the Chicago Mid-Winter meeting last February was a successful innovation. The Annual Indiana University Alumni Luncheon was held at the Sheraton Blackstone. R. Bradford Laycock, an Indiana University School of Business graduate, gave a hilarious presentation entitled "The Anatomy of Speech."

During the month of May those of us present were duly impressed with the dedicatory ceremonies of the addition to

the Indiana University School of Dentistry. It was a compliment to us to have such a representative group of dignitaries participating. This splendid new addition was built in response to present and future needs in Education, Research, and Service and we all are justly proud of the end results.

It is with a sense of pride and satisfaction that I look back upon the Fall program that was arranged for your benefit. Hopefully it will inspire those who were in attendance to return with at least one additional classmate to next year's meeting. Whether you are able to attend or not, your contribution to the Indiana University School of Dentistry Fund will be appreciated and will specifically show your interest in a most worthy cause.



President John Campbell and several members of the Board of Directors.

Chancellor's Comments...

Maynard K. Hine, Chancellor

It was again a pleasurable and rewarding experience to take part in the annual Fall Teaching Conference for the School of Dentistry faculty. All reports indicate that the combination of insights provided and of fellowship enjoyed make this occasion worthy of the efforts of its energetic organizers.

During this particular program, there was a personal challenge, which involved serving as a member of a discussion panel along with Chancellor Wells and President Ryan. Unfortunately (for me), my turn came last. After sparks of wit and wisdom had been generated in profusion, the availability of previously expressed ideas made my task more difficult. The subject we chose was "describe the ideal university teacher," and not unexpectedly, each of us described an entirely different person.

Teaching is a communicative art, and so instruction is a creative process, affected by the setting in which it takes place. The varied contexts require varied approaches. The mutual expectations, the levels of sophistication, the kinds of subject matter, and environmental conditions are a few of the variables involved. In addition, the complex personal potentials of different human beings limit generalizing. Some teachers do better with advanced students than with beginners. Some handle empirical subject matter better than the theoretical. In the health sciences, a master teacher in the clinic may be less effective in the classroom. In practice, "excellence" seems to be defined by function. Division of labor, with assignment of responsibilities to those who are best qualified to fill specific positions, applies to faculties as well as football teams.

This does not mean, however, that special roles should be regarded as unchanging or unrelated to the larger enterprise, whether the objective is to teach students or to win games. One of the major dividends of the Teaching Conference is to broaden horizons, to gain perceptions regarding vital interrelationships among the faculty, and thus to strengthen capacities to contribute to cooperative goals.

A central objective of the professional school deserves special attention. The transformation of laymen into professionals, with all of the ethical dimensions that are inevitably involved, places a special obligation upon the faculty member. Dentistry, like other honored professions, has both a body of knowledge and a body of values. The transmission of both is essential if the lifetime careers of future practitioners are to be of maximum benefit to their patients, to their colleagues, and to themselves.

"The making of a dentist" goes far beyond the formal curriculum and includes the subtleties of initiation into a calling with its own traditions and aspirations. In a dental school, the faculty member serves, to a significant degree, as a career model.

This is a heavy responsibility, for which there are no textbooks or manuals of procedure. Perhaps for different reasons, neither strongly authoritative nor highly permissive stances will provide the leadership that is needed. To inspire by example, to demonstrate mature dedication to high standards of both performance and service, has never been easy. It remains, however, as a fundamental mission of the professional faculty. Teachers in a professional school do more than merely transmit knowledge. At least, they should!

Notes from the Dean's Desk...

Ralph E. McDonald

Two members of the Dental School faculty with combined service of 70 years retired on July 1, 1972.

Dr. Harry J. Healey's many achievements are well known to his colleagues in the School of Dentistry and to fellow dentists throughout the world. Dr. Healey is the author of a widely used textbook in endodontics and has made numerous contributions to the dental literature. Throughout his professional career, he has been active in organized dentistry. He served as President of the Indiana Dental Association, the Indianapolis District Dental Society, the Indiana University School of Dentistry Alumni Association, Theta Theta Chapter of Omicron Kappa Upsilon, and the American Association of Endodontists. He also served for six years as a member of the House of Delegates of the American Dental Association. Dr. Healey was extremely active in the successful effort to gain American Dental Association recognition of endodontics as a specialty, and for this effort he received a citation from the American Association of Endodontists.

Dr. Healey received his A.B. degree from Butler University on June 15, 1931, and his D.D.S. degree on the same day from Indiana University. He earned his M.S.D. degree at Indiana University in 1958.

On July 1, 1932, Dr. Healey began his teaching career at Indiana University after completing an internship during the previous year. During World War II, Dr. Healey served in the Dental Corps of the U. S. Navy, being promoted in rank from Lieutenant to Commander. His duty assignments included the Marine Corps Depot at Parris Island, South Carolina; Camp Pendleton, California; the Naval Base at Treasure Island; and aboard the U. S. S. BARNWELL, an attack transport on which he served sixteen months. He participated in the initial occupation of Japan in the Hiroshima area immediately following Japan's surrender.

As chairman of the Department of Endodontics, Dr. Healey was known throughout the country as an outstanding teacher, researcher, clinician, and lecturer. Dr. Healey recalls, with understandable satisfaction, the number of individuals who have completed their graduate education in endodontics under his direction. These dentists are located in all parts of the United States and are making significant contributions to the practice of endodontics, education, and research. They return frequently to express their loyalty and devotion to Dr. Healey and to tell of their appreciation for the high quality education they received from him. As a tribute to him they recently organized the Harry J. Healey Study Club which meets in Indianapolis on a biennial basis.

Dr. Grant Van Huysen has played a number of important roles in dental education and research at the School of Dentistry during the past thirty years. In the early days of his career Dr. Van, as his friends refer to him, pioneered a considerable portion of the basic research on the dental pulp and its response to cavity preparation and a variety of restorative materials. Although the techniques of instrumentation of the tooth and the character of the restorative materials have since been improved, his initial work in this field pointed out many basic concepts that investigators of today have "discovered" again and again. Dr. Van Huysen's interest in microradiography in recent years also represents some of the earliest efforts in his field and has resulted in significant contributions not only by him but by others who have followed his investigations.

A native of Scotia, New York, Dr. Van Huysen attended the University of Rochester and received his D.D.S. degree from the University of Pennsylvania. He practiced general dentistry in Scotia for five years before accepting a Rockefeller Fellowship at the University of Rochester

School of Medicine where he majored in anatomy. After completing his advanced education program, he taught gross and microscopic anatomy at the Dental Schools of the Medical College of Virginia and the University of Louisville. He joined the Indiana University School of Dentistry faculty in 1942. His first teaching appointment at Indiana was in the Oral Diagnosis Department. He was later made professor of Oral Anatomy and in recent years, he has taught gross and microscopic anatomy of the head and the dental structures. Dr. Van was always receptive to any intelligent or intriguing questions from students and generous with his time in discussing their research problems.

Dr. Van Huysen possesses a broad knowledge in the basic sciences and a particular ability to analyze a given problem with dispatch. He has been responsible for stimulating the interest of many students in a career in dental research and teaching.

Dr. Van Huysen exemplifies the quality of scientific curiosity. One of his outstanding characteristics has been his knowledge of the scientific literature. One faculty member commented that Dr. Van Huysen is the most avid reader of the scientific literature that he knows. He further related the story that Dr. Van has stated that he is looking forward to his retirement period when he would not be burdened with routine teaching duties and could devote time to reading the literature.

Those students who attended Indiana University during the years of 1942-1972 were indeed fortunate to have had Dr. Van Huysen as one of their teachers.

Although both Dr. Healey and Dr. Van Huysen have concluded their formal teaching responsibilities, we look forward to their continuing utilization of our library and laboratories and their continuing contact with the School to which they have given so much.

Ceremonies were held on the Medical Center Campus on May 16, 1972, for the purpose of dedicating the \$5.1 million addition to the School of Dentistry. The

dedication ceremony, held at 11:00 A.M. in a tent south of the new building, was attended by more than 600 alumni and friends of the School. Indiana University President John W. Ryan presided. Other participants in the ceremony included: Chancellor Maynard K. Hine; Chancellor Herman B Wells; Dr. William G. Bannon, Trustee; Governor Edgar D. Whitcomb; Mr. Robert F. Daggett, Jr., of the architectural firm; and, Mr. Clark Galin, representing the Student Affairs Council.

The following is a quotation from the dedication remarks of President Ryan:

This is indeed a proud occasion as Indiana University takes formal note of a dramatic expansion in the physical facilities of one of her most illustrious academic components, the School of Dentistry. As we mark this event, it is interesting to look back upon similar ceremonies of relatively recent date. In fact, this is the third time in the past decade that dedication exercises for new Dental School structures have been held on virtually the same site. The first of these was 10 years ago, when the first addition to the School's basic building was dedicated, and the second such was the formal acceptance of the Preventive Dentistry Research Institute, just west of the main complex. Today we dedicate yet another splendid new edifice.

All of this activity of dedicating stone and brick and steel and concrete is being matched, more than matched by the dedication of the many students and alumni and faculty members and administrators and staff people who are pointing the way to better oral health for the people of Indiana and the rest of the nation.

Chancellor Maynard K. Hine, in his remarks, stated:

The facility that we are dedicating today provides impressive evidence of physical commitment to improvement of health care services for our citizens. Parallel commitments on this campus are evident in construction on the second phase of the University Hospital and on the new School of Nursing building, to-

gether with priorities assigned to expansion of the Medical Science Building and to renovation of the original Dental Building and addition. We hope to be able to make the old building look like the new building before the new starts looking old!

A highlight of the dedication ceremony included the awarding of four scholarships. Chancellor Herman B Wells presented the dedication awards and was assisted by Dr. John L. Campbell, President of the School of Dentistry Alumni Association. An award of \$500.00, made available by Theta Theta Chapter of Omicron Kappa Upsilon, was presented to junior dental student Robert J. Achterberg. The Indiana University Foundation sponsored two \$500.00 awards, one to first-year student Larry L. Tschopp, and one to second-year student Raymond G. Kubisch. A fourth scholarship in the amount of \$300.00 was presented in the name of the School of Dentistry Alumni Association to first-year dental hygiene student Shirley Young.

At a luncheon following the dedication ceremony, Dr. Robert L. Bogan was recognized for the outstanding contribution he made to the planning for the addition and the daily supervision of building and equipping the building. A statuette likeness of Dr. Bogan was presented to Dr. Bogan by Dr. Rolando DeCastro.

The Board of Trustees of Indiana University has approved a number of full-time appointments to the Dental School faculty. We welcome these new faculty and look forward to their making many major contributions to our academic and research programs.

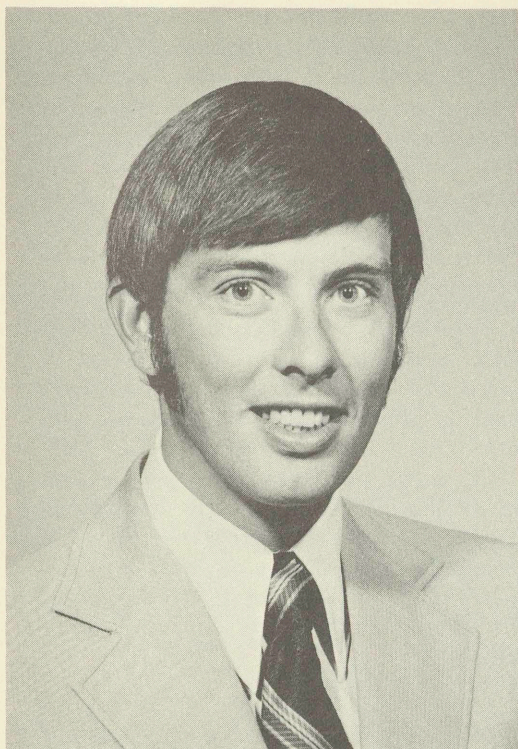
Dr. Richard S. Bloomer joined our faculty as an Assistant Professor in Periodontics on a full-time basis on July 1, 1972. Dr. Bloomer, who has recently been awarded the M.S.D. degree at our School, completed a research project entitled: "The Effect of Varying Substrates Upon In Vitro Plaque Formation," and presented a paper on his research at the IADR Meeting in Las Vegas in March, 1972. Prior to his graduate program at Indiana University School of Dentistry, Dr. Bloomer served as a Lieutenant in the U.S.

Navy Dental Corps from August, 1967 to August, 1970. A member of the American Dental Association, Dr. Bloomer is also a member of the American Academy of Periodontology, International Association for Dental Research, Delta Sigma Delta Fraternity, and the American Society of Preventive Dentistry. We welcome Dr. Bloomer to our faculty.

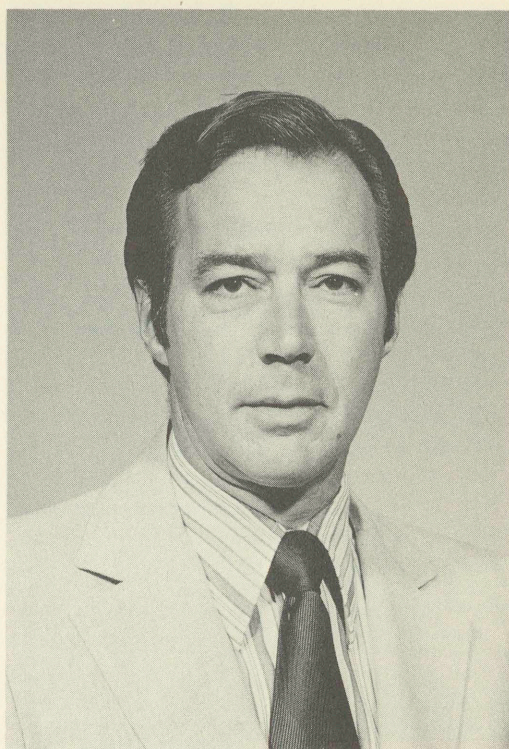
Dr. Wilbert G. Campbell, Jr., accepted a full-time appointment to our faculty as an Instructor in Operative Dentistry and Dental Sciences on July 1, 1972. Dr. Campbell ("Will" as he wishes to be called) is from Evansville, Indiana and holds, in addition to his D.D.S. degree, the A.B. degree, with a major in biology, from the University of Evansville. We look forward to the contribution Dr. Campbell will make to our teaching program.

Joining our faculty on a full-time basis on July 1, 1972, Mrs. Marjory H. Carr is no stranger. Mrs. Carr, as many of you will well recall, has spent the past 17 years in developing the Dental Assistants Training Program at the Harry E. Wood High School. Mrs. Carr and the dental assistants from Wood were often seen in our clinics. Prior to her years at the Harry E. Wood High School, Mrs. Carr was a teacher in the Indianapolis Public School System from 1950 to 1956. She comes to us highly qualified to serve as the Director of our new Dental Assisting Program, which enrolled its first class of 20 students in August, 1972. She is a member of the American Dental Assistants Association and the Indiana Dental Assistants Association, Past President of the Indianapolis Dental Assistants Society, and Past President of the Soroptomist Club of Indianapolis.

Dr. David Dickey joined our faculty on July 1, 1972 as Assistant Professor and Acting Chairman of Clinical Oral Diagnosis-Oral Medicine. Dr. Dickey's research for the M.S.D. degree involves the "Study of Pulp Response to Resin-Bonded Quartz Composite Filling Material in Human Teeth" and he presented a paper on this impressive topic at the IADR Meeting in Las Vegas in March. He is a member of the American Dental Association,



Dr. Richard S. Bloomer



Dr. David M. Dickey



Dr. Diane C. Dilley



Mrs. Marjory H. Carr

the Organization of Teachers of Oral Diagnosis, and the International Association for Dental Research. We look forward to the very meaningful contribution Dr. Dickey can make to our teaching and research program and welcome him to the faculty.

Dr. Diane C. Dilley, who joined our faculty as an Assistant Professor in Pedodontics, on September 1, 1972, has just completed the internship-residency program in pedodontics at the James Whitcomb Riley Hospital For Children. She is married to Dr. Gary J. Dilley, one of our second-year graduate students in pedodontics. We welcome Dr. Dilley to our faculty and look forward to the contribution that we know she will make to our teaching program.

We feel that we were fortunate in that several years ago Dr. Abdel Hady El-Kafrawy was honored by being awarded a scholarship from the Public Health Service, Cairo, Egypt, thereby coming to study at Indiana University. Although Dr. El-Kafrawy is a newly appointed Assistant Professor in Oral Diagnosis-Oral Medicine, his past service to our School as a Research Assistant has been invaluable. One need only read some of the acknowledgments in theses written in 1970 and thereafter to find evidence of sincere expressions of gratitude for the many hours of help that Dr. El-Kafrawy has freely given to our graduate students. He is a member of the American Academy of Oral Pathology, and the International Association For Dental Research. He has co-authored three papers which were presented before annual meetings of the International Association For Dental Research. Other publications to his credit are too numerous to list here. It is also noteworthy that Dr. El-Kafrawy's U. S. citizenship papers are in process and we look forward to welcoming him as a fellow American, as we do a fellow faculty member.

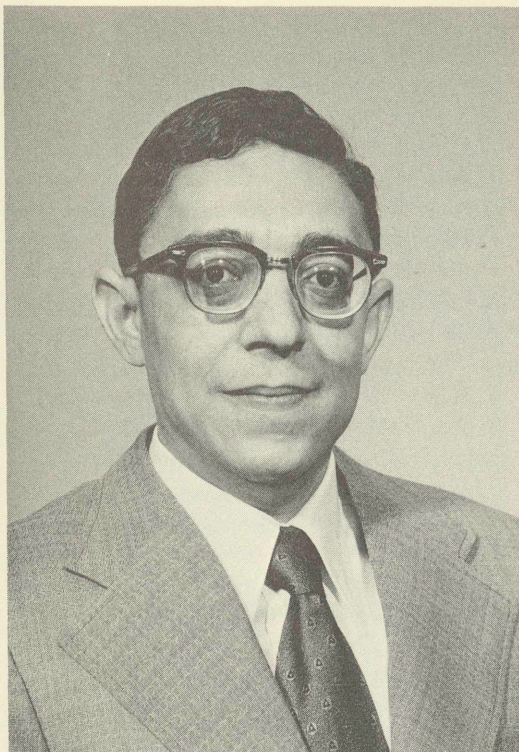
Mrs. Roberta M. Hilderbrand, who completed her B.S. degree in Public Health Dental Hygiene in May of this year, has joined our faculty in the role of Periodontal Control Therapist. Mrs. Hilderbrand will be working with Dr.

Henry M. Swenson and Dr. Timothy J. O'Leary in the Plaque Control Program. Her experience in presenting numerous table clinics and lectures before school and lay groups promises to support her well in this new position. During her degree program Mrs. Hilderbrand has proved to be an excellent student and we feel confident that her service on the faculty will be equally impressive.

Dr. David J. Kilgore accepted a full-time appointment on our faculty as an Instructor in Oral Diagnosis-Oral Medicine on July 1, 1972. Dr. Kilgore graduated from Indiana University in May, 1972, and comes to us well recommended by his former teachers. His exceptional interest in the Department of Oral Diagnosis-Oral Medicine was demonstrated during his senior year and we look forward to working with him in the years ahead.

Dr. Byron L. Olson has joined our faculty as an Assistant Professor of Preventive Dentistry. Dr. Olson, who will assist in the teaching of the biochemistry laboratory course and also work with Dr. Simon Katz in the offering of an experimental oral biology laboratory course for first year dental students, comes to us highly recommended by faculty members of the Department of Biochemistry, School of Medicine, where Dr. Olson has been doing postdoctoral research work under Dr. Roger W. Roeske. To quote Dr. David Gibson in describing Dr. Olson's research work: "... Dr. Olson is a most dedicated worker, often at his bench before 7:00 in the morning." We welcome Dr. Olson to our faculty and look forward to working with him in the academic year ahead.

Dr. Charles Poland, III, who joined our faculty on a full-time basis on July 1, 1972, is already well known to many of our faculty. Dr. Poland is working toward his M.S.D. degree at Indiana University with research interests in several areas. His training in oral medicine and pedodontics was widened by his entrance into the Pedodontics Internship-Residency Program and he has worked closely with the Department of Oral Facial Genetics. His research on hypophosphatasia gained world-



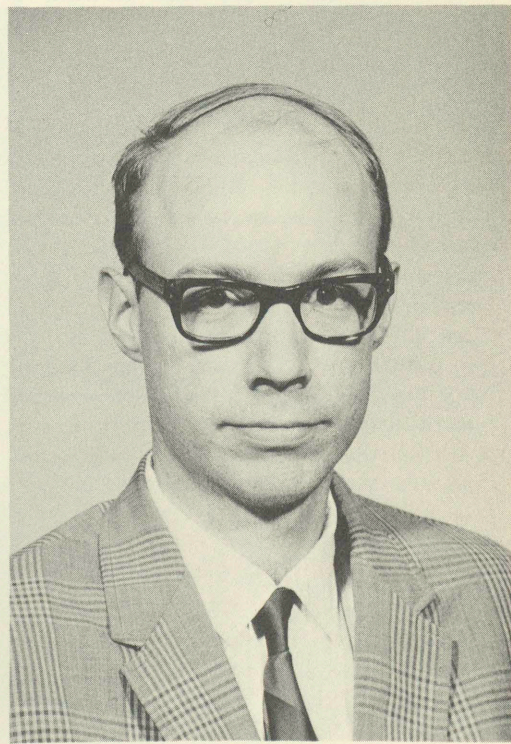
Dr. Abdel Hady El-Kafrawy



Mrs. Roberta M. Hilderbrand



Dr. David J. Kilgore



Dr. Byron L. Olson

wide attention when he was invited to lecture at the International Congress for Oral Biology in Zurich, Switzerland in September, 1971, and when his article on Hypophosphatasia: An Inherited Oral Disease, was published in the *Journal of Dental Research*. We believe it to be coincidental that Dr. Poland, exposed to the philosophies of our teaching and research faculty in Oral Diagnosis-Oral Medicine, Oral Facial Genetics, and Pedodontics, has developed into a researcher who has gained world-wide attention at such an early age, and we look forward to working with Dr. Poland in the years ahead.

As expressed by many, one of the most difficult areas in the field of fixed prosthodontics is ceramics. We are fortunate to have Dr. Arob Ridge accept a full-time appointment to our faculty in Fixed and Removable Partial Prosthodontics on July 1, 1972, as Dr. Ridge is considered by her former teachers to be an accomplished dental ceramist. She received her D.D.S. degree from Mahidol University in Bangkok, a second D.D.S. degree from Tufts University, and her M.S.D. degree from Tufts University. We look forward to working with Dr. Ridge in the years ahead and to the significant contribution she can make to our teaching program.

Dr. J. Keith Roberts, who will complete the Internship-Residency Program in Pedodontics on September 30, 1972, will join our faculty as an Assistant Professor in Pedodontics on October 1, 1972. Dr. Roberts has the respect of his former teachers and colleagues at the School of Dentistry and we look forward to the contribution he will make to our teaching and hospital programs. Dr. Roberts will devote a major portion of his time to supervising the oral hygiene programs for handicapped children at the James Whitcomb Riley Hospital For Children.

Joining our faculty at the South Bend Campus as Assistant Clinical Supervisor of the Dental Hygiene Program, is Miss Alice Smith. Miss Smith, who completed her B.S. degree in Education in 1972 at our Fort Wayne Campus, has experience

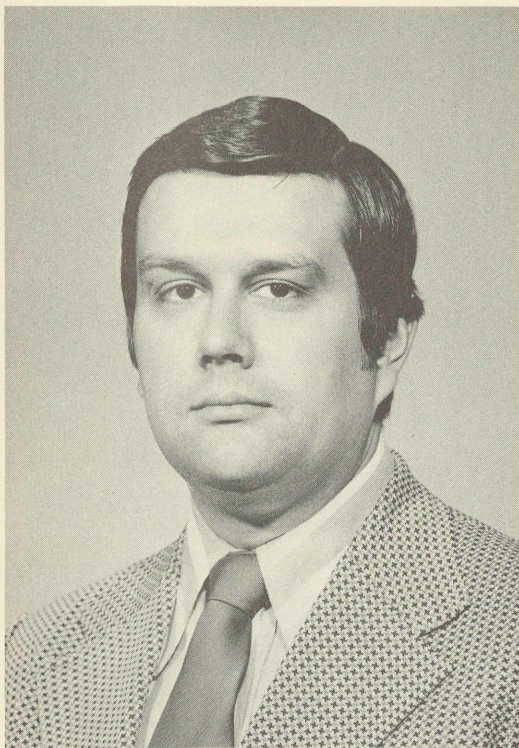
in private practice dentistry and we feel certain she will be able to make a very fine contribution to our dental hygiene education program at South Bend.

Mrs. Ruth Lois Skinner has accepted a full-time appointment as Assistant Supervisor of Dental Hygiene, and Instructor in Dental Auxiliary Education at Indiana University-Fort Wayne, effective August 15, 1972. Mrs. Skinner, who received her B.S. in Education this year, has worked in private practice while working for her degree. We are pleased to welcome her to our Fort Wayne faculty.

Dr. L. Michael Stropes joined our faculty as an Assistant Professor in Fixed and Removable Partial Prosthodontics on July 1, 1972. He comes to us highly recommended from Washington University, of St. Louis, where he spent the past year in teaching. Dr. Samuel E. Guyer, Chairman of the Restorative Division at Washington University, has high praise for Dr. Stropes' ability. We fully expect Dr. Stropes' service on our faculty to be equally praiseworthy and look forward to working with him.

Dr. James E. Vaught, who joined our faculty on July 1, 1972, has returned to his native state from East Tennessee State University where he served as Chairman of the Department of Dental Hygiene for three years. Dr. Vaught will coordinate the teaching of dental auxiliary education in Indianapolis and will be responsible for curriculum development in our state-wide dental auxiliary programs. In addition, Dr. Vaught will actively participate in the teaching of dental assisting and dental hygiene. Prior to his service at East Tennessee State University Dr. Vaught was a Dental Officer at several locations in the U.S. Navy between the years 1961-1969. We welcome Dr. Vaught to our staff and look forward to working with him as our Dental Auxiliary Program develops.

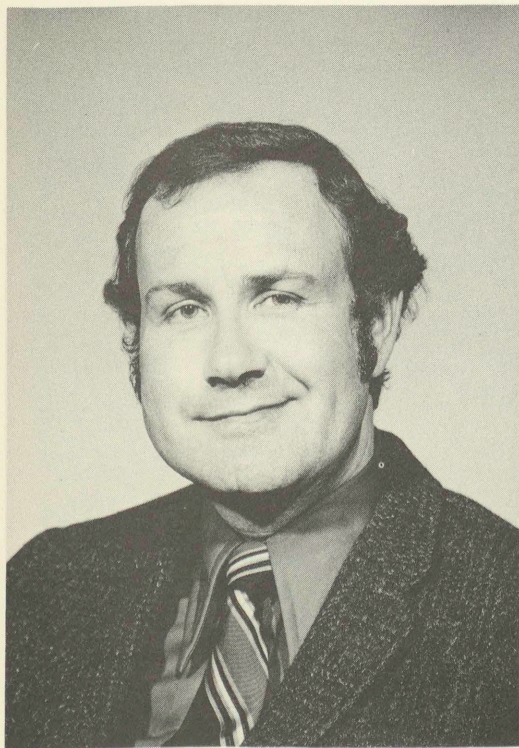
Mr. John R. Winings has accepted a full-time appointment as Supervisor of the new Dental Laboratory Technology Program and Assistant Professor in Dental Auxiliary Education at Indiana University-



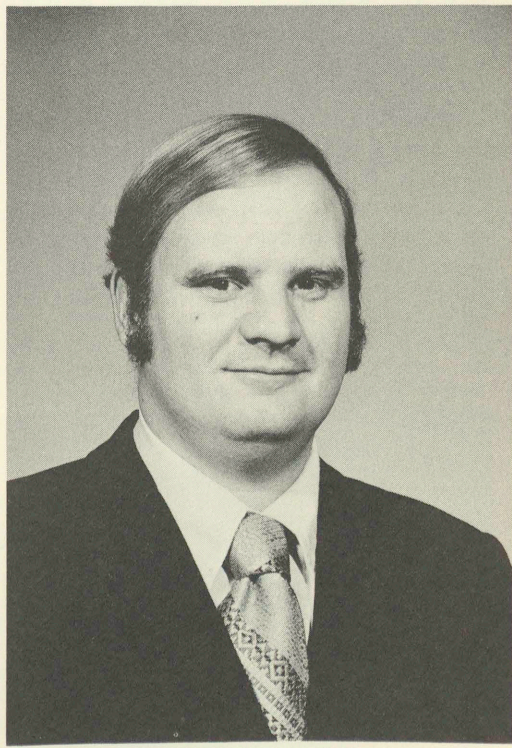
Dr. Charles Poland, III



Dr. Arob W. Ridge



Dr. J. Keith Roberts

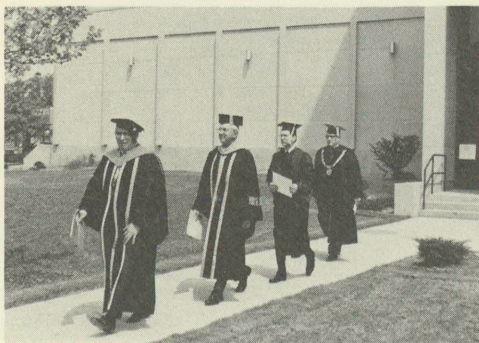


Dr. L. Michael Stropes

Fort Wayne on July 1, 1972. Mr. Winings comes to our faculty from Prairie State College, located in Chicago Heights, Illinois, where he has taught dental auxiliary education for the past two years. His academic credentials include the A.S. and B.S. degrees from Southern Illinois University and an M.A. degree in Health Sciences from Governor's State University.

Dr. George P. Wysocki, who has just completed a one-year postdoctoral program in oral pathology, has accepted a full-time appointment as Assistant Professor on July 1, 1972. Before coming to Indiana University to work under the direction of Distinguished Professor William G. Shafer, Dr. Wysocki was awarded the B.S. and D.D.S. degrees at the University of Alberta and the Ph.D. degree in general pathology at the University of North Carolina. We feel very fortunate in adding Dr. Wysocki to our faculty and know that he will make an excellent contribution to our teaching program in general pathology and oral pathology. Dr. Wysocki joins the increasing number of Dental School faculty who have doctoral degrees in basic science areas, in addition to their dental degrees.

Some major changes are occurring in the Dental School curriculum. I urge you to read the excellent summary of the activities of the Curriculum Committee during the past two years in "Starkey's Column" in this issue. Dr. Starkey is serving his third year as Chairman of the Curriculum Committee.



At dedication of new wing.



Dr. James E. Vaught



Dr. George P. Wysocki

Many Varied Programs in Continuing Education Offered in 1972-73

Indiana University School of Dentistry Department of Continuing Education completed a very successful year with an improvement in our programs and an increase in attendance over past years. A great deal of thanks and appreciation to the faculty for their help in presenting these programs.

For 1972-73 we are offering many well planned courses involving the dentist, dental hygienist, dental assistant and dental technician. With the National Health programs involving Medicaid and unions it will be necessary for the dental team to keep abreast of current concepts, methods, and techniques that will increase the efficiency of the dental office and will provide better service and care to the patients.

Anyone involved in the dental profession today will face many changes in the years to come and must prepare through the media of continuing education to cope with these changes. There is also the great possibility of continuing education requirement for relicensure. The members of the profession will be required to attend so many hours a year to retain their licenses. At present this is true in five states and many more are working on this plan.

We invite all alumni to review the list of continuing education courses for 1972-73 and we urge you to attend these fine programs.

- C.E. 108-110 December 6-10, 1972. Continuing Education in the Bahamas. Freeport, Grand Bahama Island. \$275 individual \$500 per couple
- C.E. 111 December 13, 1972. Medical Emergencies in the Dental Office. Indianapolis. \$30 dentist \$15 assistant or hygienist Dr. Ronald S. Ping and Staff
- C.E. 112 (Dates to be selected by participants) Medical Emergencies-Participation Course. Indianapolis. \$100 Dr. Ronald S. Ping & Dr. Charles E. Hutton
- C.E. 113 January 12, 13, 14, 1973. Modern Day Implantology. Indianapolis. \$375 Dr. Leonard I. Linkow
- C.E. 114 January 17, 1973. Where and How to Use Alumina and Metal Reinforced Porcelains in Crown & Bridge Work. Indianapolis. \$50 Dr. John W. McLean & Dr. Ralph W. Phillips
- C.E. 115 January 24, 1973. Diagnosis and Oral Medicine for the Dental Hygienist. Evansville. \$25 Mrs. Suzanne Boundy & Dr. David Dickey
- C.E. 116 January 27, 1973. Clinical Program for Dental Laboratory Technicians. Indianapolis. \$15 Dr. James E. House & Dr. David R. Jordan
- C.E. 117 February 1, 1973. A's-Z's for Complete Denture. Gary. \$35 Dr. Malcolm E. Boone
- C.E. 118 February 3, 1973. Dental Laboratory Procedures for the Dental Assistant. Indianapolis. \$20 Dr. James E. House, Dr. David R. Jordan and Mr. Robert T. Richmond
- C.E. 119 February 20, 1973. Four Handed Dentistry. Indianapolis. \$90 Dr. Paul E. Starkey & Dr. F. E. McCormick
- C.E. 120 February 23, 24, 25, 1973. Dental Radiology: How to Teach the Subject Matter. Indianapolis. \$150 Dr. Myron J. Kasle and Dr. Leonard G. Koerber
- C.E. 121 February 28, 1973. Diagnosis and Oral Medicine for the Dental Hygienist. Gary. \$25 Mrs. Suzanne Boundy and Dr. David Dickey
- C.E. 122 March 7, 1973. Solving Problems Related to Occlusion. Evansville. \$40 Dr. David R. Jordan
- C.E. 123 March 14, 1973. The Design and Operation of a Dental Practice. Indianapolis. \$40 dentist & 1 assistant \$20 each additional personnel Dr. Arthur I. Klein
- C.E. 124 March 21-24, 1973. The Complete Denture Service in General Practice. Indianapolis. \$150 Dr. Malcolm E. Boone
- C.E. 125 March 28, 1973. Dental Materials for Auxiliaries. South Bend. \$20 Dr. Ralph W. Phillips & Staff.
- C.E. 126 April 4, 1973. Current Interpretation of Modern Day Restorative Materials. Indianapolis. \$40 Dr. Ralph W. Phillips, Dr. Melvin R. Lund & Dr. Wilmer B. Eames.
- C.E. 127 April 7, 1973. Advanced Dental Laboratory Procedures for Dental Assistants. Indianapolis. \$20 Dr. James E. House, Dr. David R. Jordan & Mr. Robert T. Richmond

(Continued on page 69)

CONTINUING EDUCATION IN THE BAHAMAS

offered by

INDIANA UNIVERSITY SCHOOL OF DENTISTRY ALUMNI ASSOCIATION

December 6-10, 1972

FREEPORT, GRAND BAHAMA ISLAND

Educational Sessions:

Mrs. Suzanne Boundy—

- (1) What's New With Dental Auxiliaries
- (2) Patient Education: A Positive Approach

Dr. Donald M. Cunningham—

- (1) Removable Partial Denture Failures—Reasons and Solutions
- (2) Preparatory Procedures for the Partially Edentulous Patient and their Relation to Partial Denture Design

Dr. Roland W. Dykema—

- (1) Differential Diagnosis of Minor Orthodontic Cases and Growth Prediction
- (2) Biomechanics of Tooth Movement and Treatment Planning (Dr. Garner and Dr. Sheldon Rosenstein)
- (3) Case Presentations by Dr. Garner & Dr. Rosenstein

Program cost includes:

Registration fee

Charter jet transportation economy seating, roundtrip from Indianapolis

Roundtrip transfers, airport/hotel/airport, in the Bahamas.

Handling of luggage, including tips

International departure tax and Bahamas departure tax

5 days and 4 nights accommodations at the luxurious HOLIDAY INN on the beach at Freeport, share twin basis, including room tax

Two meals a day (full breakfast and table d'hôte dinner, including banquet on final night and Steak and Seafood Barbecue.)

Welcome rum swizzle party

One hour cocktail party—open bar—hot and cold hors d'oeuvres

Special green fees at the new Shannon Country Club

Free transportation to golf courses

Fully coordinated, supervised and escorted by Indiana National Bank Group Tour Department

Cost for complete Program: (Includes registration fee of \$50.00 per person)

* \$275.00 Individual \$500.00 per couple \$30.00 Single supplement

* Based on sharing twin room

Deposit of \$50 per person is necessary to guarantee a reservation. Final payment is due no later than Oct. 13, 1972.

Deposits are refunded in full whenever cancellation is made six or more weeks prior to departure. After that time, non-recoverable payments, made to carriers, tour operators or for cables will be deducted.

CONTINUING EDUCATION IN THE BAHAMAS APPLICATION

December 6-10, 1972

Detach and return with check

Deposit: \$50.00 per person

NAME

ADDRESS

.....
City

.....
State

.....
Zip Code

Please make check payable to INDIANA UNIVERSITY DENTAL CONTINUING EDUCATION, and mail to Dr. Robert H. Derry, Director of Continuing Education, School of Dentistry, 1121 West Michigan Street, Indianapolis, Indiana 46202.

REGISTRATION FORM

Name

Office Address

City State Zip Code

Degree in dentistry School Year

Please enroll me in Course No.
(title)

To be presented
(date(s))

at
(city) (state) (zip code)

Enclosed is my check for \$..... made payable to Indiana University School of Dentistry.
Canadians please state "Payable in U.S. funds."

Fees will be refunded only in exceptional cases. The sponsoring department reserves the right
to cancel any course or change its location if circumstances so demand.

Send application and fee to: Dr. Robert H. Derry, Director of Continuing Education, Indiana
University School of Dentistry, 1121 West Michigan Street, Indianapolis, Indiana 46202.

REGISTRATION FORM

Name

Office Address

City State Zip Code

Degree in dentistry School Year

Please enroll me in Course No.
(title)

To be presented
(date(s))

at
(city) (state) (zip code)

Enclosed is my check for \$..... made payable to Indiana University School of Dentistry.
Canadians please state "Payable in U.S. funds."

Fees will be refunded only in exceptional cases. The sponsoring department reserves the right
to cancel any course or change its location if circumstances so demand.

Send application and fee to: Dr. Robert H. Derry, Director of Continuing Education, Indiana
University School of Dentistry, 1121 West Michigan Street, Indianapolis, Indiana 46202.

Honors Program Held in May

The Indiana University School of Dentistry Honors Program was conducted on May 21, 1972, with Dean Ralph E. McDonald presiding. In order of their presentation, the following awards, certificates and honors were given.

The Anatomy Award to the freshman who made an outstanding record in anatomy (\$50 and a certificate, check by OKU) was presented to Mr. Ronald H. Copenhaver; the Dr. Ert J. Rogers Memorial Award in Crown and Bridge was presented to Dr. David L. Pitts; the John W. Geller Award in Research was presented to Dr. John I. Gromer; the American Association of Endodontists Award of a certificate to the senior showing interest and proficiency in the field of endodontics went to Dr. Leonard H. Garceau; the Indiana Society of Oral Surgeons—Glenn J. Pell Memorial Award (top 10% in oral surgery and upper 1/3 of class, must have internship) was presented to Dr. Charles R. Walker, Jr.; the Great Lakes Society of Oral Surgery—award to outstanding senior went to Dr. Jeffrey L. Laskin.

The American Academy of Oral Pathology Award (for presentation this year for the first time) to the dental student who has shown the most interest, accomplishment, and promise in the field of oral pathology, plus a subscription to the Journal of Oral Surgery, Oral Medicine and Oral Pathology was given to Dr. James E. Williams. The C. V. Mosby Awards for scholastic excellence in: Dental Materials to Dr. Thomas N. King; Oral Pathology to Dr. June Brose; Operative Dentistry to Dr. Edwin J. Martin; Orthodontics to Dr. Perry A. Wainman; and Dental Hygiene to Miss Teresa Garrett. The Rossya Kauffman Memorial Award in Dental Hygiene for proficiency in patient education was presented to Mrs. Suzanne Miller; the A. Rebekah Fisk Award (one year membership in state and national organization) by Indiana State Dental Hygienists Association to the dental hygienist showing the greatest profi-

ciency in clinical practice during her senior year went to Miss Kathy E. Sterzik; and an Award for proficiency in radiology from the American Academy of Dental Radiology was presented to Dr. Charles W. Lander. A certificate from the American Academy of Oral Medicine for Achievement, Proficiency, and Promise in the field of Oral Medicine was won by Dr. June Brose.

"The "What's Your Interpretation" Contest in Radiology, sponsored by OKU was presented to (1st) Dr. Perry A. Wainman, (2nd) Dr. B. D. Kimberly Brown and (3rd) Dr. David L. Pitts. The American Academy of Periodontology Award of one year's subscription to the Journal of Periodontology for proficiency in periodontology went to Dr. Donald M. Dean; an Award for achievement in periodontics, a plaque from the Lactona Corporation plus a check for \$100, to Dr. John A. Overman; an Award and plaque of the Indiana State Society of Pedodontics (\$50) for the senior who plans to continue in a graduate pedodontic program to Dr. June Brose. A Certificate of Merit from the American Society of Dentistry for Children and membership in the Society for one year, plus a one year subscription to the Journal of Dentistry for Children, and a cash award of \$25 from the Indiana Unit were awarded to Dr. James Gunnar Richardson.

The Academy of Dentistry for the Handicapped Essay Contest \$100 Award and a year's membership in the Academy was presented to Dr. Stephen R. Branam; the Ralph E. McDonald Pedodontic Scholarship Award (\$500), was presented this year for the first time to Dr. Paul O. Walker and Dr. Frederick R. Swain. An award of a certificate to the senior showing interest in development of the orofacial complex was presented from the American Association of Orthodontists to Dr. James E. Williams.

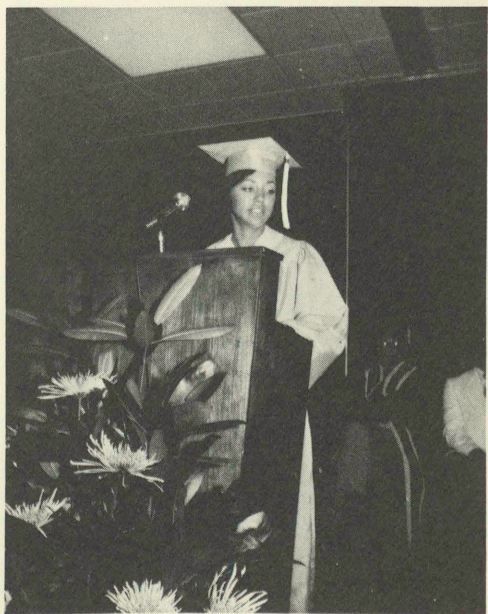
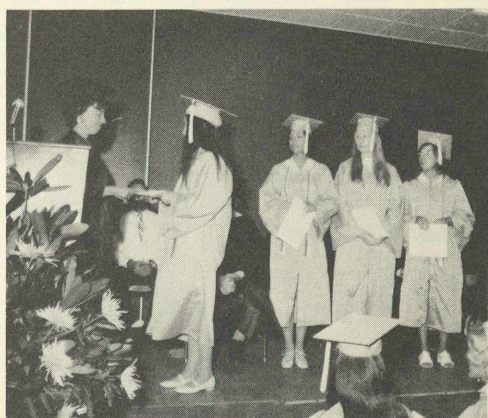
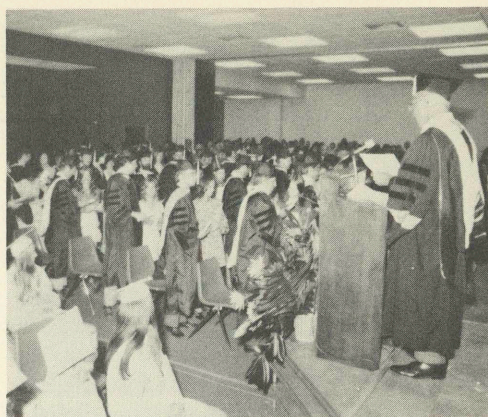
Senior Essay Awards were as follows: First, The Block Award (\$100) to Dr.

James Gunnar Richardson, "Current Attitudes of Dentists and Physicians Concerning Teething"; Second (\$50) to Dr. David R. Lukosik, "Intentional Reimplantation: A Case Report"; Third (\$25) to Dr. Richard D. Stackert, "The Case History of a Long Antero-Posterior Bridge"; and Fourth (\$25) to Dr. Thomas R. Hickman, "A Study of Senioritis." Table Clinic Awards were as follows: Winner of the trip to the A.D.A. Meeting was Michael R. Johns, "Dilantin Gingival Hyperplasia"; first place (\$100) to Dr. June Brose, "Cardio-Pulmonary Resuscitation"; and second place (\$25 and the dentoform) to Dr. Gregory A. Crawford, "Maxillofacial Prosthetics for a Patient with Hemi-Section of Maxilla Due to Carcinoma."

The School of Dentistry Alumni Association plaque (The Maynard K. Hine Award) plus membership in the Alumni Association was presented to Dr. David L. Pitts; the International College of Dentists Award for outstanding achievement during his years of dental study to Dr. Richard M. Demko; the American College of Dentists (FACD) plaque, plus \$50 cash award to the student showing the most improvement since his freshman year to Dr. Richard M. Demko; an Award of plaque and \$50 bond by the Indiana Dental Association in recognition of services to organized dentistry through student A.D.A. to Dr. June Brose; a Plaque from the National Chapter of Alpha Omega to the student who earned an outstanding record for four years of dental study at Indiana University School of Dentistry to Dr. David L. Pitts.

Sigma Phi Alpha, Dental Hygiene Honorary Society, certificates and pins to Miss Teresa Garrett, Mrs. Suzanne Miller, Miss Victoria Myers and Miss Connie Swackhamer; the Omicron Kappa Upsilon certificate to the sophomore student who made an outstanding record in the freshman year, plus a \$50 award to Mr. K. Michael Hayes. The Omicron Kappa Upsilon certificates were presented to Dr. James L. Ballard, Dr. June A. Brose, Dr. Gregory A. Crawford, Dr. Gary L. Drury,

(Continued on page 69)



Scenes at Honors Day and Commencement.

Dental Hygiene-Indianapolis

Suzanne S. Boundy, Director

INDIANAPOLIS

Thirty-five students entered the Indianapolis program in August, 1972. They had received their pre-dental hygiene education at Ball State University, Hanover College, Indiana University, Indiana University - Purdue University at Indianapolis, Indiana State University, Marion College, Miami University and Purdue University. All are from Indiana. Ten students are pursuing baccalaureate degrees on a full-time basis, including one graduate of the South Bend Program, and three are enrolled on a part-time basis. Much credit for such a fine class is due to the many hours of work of the eight dedicated members of the Sub-Committee on Dental Hygiene Admissions.

One of our graduates is enrolled in the graduate program offered at Indianapolis, working toward a Master of Science in Allied Health Sciences Education.

Thirty-four students graduated with Associate in Science degrees in May 1972. Six students received their Bachelor of Science in Public Health Dental Hygiene degrees from the Division of Allied Health Sciences, School of Medicine. Honors received included: C. V. Mosby Award, Teresa Garrett; Rossya Kaufman Award, Suzanne Miller; A Rebekah Fisk Award, Kathy Sterzik Huys; and Sigma Phi Alpha Membership, Teresa Garrett, Suzanne Miller, Victoria Myers, and Connie Swackhamer.

Dental Auxiliary Education

Ralph G. Schimmele, Director

And then there were NINE.

Expansion of the dental assisting program to include the Indianapolis Campus and the beginning of a new program, dental laboratory technology, at the Fort Wayne Campus brings the total number of dental auxiliary education programs offered by the School of Dentistry to nine. It is interesting that this academic year begins with a total of 300 students enrolled in dental auxiliary education at the four campuses. Of this total, 197 students are enrolled in the dental hygiene curriculum; 96 are enrolled in dental assisting education; and seven are enrolled in dental laboratory technology. Three of the seven students desirous of becoming lab technicians are young ladies.

In addition to new programs, we welcome new faces to dental auxiliary education. The Indianapolis Campus welcomes

Dr. James Vaught and Mrs. Marjory Carr. Dr. Vaught comes to Indiana University by way of East Tennessee State University, where he has been director of dental hygiene education. Mrs. Carr has vast experience in dental assisting education, is well known to faculty and staff, and comes to Indiana University via the Indianapolis school system. Fort Wayne welcomes Mrs. Lois Skinner and Mr. John Winings. Mrs. Skinner received her B.S. in Education at the Fort Wayne Campus. Mr. Winings, Supervisor of the Dental Laboratory Technology Program at Fort Wayne, is a C.D.T. and has a Master's Degree in Health Science. The South Bend Campus welcomes Miss Alice Smith, who received her B.S. in Education at Fort Wayne.

Additional television courses are being offered this year. New T.V. presentations

this year are "Dental Materials," which is offered by Dr. Charles Goodacre, and "Periodontics," by Dr. Henry Swenson. Another major development is the change to color monitors, which has taken place at all campuses. Dr. Paul Starkey is continuing his presentation of "Clinical Practice." Dr. Drexell Boyd was forced to relinquish his T.V. assignment in Dental Anatomy because of increased responsibilities in the basic sciences area. We appreciate the fine service he has rendered to the students and faculty and extend our sincere thanks.

The dental auxiliary programs at Indiana State University, Evansville, continue to gain momentum with the able direction given by Dr. Gordon Kelley, Mrs. Florence McCloskey, and Miss Lois Van Meter.

Last spring the administration of Indiana State University at Evansville recognized the local dental community by inviting those who had made a significant financial contribution to the dental programs at Indiana State University Evansville to a dinner. Guest speaker for the event was Dean Ralph E. McDonald. Dr. Clyde Parker served as master of ceremonies. A plaque, appropriately inscribed with the names of the special donors, was presented to Dean McDonald by Dr. Parker. Dean McDonald then presented the plaque to President David L. Rice of Indiana State University, Evansville to be displayed in the reception area of the dental hygiene clinic.

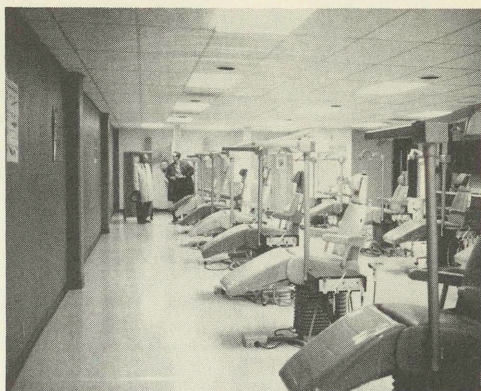
The next few months hold promise of being very busy. Site visitation by the Council on Dental Education to two locations, examining five programs, is on the immediate horizon.

We wish to thank all of you for your continued support, and we will be in touch again—next Spring.

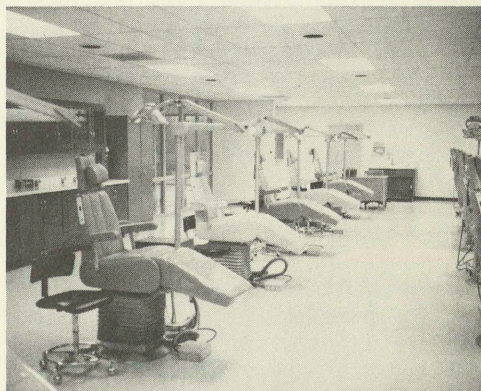
DENTAL AUXILIARY EDUCATION INDIANA STATE UNIVERSITY EVANSVILLE

Gordon E. Kelley, Director

The auxiliary program at Evansville ended its first year on a happy note. All 15 dental assistants in the first class



Looking south in the Evansville Clinic. Dean McDonald and Dr. Kelley in background.



North end of Evansville Clinic.



President David T. Rice, of Indiana State University, Evansville, and Dean Ralph E. McDonald with plaque listing names of "Special Givers."

passed their certification exams. It is always nice to know that a new program has been correctly organized and is teaching the right information. The faculty is looking forward to our new class of 16 assistant students. Now that our growing pains have subsided we can concentrate on working into more expanded duties and the improvement of our present program.

The new dental hygiene class to be enrolled this fall totals 14. We were very pleased with the girls who applied and are all looking forward to beginning a new year with complete physical facilities. No longer will we have to use rooms unsuited for dental hygiene instruction. Our senior class of 12 are all returning and are eager to begin their final undergraduate year.

Our faculty is pleased to welcome Dr. Vaught to the program and hopes to work closely with him in re-evaluating our present curriculum.

DENTAL AUXILIARY EDUCATION INDIANA UNIVERSITY— FORT WAYNE

Philip E. O'Shaughnessy, Director

By the time that this issue of the Alumni Bulletin is in your hands, we will be in our new quarters in Building A. Our campus is growing rapidly with two buildings completed and in use, and two more (Library and Student Union) almost completed. We are rapidly approaching an enrollment of 7500 students.

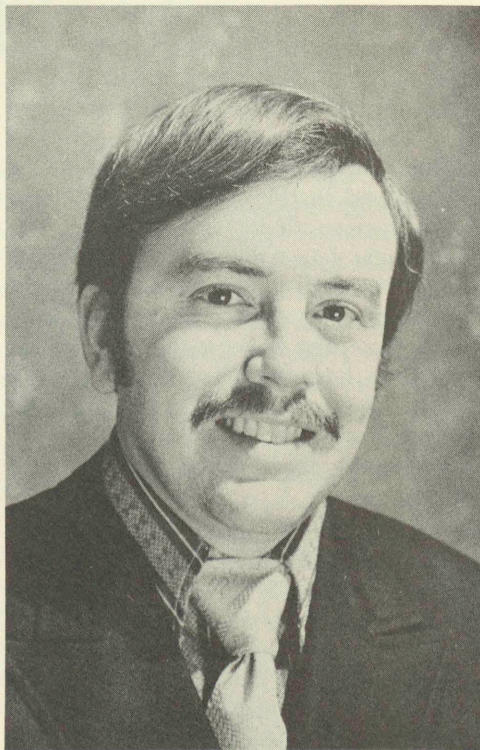
In February almost all of our students participated in Children's Dental Health Week in conjunction with the schools in the Fort Wayne area. Twenty-four of our dental assisting students took the certification examination in May. As of this writing, we have yet to learn the results of the examination but we are confident that they will do as well as our students have in the past.

Eight of our dental assisting students presented a clinic on Personal Oral Hygiene at the State Meeting in May.

Seventy-eight girls were interviewed for the 1972-73 dental assisting class. From this group the top thirty students were admitted into the class. Every year it seems that more girls with better qualifications apply and the job of the Admissions Committee becomes tougher.

Fifty-eight girls and one young man were interviewed for the 1974 dental hygiene class. From this group the top twenty-two students were selected for the class. The average grade point index of pre-dental hygiene work was 3.19 and the average number of hours of pre-dental hygiene work was 35. We feel certain that these girls have the potential to be an outstanding class.

Of course, our big news item at the Fort Wayne Campus is the new Dental Laboratory Technology Program, which will be the first accredited (provisionally) course in the State. The new supervisor of the program is Mr. John Winings. John taught in a laboratory technology program at Prairie State College outside of Chicago. We are most pleased to welcome him to



John R. Winings



SHIRLEY YERGENS



SANDRA WITMER
PRES. JR. A.D.H.A.



CHERYL TEEPLE - TREAS.



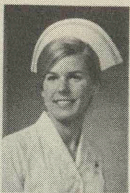
ELAINE MILLER - VICE PRES.



CYNTHIA COLLINS - PRES.



PAMELA BEER - SEC.



SHARON CLARK



SALLY GRAMLING

Indiana University

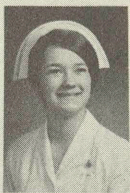
DENTAL HYGIENE

SCHOOL OF 1972 DENTISTRY

FORT WAYNE CAMPUS



VICKIE ALTEVOIGT



GLORIA CHAPMAN



JO ELLEN REX



PATRICIA DAVIS



LINDA ROWN



JANICE ISCH



LINDA BURTZNER



CATHEEN BLEDSOE



JANET PATTON



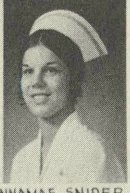
LINDA WEST



DIANE WHISLER



PAMELA NOFZINGER



ANNAMAE SNIDER



PAMELA MARTIN

WATERS STUDIO
FORT WAYNE



JACKIE SCHNEIDER



MARSHA HOUGH - SEC.



CYNTHIA LEAZIER - PRES. MAUREEN MCQUEE - VICE PRES.



EMILY STALL - TREAS.



BONNIE STOLLER

Indiana University

DENTAL ASSISTING

SCHOOL OF 1972 DENTISTRY

FORT WAYNE CAMPUS



JOYCE OUMP



ANN RAISOR



SANDRA VINUP



KATHY PFEIFER



JILL BOSTICK



ANN FEICHTER



MELISSA AMSTUTZ



LUANNE ZAWODNI



SANDRA KITT



SALLY REAM



KAREN ROGERS



NAN MAHLOCK



BEVERLY RISON



VICKI MOHR



JUDITH YEACKEL



CONNIE WEATHERHOLT



SINDY WALL



CHRISTINE LINK

WATERS STUDIO
FORT WAYNE

our faculty. He is married and the father of twin boys.

Helping Mr. Winings will be Dr. Robert Ketcham and Dr. Jack Hamilton. Dr. Ketcham is opening an office for the general practice of dentistry on the South Side of Fort Wayne after having served on the Crown and Bridge faculty at the School of Dentistry. Dr. Hamilton is opening his practice limited to orthodontics after having completed his training at Indiana University this spring. Both are Fort Wayne natives and we welcome them back to our community and our faculty.

We are planning to admit twelve students to the two-year program. This will be a new adventure for all of us, but we are confident that we can overcome any obstacle that may arise.

DENTAL AUXILIARY EDUCATION SOUTH BEND

Alfred Fromm, Director

By the time this article is in publication, South Bend will have started its fourth year of the Dental Auxiliary Education Programs.

This will be the first year that we will be running at 100% capacity. We have accepted 19 students in second year Dental Hygiene, 22 students in first year Dental Hygiene, and 30 students in Dental Assisting.

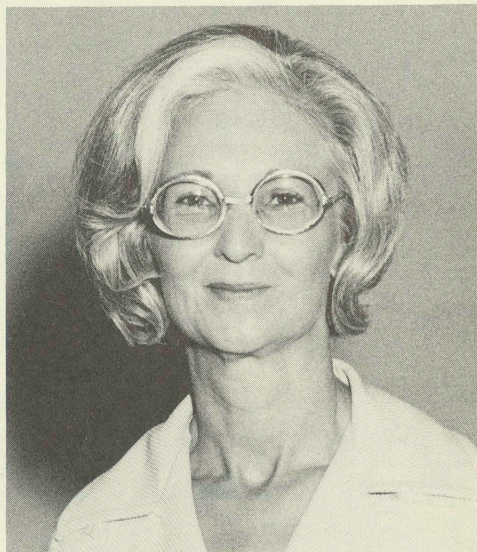
On June 7th and 8th, South Bend hosted the directors, supervisors and other personnel from the regional campuses at a faculty meeting. Seventeen persons attended. Dean McDonald gave some most informative remarks relative to the great need for dental auxiliary personnel.

We are anxiously awaiting the three television lectures per week, which will originate at the Dental School in Indianapolis and will be in color. We are most appreciative of the efforts which must go into such preparation.

Under the direction of Mrs. Keleman, Supervisor of Dental Assisting and Mrs. Ruth Ann Heath, Assistant Supervisor of Dental Assisting, our Dental Assisting students took their Certification Examina-

tion in May and as usually happens when switching to computers, we have not yet had the results. However, we are very pleased to report that all fourteen senior Dental Hygiene students passed their National Board Examinations, under the guidance of Mrs. Jacqueline Heine, Supervisor of Dental Hygiene. Mrs. Heine is now the proud possessor of a Master's Degree in Special Education, while her husband received his Master's in Psychology.

It goes without saying that we are looking forward to a fruitful year!



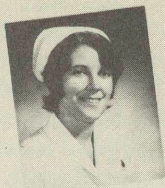
Mrs. Lois Skinner



Miss Alice Smith



Barb Sasse
Sec. Treas.



Diane Burns
Vice-President



Pam Borkowski
President



Jennifer Shira
Pres. of ADHA



Mari Ann Dunn



Sheryl Hamar

Indiana University Dental Hygienists

School of 1972 Dentistry South Bend Campus



Pat Beaver



Sue Rankin



Kathy McHew



Peggy Sauer



Jane Vollmer



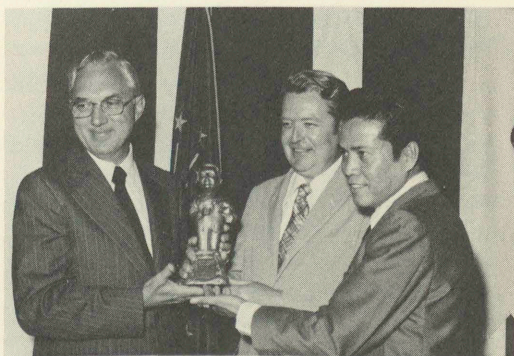
Christine Nelson



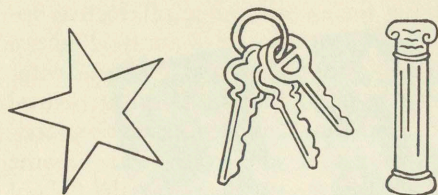
Collette Palmer



Cynthia Nagel



At dedication ceremonies for the new wing in May.



Dr. Paul E. Starkey

A THREE-YEAR CURRICULUM?

In the last issue of this Bulletin I told you that on January 4, 1972, the Faculty Council, without a dissenting vote, approved in principle a significant change in our curriculum, and suggested that by the time of this issue I might be able to report to you our progress in developing this changed curriculum. Progress has been made and I will try to review for you what has transpired to date.

First of all, let me tell you a little about how the Curriculum Committee is constituted and its responsibilities. Six members of the Committee are elected annually by the Faculty Council and the Chairman is appointed by the Dean. Specifically, according to our Constitution and By-laws, the Committee "shall maintain a continuing review of the Dental School curriculum, with a view to recommending such changes and innovations as it considers desirable. The Committee shall also be responsible for recommending curricula for special students."

Following its organization within the framework of the new Constitution and By-laws of the Dental School early in 1970, the Curriculum Committee devoted the first year or more of its efforts to studying our present curriculum and those of other dental schools. (See Starkey's Column, Spring Issue 1971)

There were many, many hours of in-depth study of our curriculum, frustrating debate over the direction we should be taking, and concerns about the inflexibility of our program, the repetition of material, and the lack of learning experiences in certain areas. After all this, Committee members felt relief when the group unanimously endorsed a proposal for a new curriculum brought to them by Dean McDonald in the fall of 1971. The

Dean titled this new curriculum the Indiana University School of Dentistry Multi-track Program. The Curriculum Committee took this proposed program to the Faculty Council on January 4, 1972, and it was unanimously adopted.

Below is printed Dean McDonald's proposed program:

Indiana University Multi-track Dental Education Program

The present undergraduate curriculum of the Indiana University School of Dentistry enables students to graduate with an adequate background in the basic sciences related to dentistry and with high proficiency in all areas of the clinical sciences. The proposed curriculum, which will be referred to as the Indiana University School of Dentistry Multi-track Program, will continue to stress the basic science subjects and will assure the clinical competence of our graduates. However, it will also be structured so as to prepare the graduate to deal with the changing patterns of dental practice and to meet the present and future demands for dental care.

The three-year core program will consist of a modification of our present program and will emphasize "coordinated" teaching. The basic science courses will be offered during the first two years in the traditional manner, but with a stronger orientation toward dentistry and, in particular, with a close correlation to clinical subjects. The basic science faculty will be encouraged to determine the competence of the entering students and to recognize their past achievement in the subject area by exempting them from a portion of the course or, in some cases, the whole course.

The preclinical sciences (technic courses) will be offered during the first

two years of the program. (See Fig. 1) "Coordinated" teaching will help to eliminate unnecessary duplication and inconsistencies in teaching. The courses will provide the dental services required by the public. In addition, course offerings will be consistent with the changing pattern of dental needs in the United States. In revising the traditional preclinical courses, it will be recognized that some of the more sophisticated procedures must be delayed to be taught at the graduate level or in continuing education programs.

Having clinical experience begin in the first year, as previously approved by the Faculty Council, will be continued. Additional clinical experience will be offered during the second year so that the student will have a complete orientation to clinical practice by the time he enters the summer session after the second year of his program. During the third-year program, including the summer session after the third year, the student will have an opportunity to demonstrate at least minimal competence in all areas of clinical dentistry and will be prepared to follow the multi-track elective program during the fourth and, in some instances, subsequent years. The fourth, fifth, and sixth years of the program in dentistry will include a broad range of elective programs. During the fourth year the student will accept much more responsibility for the planning of his program than previously.

One of the elective opportunities beginning in the fourth year of the multi-track curriculum, and the one which most students will follow after completing three years of the curriculum, will be entitled "Family Practice." The Family Practice program, which will be essentially free of required lectures in the fourth year, will offer the student experience with which to meet the challenges of general practice in the dental office and in the group practice setting. It will include a major emphasis on preventive dentistry, diagnosis and treatment planning, community dental practice, and supervision of the auxiliary team.

Past experience with the XL Program (extra learning experience) will serve as

the basis for a wide range of elective opportunities within the Family Practice program. Private dental offices, community dental clinics, hospital dental clinics, and Veterans Administration facilities throughout the state will become auxiliary training facilities for the School of Dentistry.

Another departure from the traditional dental school curriculum will occur at the end of the summer session of the third year. Students who have demonstrated competence in the basic sciences, preclinical sciences, and clinical sciences may elect to embark on a two or three-year program designed to prepare them to practice one of the specialties or enter a career of teaching and research. The curriculum is extended into the sixth year for those students who choose to prepare for an academic career. Approximately 25% of the class will have an opportunity to elect one of the seven specialty practice program or other advanced education programs. These programs will include endodontics, oral pathology, oral surgery, orthodontics, pedodontics, periodontics, prosthodontics or other advanced education programs currently offered by the Dental School. There will also be an opportunity for the student to enroll in one of the basic science programs, including microbiology, physiology, or anatomy.

Students entering a specialty practice program can be accommodated within the existing structure of the programs that have been offered at the School of Dentistry during the past two decades. The specialty programs and other advanced education programs could continue to include dentists who have graduated previously from our School and from other universities.

Dr. McDonald reported to the Faculty that he had taken the proposal to the Council on Dental Education and that they were quite enthusiastic about it. Dr. Coady had told Dean McDonald that our School is one of the few that are prepared to move in this direction.

The proposed curriculum having been approved by the Faculty, the Curriculum

Committee set about implementing this new Multi-track Program. A sub-committee, the Restorative Dentistry Committee, had already been appointed and commissioned to study the topic of Restorative Dentistry and all subjects taught within this topic. They were to attempt to identify areas of repetition, non-pertinent experiences, and needed experiences not provided for. As a result of their deliberations and recommendations, the Faculty approved the following changes to take effect at the beginning of the 1972 Fall Semester.

1. Deleting the Basic Dental Sciences Course in the first year.
2. Moving the course in Operative Dentistry (technic course) currently taught in the second year to the first year. Coordinating the teaching of this new first-year Operative Dentistry Course with the teaching of restorative procedures in subsequent years so that necessary material will be covered and repetition will be minimized.

These changes are necessary to provide early clinical experience for our students so that they will have had a basic three-year core discipline before entering the highly elective course program during their fourth year.

For years emphasis has been placed on the requirement system, in which each student had a list of requirements in most clinical areas. A new approach, now in effect, is designed (1) to orient the student to patient problems rather than requirement credit, (2) to provide skills necessary in private practice, and (3) to create a student evaluation program, progressing with the student and tailored to his individual needs. It is called the "Comprehensive Care Program," in which students are assigned patients for total care. There is no longer a "requirement" system. Rather, the student is assigned enough patients for total care so that he will have at least as much varied clinical experience as under the old requirement system.

A number of pilot programs have prepared the way for implementation of the Multi-track Curriculum. For example, during the past academic year all first-year students had 15 hours of clinical experience in a course called "Introduction to Clinical Dentistry." Also, some correlation lectures were given by clinicians during the time allotted to basic science courses. For instance, a lecture on local anesthesia and a film illustrating a mandibular injection were presented to the first-year students during lecture time in gross anatomy.

ATTENTION TO CURRICULAR DEVELOPMENT

The Faculty of Indiana University School of Dentistry is placing considerable emphasis on the study and revision of our curriculum. The Curriculum Committee meets weekly for at least two hours. Dean McDonald has appointed Dr. Glen Sagraves as Director of Curricular Development, a full-time assignment. However, you may wonder where we are going. Are we charging ahead into new, untried, and dangerous programs? Will we provide an acceptable curriculum for our current graduates? Will we modify our curriculum to meet the needs of the graduate of the future?

Just recently, Dean McDonald, Dr. Sagraves, and the author of this column, who also serves as Chairman of the Curriculum Committee, attended a four-day conference on Curricular Development sponsored by the United States Public Health Service. There were one to three representatives from every dental school in the nation.

We were surprised to learn that many dental schools now have or are planning a three-year curriculum. However, in most instances these three-year curricula are really four-year programs compressed into three calendar years. We also learned that when the representatives from most of these schools were pinned down, they admitted that the change to a three-year curriculum was solely for the purpose of obtaining federal money awarded per

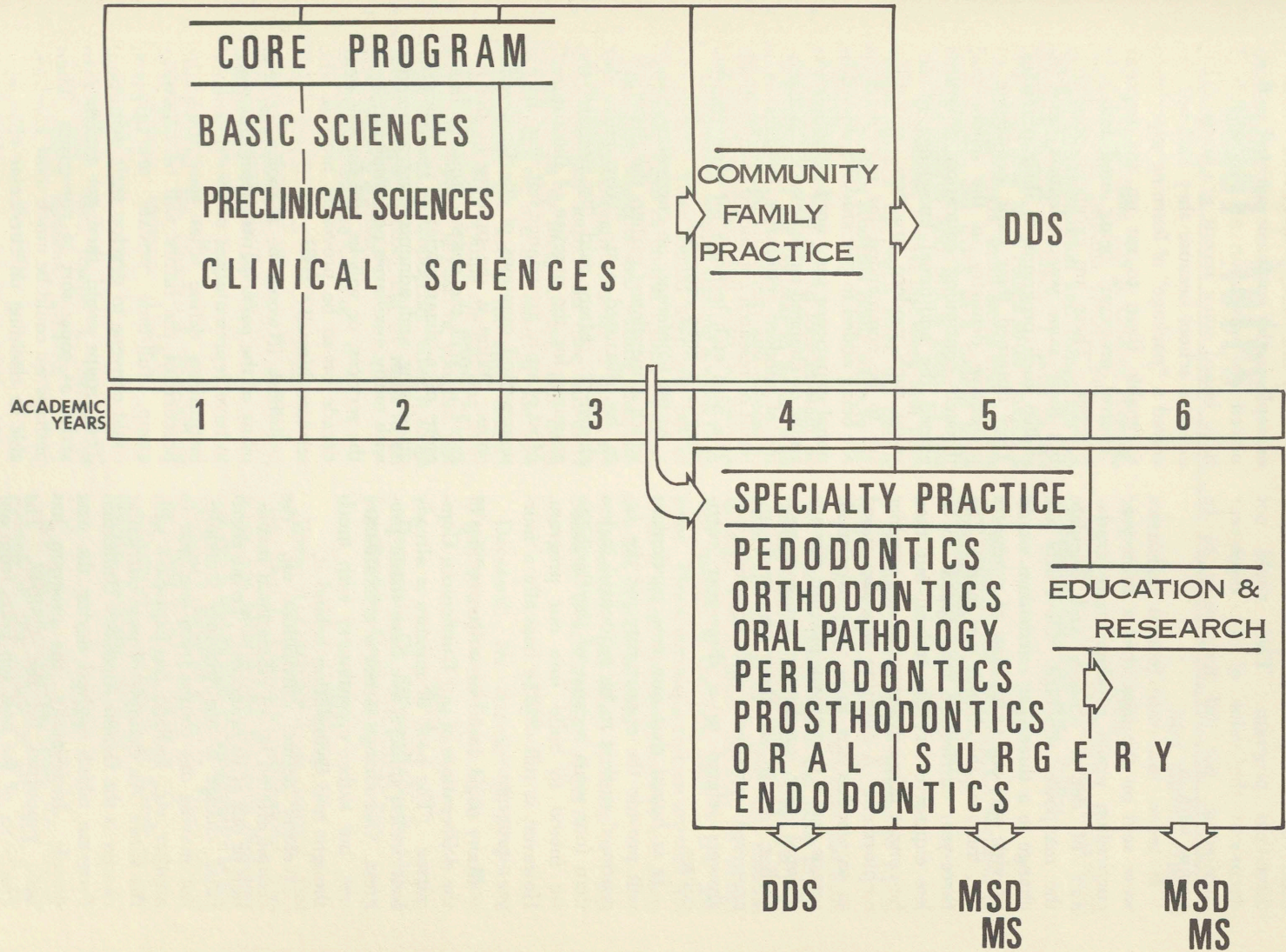


Figure 1: The Indiana University School of Dentistry Multi-track Program

head for each student graduated in a three-year program. They could not document the value of the three-year curriculum, nor did they seem to be happy with it.

It seems that our federal legislators were sold on the idea that a three-year curriculum would produce more graduates of dental schools and alleviate the manpower shortage. Obviously the change to a three-year curriculum would provide only one extra class of graduates . . . the year the change was made. The three-year curriculum may appear to be less expensive for the student, but then he cannot take advantage of any summer employment. A question was also raised as to whether the three-year curriculum means that a dentist will practice one additional year, or simply retire a year earlier. All in all, there are many unanswered questions and unsatisfactory answers related to a three-year curriculum.

It is hoped that our new curriculum will provide the opportunity for the exceptional student to be graduated in less than four years because of the flexibility we intend to build into our program. However, it still will be basically a four-year program.

Many pages could be written telling of the deliberations of our Curriculum Committee. (The book of minutes is already four inches thick). We have made progress. Our change is not a revolutionary one, but rather evolutionary with much thought and deliberation behind it.

Webster defines curriculum as: "the courses offered by an educational institution or one of its branches." To me curricular change is not juggling schedules, nor moving one course from one year to another, etc. Indiana has kept pace with the times. An example of pure curricular change is the Dental Auxiliary Utilization Program which evolved during the past decade. Incidentally, the program has been supported by the USPHS. The graduates of the past ten years from our school are "sit down" dentists who have been trained to use a chairside assistant efficiently. The results are increased pro-

ductivity and ease of operation. Another example is the emphasis which has been placed on prevention at our school. I have heard some recent graduates criticize the school because they had not received a "package" of learning experience to enable them to set up the popular "control program" being used today in practice. These are excellent programs, but these same young dentists have installed such programs in their practices. They obtained their basic knowledge of preventive dentistry in the school and through continuing education programs gained the additional knowledge to develop such modern practices, and they are to be commended for it. Programs are being added to give students this additional experience they need. Another example of changed curriculum is the teaching of modern restorative technics as a result of research conducted at our school. The acid etch technics for resin restorations is a good example.

At the Conference on curricular change which I mentioned earlier, the first topic to be discussed was "Why curricular change?". Many said "to prepare the graduate for the practice of the future." Most of us in attendance felt that the big unanswered questions of the Conference were: "What is the practice of the future?" "Will the dentist truly be much more of a diagnostician . . . primarily diagnosing and administering a practice with many auxiliaries performing most of the services, or will he still for the next decade or so be providing most of the services himself?"

I think it would be a good idea, and many of the participants shared this view, to have representatives of the educational institutions define what they think the practice of the future will be. Another group, full-time private practitioners, could convene to develop their definition. The groups could then get together to arrive at some sort of consensus. Then perhaps we could be much more comfortable in deciding on curricular change.

I have been in the profession for 30 years and in education for more than a

(Continued on page 69)

Alumni Notes

Mrs. Cleona Harvey

Greetings from 335 S. College Avenue, Bloomington, Indiana 47401. Yes, I like living in Bloomington and things are beginning to fall in place. I have to get used to living in 3 rooms after having 6 for so many years, small stores and narrow streets, etc., but living in a college town has its benefits and this is good. I was out on campus 3 days last week and plan to be there 1 day each week all during the year. The students really seem to appreciate it.

I decided I had retired long enough, so I signed up at the hospital to be a "pink lady"; called the University and offered to read to the blind; and plan to have a Bible Class for women starting a week from Thursday! That should keep me out of mischief. Then of course I shall continue counseling students and writing this column if I get enough material. I didn't receive as many letters this time but can't expect to be so lucky always. But don't forget that we are interested in you and just because you are so far away doesn't excuse you from writing me just one letter in your lifetime! If each of you did just that it would be wonderful. Give it some thought, dear doctor, and sit right down and write us a letter.

And now for the Class of

1895

Deceased: Dr. Myron E. LeGalley, Scottsdale, Arizona. 5-4-72

1899

Deceased: Dr. Charles A. Barnhill of Indianapolis, Indiana. 11-14-71

1903

Deceased: Dr. Joseph L. Strain of Bloomington, Indiana. 2-24-72

1904

Dr. Denzil C. Barnhill, 4443 North Arlington, Indianapolis, has returned from a vacation in Canada and sends "*best wishes to all the gang.*"

1916

Deceased: Dr. William C. Richardson of Francesville, Indiana. 9-26-71

1916

Deceased: Dr. Wallace C. Sechrest of Indianapolis, Indiana. 6-3-72

1917

Deceased: Dr. Harry Bryant of Albuquerque, New Mexico. 1-30-72

I must tell Dr. Carl Frech that that little "n" that got mixed up in his name in the Spring Issue of this Bulletin was all a mistake. In fact I have read my column through several times checking on things and tonight is the first time I saw the error. Please excuse us and we promise not to do it again. Greetings anyway and hope you are in good health.

Deceased: Dr. Neale R. Gunn of Point Pleasant, West Virginia, 11-12-71

1918

Deceased: Dr. Stewart B. Smith of Washington Court House, Ohio. no date.

1919

Deceased: Dr. Sidney F. Jacobi, Jr. of Los Angeles, California. 2-14-72

1922

From ALUMNEWS we learned that "Dr. Paul L. Chevalier, Richmond, Virginia, has become the Emeritus Professor of Crown and Bridge Prosthodontics at the Medical College of Virginia. He taught at the College for 47 years."

Deceased: Dr. Ralph D. Lingle of Lafayette, Indiana. 4-19-72

1925

We have a clipping from Hollywood, Florida of the death of Dr. Byron M. Pell, Sr. He was born in Harmony, Indiana and moved to Hollywood in 1925 after graduating from Indiana University School of Dentistry. He was one of the

first to set up a practice in Hollywood. His offices were at 1644 Tyler St.

1926

Another note from ALUMNEWS that Dr. Lloyd F. Abel of Pensacola, Florida has been promoted to professor and head of the Department of Dental Hygiene at Pensacola Junior College.

1928

Imagine getting a letter from Dr. Seth Shields with a letterhead which I dare not print! He said, "*Dear Mrs. Harvey: You are, were and always shall be a very lovely lady. The Alumni Bulletin came this morning and so happy to read the interesting news by Dr. Robert J. Meyers. I say 'Dr. Robert J. Meyers of 1928' because he was a barber, in 1925, in a shop where I was the shine boy. Respect, I still have. I have daily walks with His Royal Highness Count Schlessinger Schultz Von Rippen-dorf, II. He's a miniature Schnauzer who barks in French. With best wishes and great admiration. Sinseriously, Seth,*"

Thank you for writing, Dr. Shields. It has been a long time since you came in the office and kidded us and made us blush or wish we could. Those were the days.

1929

Deceased: Dr. Stanton A. Wilkes, Columbus, Indiana. 5-19-72

1930

Deceased: Dr. Frederick K. Allendorf of Berea, Ohio. 1-8-72

1931

Dr. Marvin S. Cochrane, 310 North 40th Avenue, Yakima, Washington 98902 writes, "*Hello from Washington State. The fruit trees are about to bloom in and around Yakima. In fact they are now electing the Cherry Festival Queen for 1972*

"*Thank you, Mrs. Harvey, for your plea for news about what to put in your Alumni Notes besides obituaries concerning the graduates of I.U.S.D. You nudged me into communicating with several of my former classmates of 1931 this past winter.*

All letters and cards were answered with information interesting to read.

"*Before I retired and moved here, I was trying to keep the classmates together with a yearly luncheon at May meeting time, and we did pretty well too. However, our members are so scattered many attend other dental meetings and are very seldom in Indianapolis.*

"*All that is behind us now, for it is retirement luring time for many of us and after forty-one years since graduating at the start of that 'dark decade' of the 1930's we are inclined to lessen the pressures.*

"*Our first reunion was May 21, 1951 and there were twenty-six members present and thanks to Dr. Jack Carr, we have pictures of that happy event. Then in 1956 we had our second reunion and our wives were present for that one. After that we started annual luncheons with good turnouts. They were great fun but they ended with the 1969 meeting, when I left the State.*

"*As far as I know, there are 18 members of the class left. Five are now retired, including myself. Dr. Richard Ferguson of Richmond, Indiana writes that he is still at his office but considers himself semi-retired. The Fergusons have traveled quite a lot, once to Europe and are now planning a trip to Alaska in the near future. I hope to see them when they come through the Northwest.*

"*Dr. Fred Fugazzi retired in 1970 and moved from Van Wert, Ohio to Sault Ste Marie, Michigan where he now has a Mid-N-Doc's fishing camp. They both love it all summer. They spend their winters in California near where their son lives.*

"*Dr. and Mrs. Roy Clinthorne of Indianapolis had a very enjoyable 1971 vacation visiting Morocco and the Canary Islands.*

"*Dr. Francis Reid who has practiced in Windsor, Vermont for the past forty-one years, writes that he has also considered himself semi-retired for three years, working during the summers and spending the winters in Florida. The Reids have a son who is interested in the theater and has*

been acting in summer stock for several years.

"Dr. Guy Swisher has been retired from the Navy for some years and lives in Garden Grove, California. Guy was always too far away from Indiana the past forty-one years to be in contact with any of the class. I saw him in 1957 when I was in California on a visit, also met their fine goodlooking son.

"Dr. George Goodman of Indianapolis retired last November and was looking forward to helping his wife Helen with some of their multitudinous duties. He enjoys gardening and also has a farm to look after.

"My plan is to keep in touch with as many as possible if I can get them to write and I am sending each one an address of the entire class, also urging each to send information about their vacations, etc., to you for your notes."

Dr. Cochrane sent me a list of the 18 remaining members of his Class and I think this list should appear right here: Harold Buses, 541 Bankers Trust Bldg., Indianapolis, In 46204; Roy Clinthorne, 2338 N. Illinois St., Indianapolis, In, 46208; M. S. Cochrane, 310 N. 40th Avenue, Yakima, Wa 98902 retired; Richard Ferguson, 611 S. A Street, Richmond, In 47374; Fred Fugazzi, Mid N Doc's Fishing Camp, Star Route, Sugar Island, Sault Ste Marie, Michigan 49783, retired; Lawrence Ginther, 503 Warren Bldg., Michigan City, In 46360 (office); George J. Goodman, 5501 Edgewood Avenue, Indianapolis, In 46227, retired; George Hayworth, 309 A Street, Linton, In 47441; Harry Healey, 1121 West Michigan Street (I.U.S.D.), Indianapolis, In, 46202; Fred Heimlich, 541 Bankers Trust Buldg., Indianapolis, In 46204; Francis Reid, Box 184, Windsor, Vermont 05089, retired; William Shoemaker, 1328 Drexel Drive, Anderson, In 46011; M. D. Smith, (ill) 504 Broadway 1044, Gary, In 46400; Guy Swisher, Garden Grove, California, 91303, retired; Ed Temple, 424 Bank Street, New Albany, In 47150; Ralph E. Wilson, 2390 Kemper Lane, Cincinnati, Ohio, 45206; John Yates, 640-41 Bankers Trust Bldg., Indianapolis, In 46204; Willard Stoelting, Sandborn, In 47578.

To his list Dr. Cochrane added a sentence, "How about sending M. D. Smith a card now and then?"

Dr. Cochrane, I really think you are wonderful and I know your classmates must think so, too, to take so much time to write them. If more of the alums would do that we would really have news for this column. Thank you and please do keep us informed.

1937

Deceased: Dr. Ronald C. Gardner of LaPorte, Indiana. 11-26-71

Deceased: Dr. Robert F. Gosman of Holland, Indiana. 10-25-71

1940

A card from Dr. Harold Koenig of 220 South College Avenue, Rockville, In 47872 tells us, *"My son, Keith A. Koenig, will be starting his preidental college work this next fall. He is presently a senior in Rockville High School and Master Councilor of his DeMolay Chapter of which I am chapter Dad."* Since I don't know when this card was written (they send them to me from Indianapolis) I am not sure when Keith will be starting his preidental course, but if he is attending or plans to attend I.U. I hope he will get in touch with me and let me help him plan his program of study.

1945

Dr. Hugh S. Deale of 303 Tara Lane, Muncie, In 47304 writes, *"I will be speaking in United Methodist Churches in Indiana, Delaware, Georgia and Mississippi in January, February and March about my work as a missionary dentist. Our oldest daughter, Kay, graduated from I.U. in August and is working as an occupational therapist in Warren, Ohio. Two daughters are seniors at Baker University in Kansas; a son and daughter are 2nd and 1st year at Asbury College. We return to work in Zaire in July, 1972, as missionary dentist and nurse with United Methodist Church."* It is good to hear from you Dr. Deale, and pleased to learn of your work and what your family is doing. Best wishes always and do write again and tell us something of your work in Zaire. My atlas

tells me this is in Southern Africa in Angola.

While I was counseling students last week (August 23-25, 1972) I found time to write to Dr. Charles J. Vincent who, as we told you in the last Bulletin was going to spend some time in Sweden. When I returned home that evening there, much to my surprise, was a change of address card from Dr. Vincent telling me his new address, effective September 1, 1972, would be 333 East Ontario Street, Apt. 430 3, Chicago, Illinois 60611. He added a note, *"Hello! On to new duties. Will begin 9-1 as Assistant Dean for Student Affairs at Northwestern. Best wishes."* Well all I can say is that for once at least I was on the same wave length as some one else. So, I will send my letter to Chicago. Please write more, Dr. Vincent, when you get settled. Your stay in Sweden was brief and we are glad you are back in the good old U.S.A.

1946

Deceased: Dr. Robert D. Allen of Ft. Wayne, Indiana. 4-4-72

For news regarding Dr. Everett R. Amos see under 1952.

1952

Dr. Anthony J. Chidalek, 207 Masonic Temple Building, La Porte, In, wrote in March with some interesting news. *"Doctors, some of you must remember Dr. Everett R. Amos, who was in charge of Oral Diagnosis at the Dental School a few years back. For the past several years he and his wife Martha have been living in Guadalajara, Mexico. He practices at South Main Street in Knox, Indiana from around the middle of April through early November. In the winter he vacations in Guadalajara and still works at oral diagnosis, charitably, in surrounding orphanages and for other deprived children."*

"He will probably tell me off for sending this information on his famous 'Fox Terrier Soccer Super Star', but I do believe this is interesting and I too was surprised when Fanny played ball with me one evening."

"Yours in better dentistry and more fame for our families—ha! ha!"

Thank you, Dr. Chidalek, and a more interesting news clipping would be hard to come by and although Dr. Amos graduated in 1950 I am going to include it in the news of your class. From The Colony Reporter, Guadalajara, Jal., January 15, 1972: "A fox terrier who plays soccer? Hard to believe but it's true. For several winters now the tiny super star has come to Guadalajara with her owners, Dr. and Mrs. E. R. Amos, from Knox, Indiana, and has captured the hearts of the young and old alike who have seen her in action.

"Her ardent fans claim she is an excellent promoter of international relations between Mexico and the United States, as important, they say, as the U.S. table tennis team sent to China. Fanny pushes a ball out of her motel room and plays an exciting game of soccer by herself. A crowd inevitably gathers and some of the braver little boys join in. Anyone who has witnessed one of these suspenseful games can attest to Fanny's skill—in fact, she's quite the star.

"According to Dr. and Mrs. Amos, Fanny has been playing soccer for six years. Dr. Amos has started taking home movies in order to capture Fanny's brilliant plays on screen and Mrs. Amos is currently writing a children's book about Fanny's adventures.

"When the world soccer tournament was held in Mexico during the summer of 1970, Fausto Prieto, former Guadalajara Chiva star noticed Fanny. 'After I watched Fanny play soccer for the first time I was very impressed.' Sr. Prieto said. 'I arranged for her to come to the Club Deportivo Guadalajara during a soccer practice session. She was fitted in the little red and white striped uniform of the Chivas. Fanny ran out on the field and played with some of the men. Everyone was amazed.'

"Sr. Prieto wanted to have Fanny as the mascot for the Mexico team during the tournament but Dr. and Mrs. Amos had to return to the States. Since then, however, he has written the foreword to a soon-to-be published book entitled 'Fanny the Futbol Star,' written by Mrs. Amos."

I have talked several times to Dr. Amos about his vacationing in Guadalajara (if I write that many more times I will know how to spell it!) but he never mentioned his little dog. If he did I don't remember it, but I won't forget now. I know he is going to be amazed to read about it in this publication and we have Dr. Chidalek to thank for it. This is the sort of thing that a publication needs, so watch for interesting things about our alums and write us, please, all of you.

Imagine my surprise upon receiving the following interesting letter from Col. Almer T. Duncan, USAF (DC), USAF Hospital Clark Box 15656, APO SF 96270: *"I have often thought of writing to you but just have never taken the time over the last twenty years. As long as you were still full time at the school I didn't have the heart to add to your duties—now that you should have a little time, I will try to bring you up to date.*

"Incidentally, I am having trouble with the Alumni Association—in that they will not update my records to reflect my current rank. I don't mind them being a little off, but when they keep the same rank for 20 years I don't always get my correspondence from them.

"Following my 'launch' from the dental school, at the height of my feeling of euphoria—relative to my prowess in dentistry, I completed an internship at Fitzsimmons Army Hospital in Denver. After a tour of duty in Japan (USAF) I returned to graduate school at Washington U in St. Louis for an MS in Prosthodontics. Since 1959 I have been engaged in the full-time practice of Prosthodontics. (USAF Dental Service). At present I am nearing completion of a tour of duty at Clark AFB in the Philippines. We have a large hospital here at Clark with a staff of about 800 with 28 Dental Officers. I am serving as the Chief of Prosthodontics and as a consultant for 13th AF which has responsibilities in the Philippines, Thailand and Taiwan. We have a very complete prosthodontic capability.

"Both of our children have completed extensive education programs and are now

married. My wife and I are finding time to improve our golf game. We have a fine golf course here on the base and some very good inexpensive golf pros. We have visited most of the exotic areas in this part of the world in the last 18 months.

"My wife and I hope this finds you in good health and trying to enjoy your well-earned retirement."

As I said, this letter was a surprise but a pleasant one and I want to report to you, Dr. Duncan, that I immediately called the Alumni Office and believe you will find that they now have your title and address correct. If they don't, please write again and I shall go out and correct it myself! There are some advantages in living in Bloomington. Your good letter came a few days after my brother died and in the duties that fell upon me following that I haven't done very well in answering letters but I will get it done one of these days. In the meantime, thank you and do write again.

1955

Dean McDonald passed on to me a letter from Dr. Basil G. Theofilis, who gives Theseos 7 - Apt. E-1, Paleon Phaleron, Athens, Greece, as his new address. He wrote, *"With great pleasure and pride I received the brochure of the new school in Indianapolis. I feel indebted to Indiana Dental School and am proud to hold a degree from this great institution.*

"I regret to inform you that I am leaving this country to return to my native Greece and hope to be able to practice there for a few years if God grants me that privilege. I shall always remember the two years I spent there and cherish the efforts and kindness of the faculty members.

"I will try to convey the spirit and the knowledge I gained at the University to colleagues in my native country and do everything possible to expound the American hospitality, tolerance and the peoples' interest in others. I hope to see some faculty members in Athens, Greece where I am going to stay and I promise them their visit will be rewarding.

"Please extend my appreciation and best wishes to the rest of the faculty."

That is a lovely letter and so good of you to tell us of your move. I am sure I speak for all who knew you, Dr. Theofilis, when I say we wish you the best and would love to visit Athens. Who knows, maybe some of us will get there some day. We would appreciate another letter when you get settled as we shall continue to be interested in you even though you will be so far away.

We were so glad to hear from Dr. Charles Infante of 4100 South Hospital Drive, Plantation, Florida 33313, who wrote, *"I want to let you know that the notice of my death in the ADA was in error. I had a laminectomy done in May, and when my secretary wrote for disability forms, someone in Chicago mistakenly thought I had died. So, please pass the word on that I'm alive, and as well as can be expected."* We certainly are happy to pass this good news on to all, and we hope you keep on keeping on for a long time.

1959

We have just learned that Dr. David Eberly is at 410 Ruth, Rt. 2, Box 4691, Panama City, Florida 32401. I don't know how we learned this but it is news and we pass it along hoping Dr. Eberly's wife sees it and writes us another letter. I do work at getting in that "punch" about writing me, don't I?

1961

It was good to hear from Dr. Ronald K. Bowman, Devington Medical Arts Building, 6000 East 46th Street, Indianapolis, Indiana 46226. Dr. Bowman was in the Bible Class that I helped teach many years ago. I shall never forget the wonderful spirit of fellowship which was a part of that interesting group of boys. We studied the book of Revelation together and I guess none of us will ever forget it. So when he says, *"Read some of your good notes in the Alumni Magazine and was refreshed in the nostalgic realm. And can it be that I haven't seen you in such a long time?"* He gave me some confidential information concerning a predental student which I shall try to follow through on

and he added a bit of news, *"Have been very busy in the postgraduate study in Chicago the past year and a half. It's been a tough drive every month, but worth it. Possibly will go to Radiology Seminar conducted by Jim Beck in S. Dakota in August. He's a great fellow! Haven't seen him in 5-6 years."* Dr. Beck was in our Bible study too, and did some of the teaching. Your letter certainly brought back memories, Dr. Bowman, and I do appreciate your taking the time to write. I shall hope to see you in Indianapolis, some time when I am up there. Give my regards to your mother—she is a grand person. Do write again.

1966

Dr. William H. Bond gives us a new address: 16 Hancock Street, Lexington, Mass. 02173 and says, *"I always enjoy the Alumni notes you publish, even though I don't know most of the people. I am a graduate of the Class of 1966. Next semester (July 1st) I will start a two-year Prosthodontics residency at Harvard University. Thank you again for publishing Alumni Notes. It makes us seem like a closer group."*

Letters like that makes it all worthwhile and keep us from getting too discouraged. Guess I shall have to keep the column going for another time.

1967

Dr. Charles Hassel gives us as his new address: 125 S. Stewart Street, Bremen, Indiana 46506.

1968

Some news from Dr. J. Michael Boyd of 1912 Farrington Lane, Modesto, California 95350 inform us that *"In September 1971 I opened my private practice at 2020 Coffee Road, Suite A-4, Modesto, California 95350. I am a life member of I.U. Alumni Association."* We are always pleased to get correct addresses so we can keep our files up to date. Please write again and tell us more about your activities.

We received a letter from Dr. Geraldine Chan dated June 7, 1972 in which she said, *"A little voice inside keeps reminding me that I am doing poorly with my cor-*

respondence. Tonight, I decided to do something about it, although it is already 11:45 p.m.!

"Let me turn the time wheel back a bit to the vacation I had in Hong Kong. After an absence of 10 years plus, I found that many things had changed, so much so that I could hardly find my way home. My visit was during the holiday season and I wound up going to a lot of the social activities. My mother and aunt were indeed very glad to see me. I naturally felt the same way. I also enjoyed getting together with my old friends from high school days. While I was there, I also visited some dental offices and clinics. In fact, I was thinking about returning to Hong Kong to practice. I even got the license and the registration taken care of. All in all I had a good time at home and found the month's vacation entirely too short!"

"Last year in April, my mother came to visit me. She stayed in New York City most of the time, even though she went to my sister's home in New Jersey often. After some lengthy talks with Mother, I decided to stay in the States where I can really serve better. Since there wasn't any government or hospital position available then, I had to open my own office in Hong Kong where I would have no choice but to serve the very rich who only can afford my fees. Since that is not my idea of service, I chose to remain in New York City. Eventually, I hope to get a position in a hospital which is located near Chinatown here. 40% of the patients there are Chinese and I can truly use the six Chinese dialects that I know. For the time being, I have a position in a private clinic near the Kennedy Airport. And on Tuesdays I have sessions in Coler Hospital as an assistant clinical attending. Everything works out just fine and I like what I am doing."

"I have also been involved with a Chinese church in Chinatown since last July. I participate as a counselor for the English speaking youth group. For 2 Sundays each month I also do the translation of the sermon from Chinese to English. This is for the convenience of those Chinese who understand neither Cantonese nor Mandarin."

I almost forgot to give you Dr. Chan's address. It is Central Nurses Residence, Welfare Island, N.Y., N.Y. 10017.

Dr. Chan proceeded in her letter to pay me some lovely compliments which I really appreciate. I do wish we could interest more women in dentistry. But I do believe we have more women enrolled in dental school than ever before and I am counseling several on the Bloomington Campus. Your letters are interesting, Dr. Chan, keep them coming as we all like to know what you are doing.

Dr. Virginia Crose, R.R., Zionsville, Ind. 46077 sent us some news: *"Last September Dr. Dave Morgan and I moved to new offices on the Northeast side of Indianapolis (Brendon Plaza Professional Building). Chalomer (my husband) and I ventured to Acapulco, Mexico in February 1972."* Good to hear from you, Dr. Crose, and thanks for those few notes about yourself.

A news clipping tells us that Dr. Ralph V. Everly Jr. has opened his office for the general practice of dentistry at 2116 East 116th Street in Keystone Square in Indianapolis, Indiana.

What would we do without news clippings? Another one gives us the information that Dr. Thomas H. Lapp has joined Dr. J. Frank Hall in the practice of oral surgery at the Fountain Square Professional Building, 1122 Shelby, in Indianapolis, Indiana. Dr. Lapp recently completed a three-year residence in oral surgery at Ohio State University.

1969

We had a brief note from Dr. Ronald W. Care of 4920 Hondo Pass, El Paso, Texas 79924. We sent the note to Indianapolis to be cared for there. We hope you received the information, Dr. Care. If not, do write again and next time tell us more about your activities, please.

We are pleased to learn that Dr. Roland R. Ditto has been awarded a \$5,000 research grant from the United Cerebral Palsy Research and Education Foundation to study at the School of Dentistry at Indiana-Purdue University, Indianapolis. He will study under Dr. James R. Roche, chairman of the graduate division of pedodontics.

1970

I want you to share in a letter received from Dr. E. Dean Harmison of 405 Ferson Loop, San Antonio, Texas 78256:

"This is one of your long-lost former students reporting back in. Since graduation my family (we have a son one year old) and I have been living in San Antonio, Texas. I'm in the Air Force at Lackland AFB. We are enjoying the 'easy life' until the end of July, which is when my commitment is up. We may consider staying in the Air Force a while longer if the right educational opportunities come along.

"I work in a large clinic here with twenty-five to thirty other dentists. We have representatives from schools from every section of the country. I think that though my education at Indiana was fairly conservative, I came out of school better equipped to handle dental problems in general. Also, I've found it easier to adapt to the problems of Service dentistry than some of my friends, particularly those from the East. It's just too bad we don't appreciate the education we're getting while we're getting it instead of having to find out through experience.

"I don't like people who write letters only when they need something; however, I find myself in just that position and I apologize for it. My wife and I like the climate down here so well that we would like to stay. However, there is the matter of the state board examination. I am enclosing the necessary papers which need to be signed. I would be greatly indebted to you and the school if this could be taken care of. Thank you again for all your help both now and during my student career."

Bless your heart, Dr. Harmison, and don't ever apologize for asking our assistance in taking a state board. While I am no longer in Indianapolis, other people are doing all those little things and I am sure your papers were taken care of. You would be surprised how welcome your letter was and is. That is one way I get news and one way we know how to keep our address file complete! So all of you out there, keep on taking state boards.

Another man in the Air Force. Dr.

Richard V. Janzaruk of 306 14th Ave., us how things go at Anderson.

Havre, Montana, tells us that *"I am presently in the U.S. Air Force stationed at Havre, Montana. As of July 17, 1972, I will be opening private practice at 2403 Raible Avenue, Anderson, Indiana."* That is news and we hope by now (8-21-72) you are all moved and enjoying good old Indiana again. I am sure you will be visiting the dental school and you will be surprised at the changes. Do write and tell

Dr. James D. Reed sent his new address: 28 Craige, University of North Carolina, Chapel Hill, North Carolina 27514. He said in the brief note: *"Please change my mailing address to correspond with the above. I am presently doing graduate work here and enjoy the Bulletin very much."* Ah, those words please Dr. Phillips and me, too! Tell us more and do write again.

1971

Dr. Allan D. Gross of 12350 Mercy Blvd., Apt. 327, Savannah, Georgia 31406, added a few lines to the Alumni card: *"1. Preventive Dentistry officer for Hunter Army Airfield, Georgia. 2. Attended the first clinical Endodontic course offered by the Army, Jan. 9-21, 1972 at Ft. Benning, Ga. Only thirteen officers from bases throughout the country were able to attend. John Ingle, Milton Siskin, and Jacob Freedland were among the guest lecturers."* Good to hear from recent graduates. We hope you continue to keep in touch.

Dr. Dean R. Laukhuf is in general practice at Suite 31, 4600 N. Habana, Tampa Florida 33614. I often tell people that our graduates are all over the world and those of you who read this Bulletin surely must agree. If you go to Florida be sure to visit Dr. Laukhuf.

Dr. Paul A. Rocke, 3530 Laclede #901, St. Louis, Missouri 63103, wrote Sarah Manion a note asking about his senior paper and added: *"Hope all is well in Indianapolis. I am enjoying the orthodontic program at St. Louis University immensely."* I am so grateful for the "news hounds" at Indianapolis who keep me posted and send me letters they receive. Sarah, thank you, and Dr. Rocke, now that you have my address why not send me a

note. That way I will not get jealous of those good people in Indianapolis.

Dr. John W. Miskuf wrote Sarah Manion and she sent his letter to me. He said, *"This letter is to inform all of you that I have finished the rotating dental internship at Fort Bragg, North Carolina. This was a tremendous experience in that I had a chance to work in all the specialties, doing more of the advanced cases. My mentors were all board certified. Fort Bragg has the reputation as being the number two trauma center in the world, next to Viet Nam, and I had a great opportunity to treat gross head and neck trauma. This past year was a tremendous experience that was well worth the extra year in the service."*

"I had also wanted to inform all of you of our change of address. I am now stationed at a small ordnance depot in California for two years. It's called Sierra Army Depot in Herlong, California. I am approximately 50 miles from Reno, Nevada, where my wife Sheila is working on her Master's degree at the University of Nevada. We are also about three hours from Sacramento and 4½ hours from San Francisco."

"I am in an Army hospital dental clinic and I am the only dental surgeon. I have a three operatory setup with two assistants and one hygienist. We are running a full service clinic and I'm ever so thankful for my background at IUSD. I will be mailing out a clinic description that is to appear in the local paper in approximately a week."

"Please record a change of address for your mailing list. Could you also inform me if IUSD will have a hospitality room at the convention in late October—early November in San Francisco? I would really like to attend. My new address is Post Dental Surgeon, Box 1047, Herlong, California 96113. Thank you and keep in touch!"

Good to hear from Dr. and Mrs. Miskuf and we appreciate getting letters with so much information.

1972

Dr. Michael Gull of 99 Reservoir Street, South Plaza, Holden, Massachusetts 01520, also wrote Sarah Manion and she

passed the letter on to me. Among other things he said: *"My family and I are well and after many delays my office is finally to open in Holden in approximately two weeks. In the meantime, I am associated with a dentist in the area. He is a friend of Dr. Lund in the Operative Department; you might mention to Dr. Lund when you see him, that Joe Klouzek is alive and well and sends his regards. Note my new address. Thank you."* It is so good to hear from members of the 1972 Class. Do write again, Dr. Gull.

Dr. Ronald W. Housely wrote us in June, 1972: *"For your records, my new address as of June 28, 1972 will be Village of Pine Run Apt. 66-C Sec. 4., Blackwood, New Jersey 08012, while attending the US Naval Dental Internship program at the U.S. Naval Hospital in Philadelphia, Pa., from July 1, 1972 to July 1, 1973."* Isn't that wonderful? One graduate, at least, realizes how we love to keep the records straight. Thank you, Dr. Housely, and we send our best wishes.

We have just learned that Dr. Richard A. Longardner has opened his office in Noblesville, Indiana. No street number given us—perhaps by next issue Dr. Longardner will have time to write us and give us all the scoop.

Several classes were represented in a rather well-written article which appeared in the Indianapolis Star, July 16, 1972 and titled "2 Clinics—Something to get your teeth into." by Shirley Rogers. I think all of you will enjoy reading about these 2 clinics so read on: "Two inner-city dental clinics may not be able to entirely remove the 'ouch' from dentistry, but their unique preventive dental education programs and ultra-modern equipment may deter tooth and gum decay and with them some pain.

"Directed by a full-time dentist and staffed by part-time dentists and volunteers the two facilities are the Brightwood Dental Clinic, 2508 North Station Street, and the Martindale Dental Clinic, 1546 Columbia Avenue.

"The clinics are financed through the Community Services Program of Indi-
(Continued on page 70)

The Bookshelf

Mrs. Helen Campbell, Librarian

In the last six months, acquisitions by this Library have covered a wide range of dental subjects, including materials for the practicing dentist as well as his auxiliary personnel. Dentists and auxiliary personnel practicing in Indiana, or any alumnus of the Indiana University School of Dentistry, may borrow any of these books from the School Library. Other persons may arrange with their local libraries for inter-library loans.

Andrew, Warren

The anatomy of aging in man and animals. New York, Grune & Stratton, 1971.

Barkley, Robert F.

Successful preventive dental practices. Macomb, Ill., Preventive Dentistry Press, 1971.

Chalian, Varoujan A., Drane, Joe B. and Standish, S. Miles

Maxillofacial prosthetics; multidisciplinary practice. Baltimore, William & Wilkins Co., 1972.

Courtade, Gerard L. and Timmermans, John J.

Pins in restorative dentistry. St. Louis, Mosby, 1971.

Davidoff, Arthur, Winkler, Sheldon, and Lee, Mathew H. M.

Dentistry for the special patient: the aged, chronically ill and handicapped. Philadelphia, Saunders, 1972.

Davis, H. Colin

Your mouth is a living machine. London, Gibbs Oral Hygiene Service, 1971.

Emergencies in dental practice; prevention and treatment, edited by Frank M. McCarthy. 2d ed. Philadelphia, Saunders, 1972.

Fastlicht, Jorge

The universal orthodontic technique. Philadelphia, Saunders, 1972.

Gardner, Alvin F.

Pathology of oral manifestations of systemic diseases. New York, Hafner, 1972. 1972.

Glickman, Irving

Clinical periodontology; prevention, diagnosis, and treatment of periodontal disease in the practice of general dentistry. 4th ed. Philadelphia, Saunders, 1972.

Held, Harold W.

A lecture manual of oral and dental comparative anatomy for dental hygienists. Ann Arbor, Mich., Overbeck, 1970.

Jensen, James R. and Serene, Thomas P.

Fundamentals of clinical endodontics. Dubuque, Iowa, Kendall/Hunt Publishing Company, 1972.

Luce, Gay Gaer

Body time; physiological rhythms and social stress. New York, Pantheon Books [c1971]

Lunt, Naomi Dillman

A dentist of my own. Salt Lake City, Women's Auxiliary to the Utah State Dental Association, 1971.

Motley, Wilma E.

Ethics, jurisprudence, and history for the dental hygienist. Philadelphia, Lea & Febiger, 1972.

North Carolina University, School of Dentistry.

Dental assisting. 7 vols. 2d ed. Chapel Hill, 1970-1971.

O'Brien, Richard C.

Dental radiography; an introduction for dental hygienists and assistants. 2d ed. Philadelphia, Saunders, 1972.

Peterson, Shailer Alvarey, ed.

The dentist and his assistant. 3d ed. St. Louis, Mosby, 1972.

Peyton, Floyd Avery and
Craig, Robert G.

Restorative dental materials. 4th ed. St.
Louis, Mosby, 1971.

Shaner, Edward O.

Dental Assistants Rapid Training;
DART manual, Bethesda, Md., 1972.

Slagon, George J.

Dental receptionist procedure manual.
Detroit, Devonshire Publishing Co., 1972.

Starkey, Paul Edward and others, editors

The 123 most asked questions by par-
ents about their children's teeth. 2d ed.
Toledo, Ohio, Healthcare, 1971.

Stoll, Frances A. and Catherman, Joan L.

Dental health education. 4th ed. Phila-
delphia, Lea & Febiger, 1972.

Underwood, Eric John

Trace elements in human and animal
nutrition. 3d ed. New York, Academic
Press, 1971.

Wiedeman, Charles L.

The new philosophy for dentistry. Hack-
ettstown, New Jersey, The Foundation for
Motivation in Dentistry, 1972.

Willig, Sidney H.

Legal considerations in dentistry. Balti-
more, Williams & Wilkins, [1971]

In addition, the original copy of the
following theses, written by candidates for
the Master of Science in Dentistry, have
been filed in the Library and may be
borrowed:

A RHEOLOGICAL INVESTIGATION OF THE SETTING REACTION OF ELASTIC IMPRESSION MATERIALS

Ralph Y. Barolet

A reciprocating rheometer of unique design
was constructed to monitor continuously the
viscosity of elastomeric materials as they poly-
merize from a liquid to an elastic solid. Eighteen commercial and two experimental im-
pression materials were tested. These materials
were all elastomers and classified as polysulfide,
silicone or polyether polymers. Other types of
dental impression materials—inelastic materials,
irreversible hydrocolloids or stiff putty-like sili-

cone polymers—could not be tested in the
equipment.

Graphical traces obtained from the test
equipment permitted the measurement of maxi-
mum working time, setting range, setting time,
initial rate of reaction and stiffness of the
elastomers.

Accuracy tests showed that the deviation
measured in impressions allowed to cure for
the setting times measured from the rheometer
traces was less than 0.1 per cent.

Rates of reaction measured at room tem-
perature and at oral temperatures showed the
silicone polymers to be as heat sensitive as
the polysulfide polymers whereas the polyether
polymers were less sensitive to heat.

Based on the criteria employed, the follow-
ing materials appeared to have the best prop-
erties: Permlastic Regular, Mim, Permlastic
Light Body, Elasticon Tray, Citricon Wash,
Lastic 55, Xantopren Blue, Rubberjel Syringe
and Xantopren Green.

THE EFFECT OF VARYING SUBSTRATES UPON IN VITRO PLAQUE FORMATION AND COMPOSITION

Richard S. Bloomer

Pooled plaque was collected from the gingi-
val crevicular area of teeth from patients with
known periodontal disease. This pooled plaque
sample was used as an inoculum for an *in vitro*
plaque assay system. Nichrome steel wires were
serially passed through a basal Jordan's medium
supplemented with thioglycolate and cysteine.
Various substrates such as glucose, sucrose, oleic
acid-brij and vancomycin were added to the
modified medium alone or in combination. The
ability of plaque to form under these varying
conditions was determined. The various *in vitro*
plaques were analyzed according to gross mor-
phology and microbial make-up. Plaque formed
in the presence of sucrose, and glucose, and in
the medium with no additive. Adding sucrose
produced more plaque and it adhered more
closely to the wires. No plaque formed when
oleic acid-brij or vancomycin was added to the
medium. Microbiologic analysis of the formed
plaques revealed a qualitative difference with
respect to the predominant microorganisms. The
addition of glucose resulted in a plaque com-
posed of approximately 32% streptococci and
68% non-pleomorphic gram-positive facultative
rods which grew on Rogosa medium and were
catalase negative. The addition of sucrose re-
sulted in a plaque which consisted of 99%
streptococci and 1% gram-positive facultative
rods. When no supplement was added to the
basal medium the plaque consisted of 46%
streptococci and 54% pleomorphic gram-positive
facultative rods which were catalase positive.

PANOREX INTERPRETATION OF MESIO-DISTAL AXIAL INCLINATIONS AND MESIO-DISTAL DIAMETERS OF THE POSTERIOR TEETH

Nelson R. Diers

Sixteen adult human skulls with "normal occlusion" were examined with the Panorex to determine its ability to record the mesio-distal axial inclinations and the mesio-distal diameters of the posterior teeth.

This study indicates that the Panorex can be used as a qualitative and quantitative instrument in the study of the mesio-distal axial inclinations of the posterior teeth. A series of means and standard deviations for each posterior tooth as interpreted by the Panorex was developed. Individual measurements of posterior teeth as seen on the Panorex can now be related and compared to these standards so that they are valuable in the diagnosis, treatment, and evaluation of orthodontic cases.

Further research is necessary, however, to accurately interpret the mesio-distal diameters of the posterior teeth as seen on the Panorex if these measurements are to be used for arch length analysis.

OSSEOUS FINDINGS IN CONTEMPORARY DRY AMERICAN SKULLS

Robert B. Drake

A total of 163 contemporary American skulls of known age, race, and sex were evaluated for missing teeth, infrabony defects, bone loss, bone margin morphology, furca involvements, interseptal contours, and fenestrations. The skulls examined were a portion of a collection of 3300 skulls assembled by Dr. T. Wingate Todd from 1912 through 1938 in Cleveland, Ohio.

Facial fenestrations decreased from 16.12 per cent of all tooth socket sites in skulls 37 years of age or younger to 10.28 per cent in skulls 38 years of age or older, and were found most frequently in female skulls. Fenestrations exhibited a bilateral symmetry, with maxillary first molars most involved followed by mandibular cuspids and bicuspid, maxillary cuspids, and mandibular lateral incisors.

Bone margins were predominately thin. It was found that lip bone margins were most frequently associated with female Caucasian skulls while Negro skulls were more frequently associated with ledge or exostosis bone margins. The distance between the bone margin and the cemento-enamel junction (bone loss) was greater in males than females for all tooth types. Mean bone loss was similar between Negro and Caucasian skulls in the younger division. Caucasian skulls had more bone loss

than Negro skulls in the older age division for all tooth types. The number of osseous defects and the percentage of defects which involved two or more surfaces of a tooth increased with age, with no apparent association to race or sex. The incidence of furca involvements increased with age with available molars in Caucasian skulls involved more often than in Negro skulls.

Results of this study indicate that age, race, and sex, either singly or in combination, had a pronounced effect on every factor studied. Studies which report on anatomical norms or aberrations of the human alveolar process without adequate identification of material examined may be misleading.

A COMPARISON OF MAXILLARY ARCH FORM BETWEEN GROUPS OF CEREbral PALSIED AND NORMAL CHILDREN

Clifton O. Dummett, Jr.

The purpose of this study was to compare the maxillary dental arch form and palatal vault form between 98 cerebral palsied and 76 normal children. All subjects were divided into three categories based on their dental eruption. The cerebral palsy subjects were further divided into the regional classifications of diplegia, paraplegia, hemiplegia, and quadriplegia, and the descriptive classifications of spasticity, athetosis, and mixed.

The maxillary dental arch form was described by an index number which reflected intercuspid width, intermolar width, anterior-posterior length, and degree of divergence of the posterior segments. The palatal vault form was described by the angle of divergence of the palatal walls at an established reference point from a cross-sectional view. All measurements were made from study models and Xerox photocopies of study model cross-sections. In addition, those occlusal discrepancies that were thought to influence arch form, i.e., posterior unilateral and bilateral crossbite, anterior crossbite, anterior open bite, and posterior dental asymmetry were tabulated.

Statistical analysis of the results revealed no significant difference in maxillary dental arch form between the cerebral palsied and normal children. The same held true for palatal vault form. Significant differences did occur between primary, mixed, and permanent dentitions for both cerebral palsied and non-handicapped groups. The results suggest that the neuromuscular handicap has little effect on the form of the maxillary dental arch. On the basis of this study, it appears that there is no particular type of maxillary arch form that is peculiar to cerebral palsy.

A COMPARISON OF THE FORMOCRESOL PULPOTOMY TECHNIQUE AND DYCAL PULPOTOMY TECHNIQUE IN YOUNG PERMANENT TEETH

E. Michael Feltman

The purpose of this study was to compare the effects of formocresol pulpotomy procedures with Dycal pulpotomy procedures in young permanent teeth. These teeth were to have incomplete apices.

Using a *Macaque speciosa* (stump-tail Macaque) twenty permanent teeth with incomplete apical development were selected and experimental pulpotomies performed. Ten specimens were treated with Dycal and ten were treated with the five-minute formocresol technique.

These teeth were then sectioned en bloc for histological evaluation. The time interval between treatment and evaluation varied from seven to 187 days. At three intervals a vital dye was injected to mark the growth and development of the apex as well as the periapical bone. In nine out of ten teeth treated with Dycal, normal growth and development was taking place at the apex and periapical bone as evidenced by the vital dye markings and histological examination. In ten out of ten teeth treated with formocresol normal periapical development was taking place.

Pulpal reactions to Dycal varied from four with no inflammation and normal pulps; one with mild inflammation; one with moderate inflammation; and four with severe inflammation.

Pulpal reactions to formocresol indicated one with mild inflammation and nine with no inflammation. All teeth in this group presented normal vital pulps at least up to and including the 187-day specimen.

Histologically, the formocresol technique appears superior to the Dycal pulpotomy technique in the time period tested.

INDIVIDUALIZED, COMPUTERIZED GROWTH PREDICTION

Jorge Fortuno Buxo

This investigation was conducted to individualize growth prediction by use of regression formulas and therefore supplement the present method of using mean incremental data obtained from mass study.

There were 30 normal individuals, ages 8 to 19 years, 14 males and 16 females. Based on the analysis of serial headplates, the incremental growth change for 12 variables to be used in growth prediction was calculated for each individual for each 3 year period until adulthood was reached. Cephalometric measurements, consisting of 39 variables, were made at the beginning of each 3 year period.

For every age group the following information was fed into a computer:

- a. The known incremental growth change for each 3 year for the 12 variables to be used in prediction.
- b. The known measurements of the 39 variables at the beginning of each 3 year period.

The computer selected from the 39 variables only those which best predicted the already known incremental growth change of the 12 variables to be used in prediction.

A total of 101 regression formulas of a possible 108 were obtained for males, and 102 for females, with a high multiple correlation.

A sign test at .05 level of confidence was used to determine if this regression formula method was significantly better than the mean incremental method presently used at Indiana University.

The results showed that, in the majority of the cases, the regression method proved to be significantly better than the mean incremental method. In none of the cases was the mean incremental method significantly better.

CLINICAL AND HISTOPATHOLOGIC EVOLUTION OF ORAL LICHEN PLANUS

Jose A. Garcia

A total of 329 oral lichen planus cases from which biopsies were received in the Oral Pathology Department from 1951 to 1970 were reviewed. In addition, detailed clinical and histopathologic investigations were made of 29 of these patients who cooperated.

The results suggest that females were affected nearly twice as often as males. The disease was more prevalent in patients of middle age. Most of the patients were Caucasoid. Skin and oral lesions appeared independently; nevertheless, both may eventually be involved in any one case. Oral lichen planus in some cases underwent no appreciable change during periods up to 14 years. Buccal mucosa and tongue were the most frequently affected areas.

Microscopically, vacuolization of the basal epithelial cells and formation of intraepithelial colloid bodies were the first signs of the disease. Hyperorthokeratosis and/or hyperparakeratosis were seen later, as well as areas of atrophic epithelium alternating with hyperplastic epithelium. The granular layer was prominent in areas of orthokeratosis. Acanthosis was seen in about one-third of all cases. Lymphocytes and plasma cells were the predominating inflammatory cells, making up the dense juxtaepithelial band.

A review of the literature concerning malignant changes of oral lichen planus brought 80 cases to light. All of these seemed to have

changed into carcinoma not because of any premalignant potential of the disease, but because of the type of treatment administered. Although reported cases in which lichen planus of the skin changed into carcinoma were not especially sought, 15 were found.

EVALUATION OF INTEGUMENTAL EXTENSION PATTERNS IN AMERICAN-JAPANESE AND ITS COMPARISON TO BURSTONE'S CAUCASIAN STANDARDS

Asaaki A. Horii

This research problem involved the evaluation of integumental extension patterns in American-Japanese and its comparison to Burstone's Caucasian standards to determine if measurable differences exist. From a sample of 15 males and 23 female American-Japanese, cephalometric headfilms were taken. Criteria for sample selection were similar to those established by Burstone. Cephalometric measurements of horizontal and vertical extensions were obtained according to Burstone's method. The American-Japanese sample was statistically compared to the Caucasian sample by the calculation of the student test.

The results obtained showed significant differences between the males and females of the American-Japanese sample in eight of ten extension measurements. When comparing American-Japanese males to Caucasian males, four extension measurements were significantly different. In comparing American-Japanese females to Caucasian females, six extension measurements were statistically different.

These measures which were statistically significant are, most probably, true differences in soft tissue extensions between the two racial groups.

EFFECT OF THE FIRING SCHEDULE ON THE FIT OF PORCELAIN VENEER GOLD CROWNS

Paul Jean

The purposes of this study were (1) to find a method to measure changes in adaptation of the metal substructure of porcelain veneered crowns occurring during each stage of fabrication and application of porcelain and (2) to measure these changes.

Thirty-five similar wax patterns were made in a mold by an injection method. The resulting castings were randomly divided into groups of five. One group was kept as a control, and four groups were treated as follows: one was degassed; another was degassed and received the opaque porcelain; still another was degassed and received the opaque and body porcelain; and the last of these four was subjected to all steps, including the glazing.

A sixth group was subjected to degassing

temperature of 1850°F. instead of the usual temperature of 1925°F., and a seventh group was subjected to all preparation and heating phases of fabrication, but no porcelain was applied. Each casting was placed on its die, embedded in synthetic resin, sectioned, and the spaces under the crowns measured at selected points.

The results of the study showed a fit of the castings which was comparable to those reported in a previous study. There were no clinically significant changes in fit. It was concluded that when the metal substructure is designed as in this study, deformation or creep as the result of thermal changes or porcelain shrinkage does not occur to a clinically significant degree.

CLASP FLEXION AND ABUTMENT TOOTH MOVEMENT WITH REMOVABLE PARTIAL DENTURES

Robert L. Ketcham

Comparisons of the effect of different clasp designs have usually been based on the theoretical probabilities or in vitro investigations. This study tested devices that could easily be used intraorally if their validity could be shown. Microelectronic strain gages were used to monitor clasp flexion and abutment tooth movement on a Class II modification I partial denture on a model with simulated periodontal membrane and mucosa. The forces placed on the three framework configurations used included insertion and up to 10 kilograms on the supplied teeth.

The results show that information derived from clasp flexion cannot be used to predict abutment tooth movement. However, it appears that the tooth movement device used in this study can be modified for intraoral use.

While in the frameworks used a great deal of force was placed by the wrought-wire clasp in comparison to a T-bar clasp as the anterior direct retainer for a free-end saddle, tooth movements for the two clasps were similar. Changing position of the clasp so no undercut was engaged on the anterior abutment of a modification space did not decrease the force placed on this tooth.

AN IN VITRO STUDY OF PLAQUE FORMATION AND MICROBIAL INTERACTIONS

Joseph L. Kleinman

This study compared interactions between various microorganisms in plaque formation, assessed the plaque-forming ability of these microorganism, and investigated those interactions which produced differences (increases or decreases) in the amount of plaque formed in pure and mixed cultures.

Plaque formation of 10 oral microorganisms, *Streptococcus mitis*, *Beta-hemolytic streptococcus*, *Streptococcus sanguis*, *Staphylococcus aureus*, *Lactobacillus casei*, *Lactobacillus acidophilus*, *Actinomyces viscosus*, *Neisseria catarrhalis*, *Candida albicans*, and a diphtheroid (oral isolate #3) was investigated in pure and in mixed culture with *Streptococcus mutans* 6715. A modification of the procedure described by McCabe, Keyes, and Howell was used. After the 10-day period of plaque formation, the gross appearance of the plaque was evaluated and the amount of plaque was determined by a dry weight analysis. *Candida albicans* and *B-streptococcus* increased total plaque formation in mixed culture with *S. mutans*. *Candida albicans* had the greatest effect. *Lactobacillus casei*, *S. mitis*, and *N. catarrhalis* decreased total plaque production in mixed cultures with *S. mutans*, *L. casei* having the greatest inhibitory effect. Further investigation of *L. casei* and *C. albicans*, separately tested in pure and mixed culture with *S. mutans* using a growth rate analysis, suggested that *C. albicans* acted as a secondary plaque-former with *S. mutans*, while *L. casei* inhibited plaque formation due to growth inhibition of *S. mutans*.

GINGIVAL RECESSION AND RELATED FINDINGS IN ADULTS

Thomas C. Lease

Ninety-five clinic patients seeking routine dental care at the Indiana University School of Dentistry were examined for gingival health status, periodontal attachment loss, the presence and extent of plaque, and the presence of gingival recession. The subjects were divided into a "30 to 45 years" age group and a "46 years and older" age group and segment gingival, periodontal, and plaque score means were determined for all segments with and without recession in each age group and for the combined groups.

In the combined age groups, 85.26 per cent of the 95 subjects demonstrated recession on at least one tooth. Segment one was most susceptible to recession, closely followed by segment five, with 66 per cent and 63 per cent of these segments demonstrating recession, respectively. Mean segment gingival, periodontal, and plaque scores were significantly higher for the segments demonstrating recession than for those with no recession. The incidence of dental pathology increased with age, with the older group having more missing teeth, more edentulous segments, a greater percentage with recession, a greater percentage of teeth with recession per subject, a greater amount of recession per tooth with recession, and a greater amount of periodontal pocketing at the point of greatest recession.

A PRELIMINARY STUDY ON THE INFLUENCE OF FINISHING, POLISHING, AND OTHER VARIABLES ON THE DIMENSIONAL ACCURACY OF MAXILLARY ACRYLIC RESIN DENTURE BLANKS

Richard C. Osburn

This study was initiated in order to determine if finishing, polishing, acrylic types, palatal forms, blank thicknesses or stone used in processing cast construction could influence the dimensional accuracy of maxillary acrylic resin denture blanks, and whether any changes found would be of sufficient magnitude to affect the fit, retention or occlusion of the test blanks.

A comparator microscope was used to obtain 1800 measurements of 36 denture blanks at three vertical reference points and between two horizontal reference marks.

These measurements were obtained; 1.) after processing; 2.) after removal of the blanks from the processing casts; 3.) after finishing; 4.) after polishing, and 5.) after storage in distilled water for eight days.

Dimensional changes were found which implicated finishing, polishing, and palatal forms as variables which could affect the occlusion of maxillary acrylic resin dentures.

AN IN VITRO ASSESSMENT OF MICROLEAKAGE OF PIT AND FISSURE SEALANTS USING CA⁴⁵

Jerome J. Rudolph

The effect of thermal stress and storage time on the microleakage of commercial and experimental pit and fissure sealants was investigated. The sealant materials were applied to the occlusal surfaces of extracted human molar teeth. The teeth were stored in water for periods of one week and three months prior to temperature cycling. Additional specimens were stored for the same time intervals but not subjected to temperature cycling. Thermal stressing was carried out at 15° and 45° C at 30 second intervals. Microleakage was assessed by penetration of a radioisotope calcium⁴⁵ chloride.

The sealants containing bisphenol A-glycidyl methacrylate demonstrated excellent sealing qualities. Epoxylite 9075 had only one specimen showing superficial leakage. Of the specimens sealed with Caulk Nuva-Seal, the few isolated instances of leakage were attributed to poor and/or inconsistent sealing of the vials of resin. Of the two filled cyanoacrylates tested, Johnson & Johnson Experimental Formula #2 indicated a trend toward leakage. A similar formula with sodium fluoride did not

leak, which suggests that sodium fluoride may somehow enhance the bonding of this particular cyanoacrylate.

Temperature cycling did not markedly increase leakage or affect retention of the sealant. The unfilled resins were easier to manipulate and showed better flow and "wettability." Differences in manipulation and viscosity did not affect leakage.

In vitro data on leakage appears to agree with reported clinical studies. Continued long-term, well-controlled investigations are needed to determine the effect or lack of effect on enamel maturation, caries arrestment, retention of the sealant material, and finally the efficacy of this group of resin materials.

A COMPARISON OF FIVE METHODS OF TEACHING DENTURE REPAIR TO FRESHMAN DENTAL STUDENTS

Chanpen Sakarin

This study compared the relative effectiveness and efficiency of five methods of teaching a midline maxillary denture repair to freshman dental students. The teaching methods used were: 1) live lecture and demonstration, 2) videotaped lecture and demonstration, 3) live lecture and slides, 4) taped lecture and slides, 5) videotaped lecture, demonstration, and casts (casts of each step of the denture repair procedure were made available to the students during the laboratory period), and 6) control group (no instruction).

Analysis of variance was used to analyze the data, and a significant difference was found in the scores. Individual comparisons between two groups of mean gain scores, mean performance scores, and mean subjects' performance time were made by the Newman-Keul test. The scores of all five teaching methods were significantly greater than the score for the no instruction group. Among the five methods, none could be considered better than any other, based on the three criteria used.

EFFECTS OF RESTRAINT STRESS ON BODY WEIGHT AND ORGAN SYSTEMS OF GERMFREE AND CONVENTIONAL RODENTS

Edmond L. Truelove

This study was designed to study the effects of restraint stress on body weight and organ systems of conventional and germfree adult rodents. Thirty-two Sprague Dawley rats were divided into four groups: Group 1, conventional control; Group 2, conventional stressed; Group 3, germfree control; Group 4, germfree stressed.

The experimental groups were stressed by restraint in the cylindrical chambers which prevented all movement. The animals were stressed for eight out of every 24 hours for 14 consecutive days. The control animals were deprived of all food and water for the same eight hour period each day. The weights of all animals were recorded daily as were the organ weights at autopsy. The adrenals, thymus and spleen were examined histologically. The control groups gained weight while both stressed groups lost. The adrenal glands of the stressed animals were heavier than the controls. The thymus underwent involution under the effects of stress. The spleen exhibited a different pattern in the conventional than in the germfree animal. The results of the study indicate that the response to stress is similar, regardless of bacterial presence, but that the response is somewhat exaggerated in the germfree animal due to its underdeveloped immune system.

PLAQUE-RETAINING CAPACITY OF SOME DENTAL MATERIALS

Michael D. Wise

Dental plaque must be removed to control periodontal disease, and the same is probably true with regard to subpontic tissue health. The purpose of this study was to develop a reproducible method for studying the plaque-retaining capacity of some dental materials, and to use this method to determine whether there are differences in the plaque-retaining capacity of samples of a type III gold, Ceramco metal for veneering with porcelain, vacuum-fired veneering porcelain, and an acrylic resin. A hypothesis was proposed that there were no such differences.

Plaque was collected for 48 hours on specimens (attached to the buccal surfaces of upper posterior teeth) in ten subjects. Plaque was removed in vitro by a standardized technique and the retaining capacity of the materials assessed by a reflectometer method and by planimetry of tracings made from projected photographic slides of stained plaque.

Statistical analysis of the results of this study showed that porcelain and acrylic had lower plaque-retaining capacities than Ceramco metal. There was no difference between acrylic and porcelain, but there was a strong suggestion that porcelain had a lower capacity than type III gold and type III gold a lower one than Ceramco metal. For any particular combination of materials, differences could occur at the start of cleaning, at the end of cleaning, or throughout the whole cleaning range. The method used was found to be reliable but modification of the reflectometer technique is suggested.

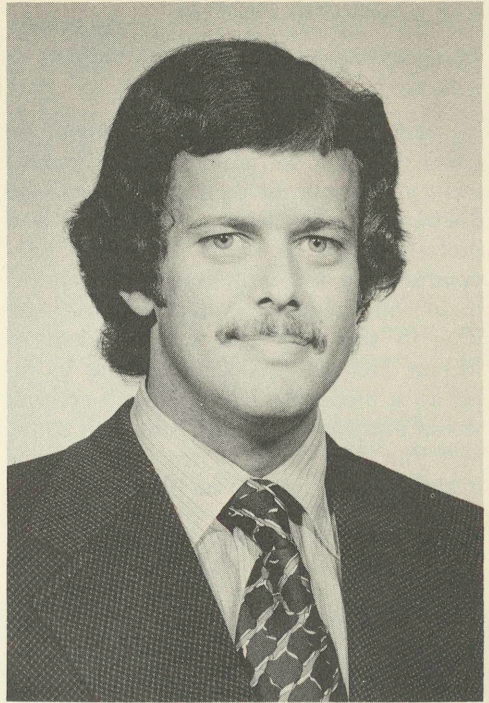
A HISTOLOGIC STUDY OF ENDODONTIC IMPLANTS IN MONKEYS

Jeffrey S. Woodson

This investigation evaluated the histologic response of the apical periodontium to endodontic implants. AH-26 was used as the root canal cement.

A total of 32 apical areas were divided into three groups: 1) Control—intraosseous preparation, canal filled—eight apices; 2) Cement—cement forced into intraosseous preparation past the apex, canal filled with implant cemented to or short of the apex—seven apices; and 3) Implant—intraosseous preparation, implant cemented in place past the apex—17 apices. Specimens were obtained from a short-term animal (36-48 days postoperatively) and a long-term animal (123-149 days postoperatively). The sections were stained with hematoxylin and eosin.

The control apices had the mildest inflammatory reactions of all groups. The inflammatory reaction and foreign body response to the cement and implant groups were more severe in both examination periods and appeared to be directly proportional to the amount of root canal cement in the periapical area. The Vitalium endodontic implants were well accepted, with very little inflammation associated directly with the metal.



Dr. Wilbert C. Campbell, Jr., new instructor in operative dentistry.

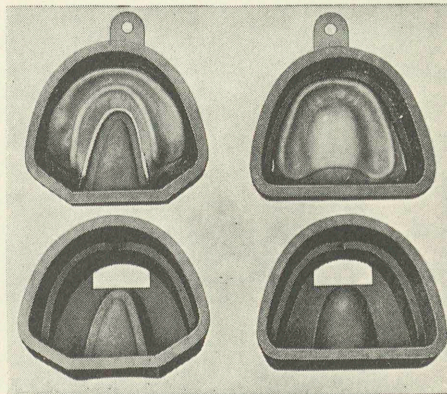
... the new COLUMBIA WORK-MODEL FORMER

Features

- Accurate models
- Controlled dimensions
- Ready for immediate use
- Preserves and protects impression borders
- Mounting plates can now be used

Advantages

- No boxing-in
- No waste of materials
- Cleaner and neater
- Eliminates impression distortion
- Eliminates trimming
- Prevents weak, thin models
- Prevents lost time
- No assemblage of parts



No. 910 outfit consisting of 4 sets of different sizes of upper and lower formers. (Any standard make of impression trays can be used with the outfit.) Price\$20.00

If you do not have our Catalog No. 50, write for your copy today.

COLUMBIA DENTOFORM CORPORATION

"The House of A Thousand Models"—and Home of Brown Precision Attachments

49 EAST 21st STREET

NEW YORK, N.Y. 10010

THE CHANGING PROFILE

(Continued from page 8)

we will glorify science and forget the scientists, that we will magnify government and ignore the men and women who discharge its functions. Institutions and professions are no more creative or purposeful than the individuals who endow them with creativity and usefulness. And it is in this vein that the President of Mount Holyoke College, speaking in reply to a prediction that women's colleges would disappear from the American scene, said that this would be true only for the institutions "which sit on their fat status

quo." His admonition deserves wider application.

I contend that dentistry has as its pillars a moral and scientific foundation as firm as any other profession. However, the discharge of its responsibilities will be realized *only* if it accepts a critical, reflective attitude so that it can envision and react to the new challenges which will be offered. If it does, then the values and rewards are such that it can compete on a scientific and academic level superior to that with which we are presently blessed. The future is an exciting one but its fulfillment is dependent upon a virtuous use of the tools and skills with which the profession is now endowed.



Indiana University at South Bend

Dental Assisting Class of 1972



CONTINUING EDUCATION

(Continued from page 35)

- C.E. 128 April 11 & 12, 1973. Preventive Dentistry for the Daily Practice. South Bend. \$50 (dentist & 1 assistant) \$20 (each additional personnel) Dr. Simon Katz & Staff
- C.E. 129 April 18, 1973. The Management and Patient Public Relations of a Dental Practice. Indianapolis. \$40 (dentist & 1 assistant) \$20 (each additional personnel) Dr. Arthur I. Klein
- C.E. 130 April 18, 19, 20, 1973. Basic Procedures for Success in Periodontal Therapy. Indianapolis. \$200 Dr. Timothy J. O'Leary
- C.E. 131 April 26, 27, 28, 1973. The Pankey-Mann-Schuyler Philosophy & Technique. Indianapolis. \$150 Ohio Oral Rehabilitation Seminar
- C.E. 132 May 3 & 4, 1973. New Methods for Producing Cohesive Gold Restorations. Indianapolis. \$125 (dentist and 1 assistant) Dr. Melvin R. Lund & Dr. Harold E. Schnepfer
- C.E. 133 May 8-11, 1973. Clinical Pedodontics. Indianapolis. \$150 Dr. Paul E. Starkey & Staff
- C.E. 134 May 27-31, 1973. Achieving Orthodontic Goals for Your Cleft Palate Patient. Indianapolis. \$250 Dr. LaForrest D. Garner and Dr. Sheldon Rosenstein
- C.E. 135 May, 1973 (dates to be announced). Diagnosis and Correction of Occlusion. Indianapolis. \$100 Dr. David R. Jordan and Dr. Lloyd J. Phillips
- C.E. 136-138 (dates to be announced) Continuing Education in Spain.
- C.E. 139 July 23-26, 1973. Dental Radiology for Dental Hygienists and Dental Assistants. \$150 Dr. Myron J. Kastle, Dr. Jack D. Carr, and Dr. James F. Matlock.
- C.E. 140 (Dates to be selected by participants). Clinical Oral Surgery. Indianapolis. \$50 Dr. Ronald S. Ping & Staff

STARKEY'S COLUMN

(Continued from page 50)

decade and I have never known a time where there was more upheaval and change and unsureness about what lies ahead for the profession.

I am very satisfied, however, that our school is taking the correct course as

we modify our curriculum and continue to prepare our students for modern practice. At the same time our curriculum is being developed in a flexible way so that we are gearing up to make changes as they seem necessary.

Implementing the Multi-track Curriculum requires the cooperation and support of faculty and students. For example, for this year only, it will be necessary to teach Operative Dentistry to both the first year and second year classes. The faculty members involved have already been working hard and cooperating diligently. With this fine attitude toward the improvement of our curriculum, Indiana University can look forward to maintaining its excellent reputation as one of the leading dental schools in this country.

To conceive and institute a system of professional education to meet the needs of the future requires a faculty with insight, perseverance, and depth of conviction. The task is not easy, but the Curriculum Committee has great confidence in our faculty and administration. We solicit the support of you, our Alumni.

HONORS PROGRAM

(Continued from page 39)

Dr. Leonard H. Garceau, Dr. Robert P. Gebfert, Jr., Dr. John I. Gromer, Dr. Michael V. Gull, Dr. Thomas R. Hickman, Dr. Michael A. MacDonald, Dr. David L. Pitts and Dr. James E. Williams.

The Interfraternity Council plaque for scholarship to (1st Place) Psi Omega and (2nd Place) Delta Sigma Delta. The American Academy of Gold Foil Operators Award for Achievement to Dr. E. Kent Fritch. (This award was not presented at the Honors Program but was awarded later.)

X-L Program Certificates were presented to: J. Logan Ballard, Charles C. Bewick, Dennis D. Bowman, Stephen R.

Branam, B. D. Kimberley Brown, Ronald K. Corley, Gregory A. Crawford, Richard M. Demko, Gary L. Drury, John G. Ellison, E. Kent Fritch, Robert P. Gebfert, Jr., Michael V. Gull, Thomas R. Hickman, Robert L. Holloway, Thomas N. King, Larry L. Lindenschmidt, Edward L. Martin, Michael A. McDonald, Ronald I. Miller, Jr., Larry W. Pampel, David L. Pitts, David M. Plank, Robert E. Sexton, Donald L. Smitha, Richard D. Stackert, Joseph W. Thurston, Charles A. Valentine, Philip C. Walter, James P. Weideman, Alan L. White and James E. Williams.

ALUMNI NOTES

(Continued from page 59)

anapolis, federally funded parent of anti-poverty programs here.

"As the first anniversaries of the clinics approach, Dr. Reuben L. White (1963), full-time director of both, reported neither is accepting new patients, except emergency cases, until their waiting lists are reduced.

"The Brightwood clinic began operation last August and Martindale opened its doors two months later. On opening day, each clinic already was suffering from 'overcrowdedness,' Dr. White said, with waiting lists that stretched easily into this year.

"There appears to be little chance of a let-up in the overcrowdedness, he said.

"The Brightwood clinic's staff includes Drs. John W. Brooks (1971) and Oksana P. Withley (1971), both part-time dentists. At Martindale, Drs. Cardinal M. Casey (1958) and Marilyn K. Cosby (1971) are the part-time dentists.

"Other staff members include Miss Lyndall K. Bradfield, a 1972 Dental Hygiene graduate, who works at both facilities, second-year dental students from Indianapolis Dental School, Neighborhood Youth Corps personnel and graduate dental assistants.

"Because of the overcrowding, the clinics' services are limited to Model Cities

Ryker Dental Depot Inc.

426 No. Alabama
Indianapolis, Ind.

**Office Planning
with
The New Look**

Phone 637-4507
Free Parking

Your Drive-in Supply House

residents, except in emergencies and special groups of senior citizens, those attending mother and infant-care programs and others—all of whom skirt the poverty level as defined by the Office of Economic Opportunity.

“Dr. White said 50 per cent of the patients pay nothing; 5 per cent pay the usual fee charged by local practicing dentists and 45 per cent fall in between. All patients pay on a scale based on income. The 400-plus patient-load at each clinic is equally balanced between children and adults.

“The Education program is the brain-child of Zebedee Christian, 30, one of the IPI students, and Dr. Withey, a Ukranian native and a former dentist with the Indiana Board of Health. Together, they have created a program to which, after their first or second visits, ‘kids come back bringing sisters, brothers, and friends.’

“One of the program’s main features is a ‘Saturday morning brush-in,’ where kids learn proper brushing under the guidance of Christian and Dr. Withey, who use mammoth-sized tooth brushes and huge dental models in their lessons.

“The kids also use disclosing tablets, which, when swished around in the mouth, reveal dirty areas of the teeth missed by a brush. (The tablets are not swallowed.)

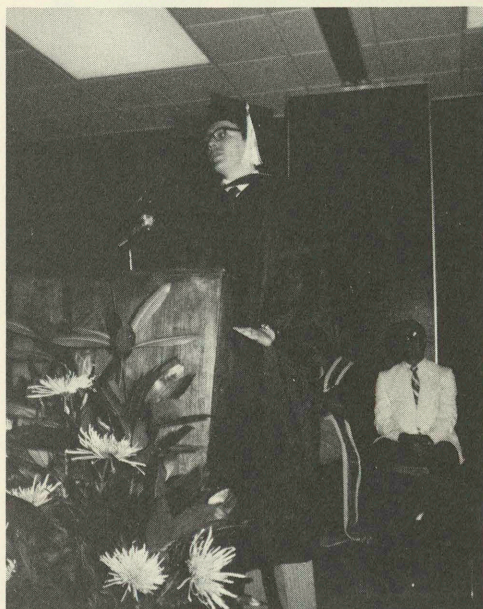
“Information on proper diets, and the proper care and maintenance of teeth and gums, 16mm. slides on dental care, and helpful hints and ‘tours’ around the clinic help the youngsters ‘lose their boogey man’ fears of the dentist and aids in the work of the doctors, who do the anesthetizing, extractions, oral examinations, X-rays, and minor orthodontics.

“The education program is two-fold, because in the course of introducing children to good dental habits, parents help their children continue the practice at home and also begin coming in for dental treatment themselves.

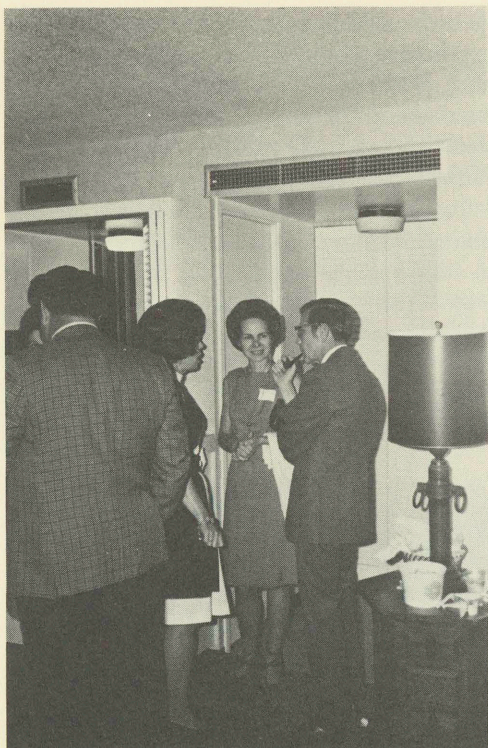
“The overall treatment plan for both children and adults includes preliminary visits for interviewing, oral examinations and outlined treatment plans, followed up by the actual dental work. Among adults,

periodontitis or gum diseases are the major prompters of visits, with tooth decay running a close second. Children-related problems are usually tooth decay, misaligned teeth and split gums and broken teeth resulting from accidents.”

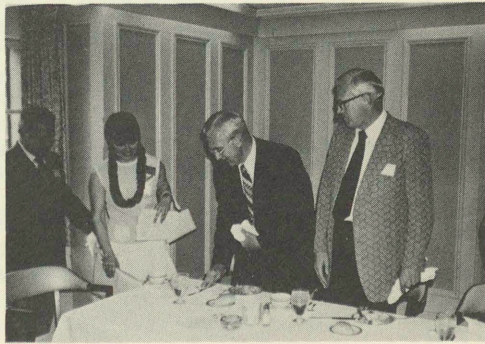
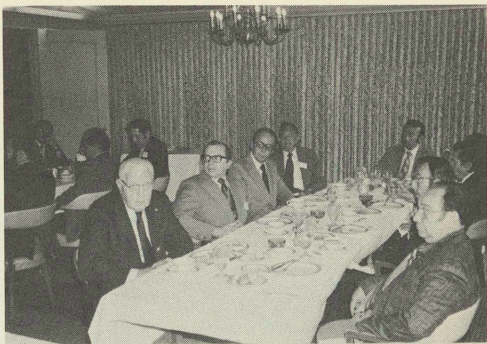
Perhaps reading about what they are doing in Indianapolis will inspire someone to start such a program. I hope so, anyway. And now goodbye until next time. Be good to yourselves and take time out to relax and write me about what you are doing in your busy world.



Commencement Shots



Random shots on these two pages taken at Dedication, Varsity Club Reception, Alumni Meeting and Commencement. Courtesy of Jack Carr.



before you buy
tray covers



**compare
Litton product
excellence
... and the
savings to you!**

Just what you need in Tray Covers — available at savings from Litton! These paper covers are produced in a heavy matte finish with controlled absorbency to meet dental profession needs. Sizes and shapes to fit all bracket tray units in White, Seamist Green or Cascade Blue. Order today from your Litton salesman.

You'll like the top quality and savings on other Litton products, too! Needles, towels, sterilized gauze sponges, prophylaxis cups, prophylaxis paste, fluoride gel, matrix bands, scalars, diamonds, handpieces and more.



"Growth through Service"

LITTON DENTAL PRODUCTS

SOUTH BEND
814 LaSalle East
234-1148

INDIANAPOLIS
1831 W. 16th Street
632-2315

HIGHLAND, IND.
8012 Kentucky Ave.
832-4511

T. M. CRUTCHER DENTAL DEPOT, Inc.

1130 Hume Mansur Bldg.

—P.O. Box 94—

INDIANAPOLIS, INDIANA 46202

634-7515



DENTAL SUPPLIES
DENTAL EQUIPMENT

*Reputation is never completely earned;
it is a continuing responsibility.*

(Auxiliary member Indianapolis District Dental Society)

Indiana University School of Dentistry
(**ALUMNI BULLETIN**)
1121 West Michigan Street
Indianapolis, Indiana 46202

Address Correction Requested

Nonprofit Organization
U.S. POSTAGE
PAID
Bloomington, Indiana
Permit No. 9