

Alumni Bulletin

SCHOOL OF DENTISTRY
Spring Issue 1969



Indiana University-Purdue University at Indianapolis

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Indiana University
School of Dentistry

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R. W. PHILLIPS

DEAN

BETH GRAYSON

ASSISTANT DEAN

Donald McQueen, Professor

Edward Young, Vice-Chancellor

Frank McDonald, Professor

Walter Roper, Jr., Trustee

Indiana University School of Dentistry ALUMNI BULLETIN

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R. W. PHILLIPS

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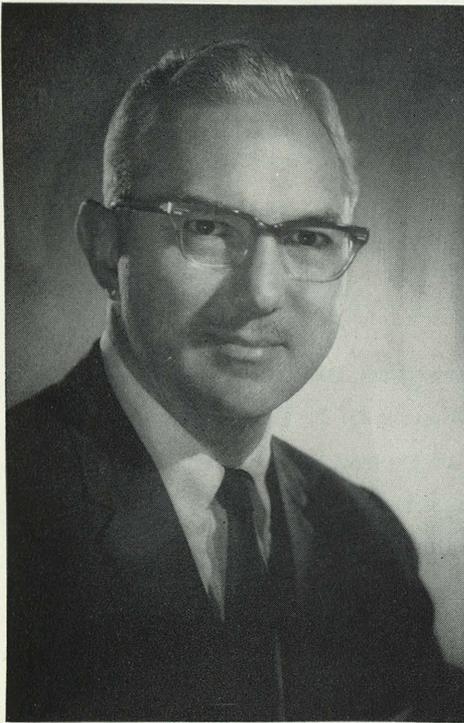
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Robert Bogan, Sec., Treas.

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.

McDonald Appointed Acting Dean



Acting Dean Ralph E. McDonald

Dr. Ralph E. McDonald has been serving as the Acting Dean of the dental school since the appointment of Dr. Hine to the post of Chancellor of Indiana University-Purdue University at Indianapolis. He is well known to the alumni and brings to the position a broad based background in dental education and research, community dentistry and a host of activities in professional and lay organizations.

Dr. McDonald received his B.S. degree from Indiana University in 1942, his D.D.S. from Indiana University School of Dentistry in 1944 and the M.S. from Indiana University in 1951.

Starting as an instructor in Pedodontics in 1946, he rose through the academic ranks to become Professor and Chairman of that Department in 1958. Five years later he assumed the additional responsi-

bilities of Secretary of Graduate Dental Education and became an Assistant Dean in charge of that area in 1964.

Among his special honors are: Fellowship in the American College of Dentists; Diplomate of the American Board of Pedodontics and Chairman of that Board for three years; A member of the Aptitude Testing Committee of the American Dental Association for eight years; a Consultant to the United States Public Health Service and to the Council of Dental Education of the American Dental Association; Member of the Committee on Institutional Cooperation and Committee on Advanced Education of the American Association of Dental Schools; Honorary member of the Brazilian Academy of Dentistry; Member of the Board of Directors of the United Cerebral Palsy of Central Indiana.

He is a member of Sigma Xi, has served as President of the American Society of Dentistry for Children, as well as the American Academy of Pedodontics. Dr. McDonald has been very active in professional dental organizations, having been President of the Indianapolis District Dental Society, is presently Trustee of the Indiana State Dental Association and President-Elect of the Indiana University School of Dentistry Alumni Association. In addition to his administrative responsibilities at the dental school, he is a member of a number of University committees, including the Pharmacy and Therapeutics Committee and the Committees to Study Graduate and Undergraduate Development.

His writings include 40 publications and he is author or contributor to nine texts. This spring his latest book, *Dentistry for the Child and Adolescent*, will be published by the C. V. Mosby Company. A much sought after lecturer, he has appeared on programs in 31 states and lectured in Europe and South America.

What's In It For Me?

by G. E. Coons, Executive Director, Indiana Dental Association

I requested Mr. Gale Coons, Executive Director of the Indiana Dental Association, to prepare this article tracing some of the more important activities of that organization. The ties between our school and the state association have always been close. I am sure that our Alumni join me in wishing Mr. Coons continuing success in his constant efforts to make the association even more meaningful to the dental school and to the profession.

R.W.P.

Every once in awhile I hear a comment or conversation that indicates a member doesn't know too much about his Indiana Dental Association's activities. This used to be a shocker for me; but when you stop to think about it, that is not too unlikely. Dentists have many other activities and interests to occupy their attention—practice, home, family, school, community, etc. The sad fact is that when you hear these comments you will generally find an individual who at the same time doesn't see that his Association really does much for him.

So, with this in mind I appreciate this opportunity to briefly describe some of the highlights of a modern and active dental association (Indiana Dental Association) which, if it is to survive, must conduct itself like any other successful business corporation. It has a governing body with officers and directors, and it has departments (councils and committees) serviced by staff people with responsibilities for getting certain jobs done. These jobs or products benefit members either directly or indirectly. Overlying all of this there *must* be an honest practice of well defined and understood principles of integrity. For a professional health association, this is just as important as the code of ethics are to an individual member. Now, let's take a candid look at some of the Indiana Dental Association's 1969 activities and plans for the '70's.

Organizational Structure

First of all, it is well for everyone to understand something about the *organizational structure* of the Indiana Dental Association. Today it has almost 1900 members which is about 87 per cent of the practicing dentists in Indiana. These members are located in fourteen component societies throughout the state. These societies are represented by one trustee from each society making up the Board of Trustees. The Bylaws provide that the Trustees shall be responsible for the administrative details of managing the Association and making ad interim association policy when the House of Delegates is not in session. By the way, all ad interim policies must be affirmed or rejected by the House of Delegates at its annual session.

The House of Delegates is responsible for all Associate policy decisions. The House is made up of representatives (delegates) from each component society. The number is determined by the number of members in each society (i.e., 1 delegate for every 50 members or fraction thereof). The House meets once a year to formulate association policy and plan for association activities in the coming year or years. The Bylaws provide that the House may meet in special session, but this is seldom if ever used. The House of Delegates and Trustees share the responsibility of selecting association officers who guide and direct association activities. In addition the House elects Indiana representatives (delegates) to the American Dental Association, and the House elects the members of all councils and committees which, as we said before, are like departments of any large, successful modern-day business corporation. Now you say, "so I'm represented. What does this corporation—pardon—professional health association do for me?" This is one of the

most frequent questions either asked or implied.

Group Insurance

Dr Frederick Cantrell, President-Elect of Indiana Dental Association, wrote of advantages derived from belonging to organized dentistry in the 1968 August-September Roster-Yearbook issue of the *JIDA*. He spoke of tangible benefits, for these are the things a member can see or feel. Dr. Cantrell listed comprehensive group-sponsored insurance programs watched over and supervised by the *Council on Insurance*. These insurance programs are especially designed for the dentist's needs, and they are kept up to date. There is some savings to the member in group rates, but even more valuable is the peace of mind that claim service is prompt and accurate. And, if a problem should develop, the member knows his Council on Insurance is ready and able to represent him. Along with this is a related benefit and that is an Association group-sponsored retirement program which can be utilized via the Keogh Act or not. The *no load* feature of this American Dental Association program with The Equitable Life Assurance Company makes it the best such program in the United States.

Continuing Education

Continuing education for the professional person has become one of those invogue phrases responsible for a variety of special interests and projects. Fortunately, for Indiana, dentists and their patients, the resources of the Indiana University School of Dentistry, the Alumni Association and the Indiana Dental Association have been combined to provide excellent opportunities for continuing education. Each year twenty to thirty high quality, short term courses or programs are scheduled in Indianapolis and at centers throughout the state; thus taking the learn'in to the busy dentist. Now, plans have been proposed to lengthen some of these continuing education courses into several weeks of advanced study with an accumulation of

credits. The Dental School and the Association's *Council on Dental Education* along with the State Board of Dental Examiners are looking into this for the '70's. In the meantime the Indiana Dental Association provides scientific meetings, conferences, and scientific publications. Too, the members receive newsletters and bulletins regarding the profession.

Legislation and Government Programs

With the advent of government health programs of one kind or another, Association leaders represent dentistry's interests on state committees and commissions. This goes for both the legislative as well as the executive branches of state government. During the present session of the Indiana General Assembly the *Council on Legislation* organized a system of liaison dentists covering every member of the Senate and the House of Representatives. This effective mechanism of back-home contact makes it possible for the dentist's voice to be heard on issues that are important to the profession.

To augment this activity, the Association is lending a hand in the initial formation of an *Indiana Dental Political Action Committee*. Once this group is formed, outside of the Indiana Dental Association, Indiana dentists will have an organized voice in the political arena. Its initial objective will be to screen candidates for elective office and determine their attitude toward dentistry's needs and desires. The candidates who receive a good rating will be actively supported by the dental community. As political influence grows with respect to dental law and the State Board of Dental Examiners, the need for a loud and clear voice by practicing dentists from all parts of Indiana is most important and cannot be promulgated any too soon if dentistry is going to hope to maintain its leadership role in dental matters!

Prepayment

Methods of payment for dental care is probably as important as any other half
(Continued on page 45)

TV and Dentistry at Indiana University

*By Seymour Friedberg, Director, Medical Educational Resources Program
Indiana University Medical Center, Indianapolis, Ind.*

Why Use TV?

Television offers the instructor a number of advantages which are not available or less useful when other communication media are used.

1. *Image Magnification.* All students get to see the magnified oral cavity or the site of operations or just a single tooth with equal clarity.
2. *Image Distribution.* All students, regardless of location, see equally well the material or site being discussed.
3. *Image Storage and Retrieval.* Recording the televised image onto videotape allows many uses of such images:
 - A. As simple playback for students who have missed or wish to review a lecture.
 - B. As edited materials to supplement lectures:
 1. Items taken from case histories.
 2. Recorded experiments or segments thereof.
 3. Inserts in the form of film clips, slides, charts, x-rays, photographs.
 4. Items taken from recorded guest lectures and visiting faculty.
 - C. Demonstration of specific operative procedures not usually shown.
 1. To present actual patient problems to students.
 2. To record student technical and other skills for later evaluation by instructors.
 3. To present such items as x-rays, graphs, charts, samples of dental materials as test items.
- E. For in-depth studies of specific case histories.
 1. Pre-and-post operative anatomy.
 2. Tissue, bone, and other relevant slides.
 3. Actual operative procedures.

- F. *Immediacy of Access.* Television plus "talk-back" capability of a viewing audience—regardless of its distance from the originating studio—means an institution has a new and highly effective way of carrying on continuing education all over a state or a region.

Where and When TV Got in Dental Education

According to Romano (1), dental schools acquired and used TV for teaching purposes as far back as 1952 when the School of Dentistry at the University of Detroit started out with borrowed cameras and monitors. The School of Dentistry of Loyola University followed in 1953 and the School of Dentistry of the Medical College of Virginia in 1954. After that TV was picked up rapidly and by 1963, 30 of the 48 dental schools in existence at that time had equipment and were using it to some extent.

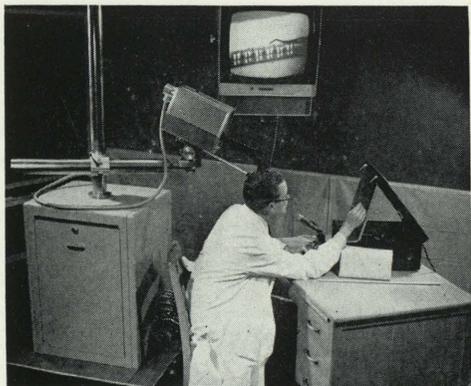
Apparently Dr. Romano was not aware of the program at Indiana University School of Dentistry. An RCA "TV EYE" was purchased on May 5th, 1954 and op-



The original RCA "TV Eye" Camera and Associated Equipment (CIRCA 1954).

erated by the intrepid Dick Scott, Head of Dental Illustrations. This early (and by present-day standards rather primitive equipment) was used in the departments of operative surgery, periodontics and orthodontics. Cables ran out of the window on one floor and came back in via the window on a lower floor. Neither President Wells nor the insurance company were happy with this direct approach for getting image and sound from "here" to "there" and this mode of operation did not last very long. On Wednesday, May 18th, 1955, Mr. Scott used the TV equipment in the *Television Demonstration Clinics* portion of the Scientific Program of the annual meeting of the Indiana State Dental Association. Five presentations, including live patients, were made by eight members of the dental school faculty. This time the cables ran from Room 112 into the hall where the monitors were set up and there was no adverse feedback. For many of the dentists present this was the very first exposure to the potential of TV in dental education.

Somehow the "TV EYE" never really caught on at Indiana—perhaps it just was not capable of delivering the crisp, sharp close-ups that dental educators had come to expect of conventional photography—perhaps the equipment just got in the way at times because the longer focal length lenses were not immediately available. Regardless of the reasons, the "EYE" was set aside to gather dust.

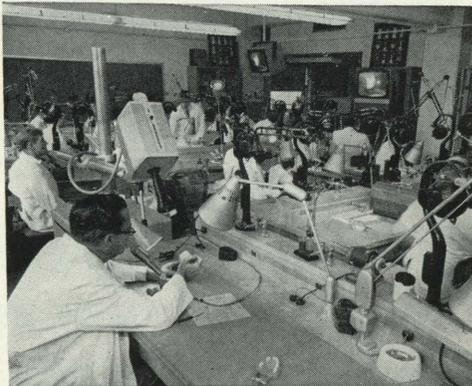


Dr. Drexel Boyd demonstrating the TV camera and the rear screen slide system.

Television at the Indiana University School of Dentistry

Nonetheless the potential of this new medium was further explored by Drs. Arthur Klein and Grant Van Huysen and Mr. Richard Scott. These gentlemen used the "free time" made available to them by TV station WISH (channel 8 in Indianapolis). They carted microscopes and other gear into the studio and experimented with camera-scope setups. Some rather sophisticated split-screen apparatus was developed in these early experiments. There was also cooperative experimentation going on with the TV engineering staff of the Sarkes Tarzian plant in Bloomington, Indiana. By July of 1963, Dr. Arthur Klein had published an article on *The Television Microscope in Dental Research* (2). In December of 1963, Mr. Dwight MacPherson came to the School of Dentistry as its Television Electronics Technician, and work was carried forward with new emphasis and direction.

A new teaching tool was first put to use in January of 1965 by Dr. Drexel Boyd and his colleagues in the dental labs on the fourth floor of the Medical Building. A TV camera chain designed by Sarkes Tarzian was employed to bring images—under the control of the instructor—to eight TV monitors placed about the two divided lab areas. The camera was constructed to be used "over-the-shoulder" fashion and gave students



Dr. Boyd, his teaching TV camera setup, and his student class in the dental laboratory (CIRCA 1955).

correct orientation in the manipulation of objects and instruments. The TV system included a zoom lens and a means whereby 2 x 2 slides could also be projected onto a rear screen from which images could be fed into the camera and shown throughout the laboratories. Combined with a public address system the worth and value of TV as a teaching accessory became readily apparent and its use continues to this day.

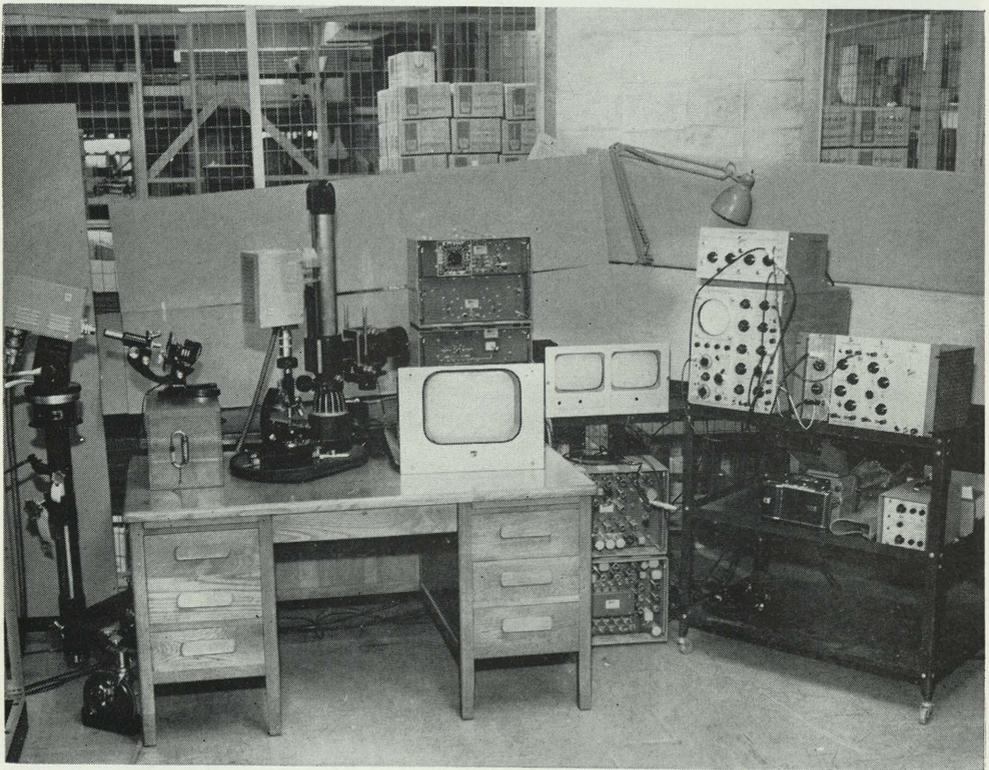
In the period 1963-1968, at least six articles were published by the faculty of the School of Dentistry in the realm of teaching and research involving the use of television (3-8).

The Medical Educational Resources Program

The Indiana University School of Medicine established its Medical Educational Resources Program in August of 1966. By February of 1967, M.E.R.P. had acquired TV equipment and had established

connections via cable and microwave with the Bloomington campus of Indiana University and the Purdue campus at Lafayette. The Director of M.E.R.P. had been invited to address the audience at the Second Dental Teaching Seminar held at Spring Mill in the fall of 1966. A number of dental faculty and graduate students expressed an interest in what M.E.R.P. had to offer and many did follow up their initial explorations.

Dr. Robert Musselman (then a graduate student) was probably the first to cross Michigan Street and work with M. E.R.P. He recorded instructional material for the training of dental assistants in the tracing and measuring of cephalometric x-rays. Equipment breakdown was frequent and frustrating in those days (it never did live up to the bright promises of the local sales area manager) and Dr. Musselman never did get to redo and continue his experiments. However, even his preliminary results were rewarding and he has continued to use television in the



Early TV camera-microscope apparatus setups in the Sarkes Tarzian Plant in Bloomington.

presentation of table clinics to the Alumni Association and in his work at Riley Hospital where he uses the equipment owned by Pediatrics Department.

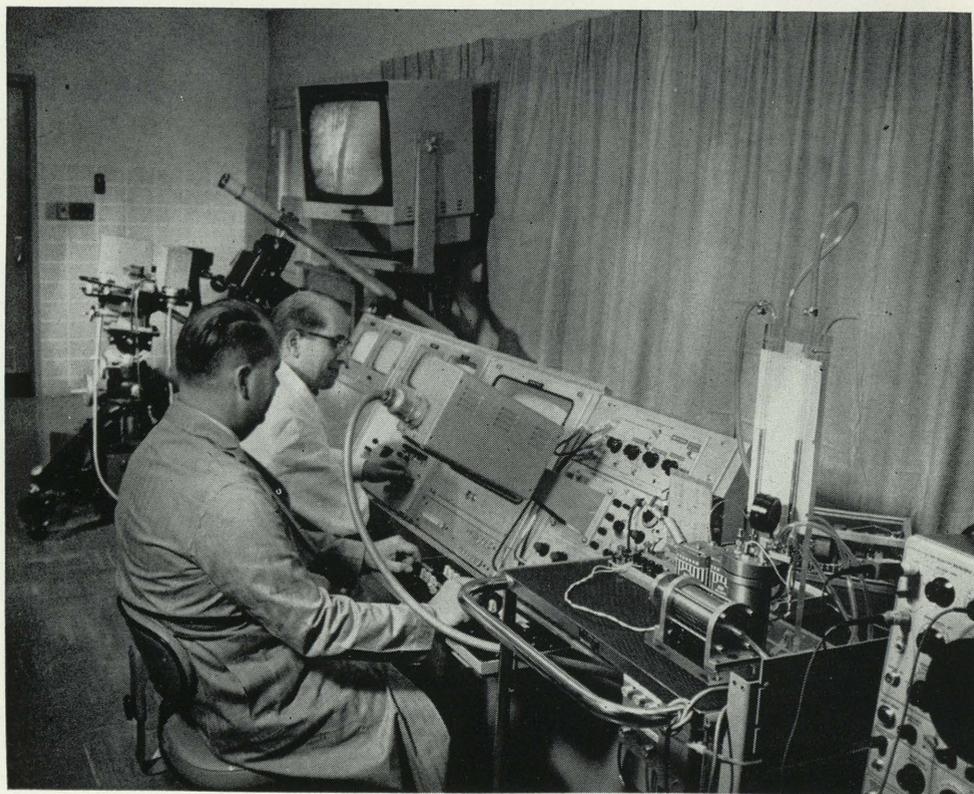
Dr. Varoujan Chalian made use of M.E.R.P. closed circuit television in the presentation of his campus course in Maxillofacial Prosthetics in 1967, 1968, and he plans to do so again in 1969. The TV camera was used in the tiny operatory in Rotary Building and his audience viewed live patients on monitors in an adjacent room. A microphone in the viewing room enabled questions to be sent to Dr. Chalian who was able to reply and demonstrate further on the spot.

At least ten members of the School of Dentistry have used M.E.R.P. television facilities in the past two years. The interest of the dental faculty is evidenced in their requesting Messrs. Seymour Friedberg and Elmer Friman (Director and Producer-Director of the TV Facility respectively) of M.E.R.P. to make a pre-

sentation on and about TV in professional education at the Fourth Teaching Seminar held at Spring Mill in the fall of 1968.

Off-campus Uses of Television in Dental Education

In the last year the four state universities and the Medical Center formed the Indiana Higher Education Telecommunications System. In all, there are presently five points of television origination and fourteen points of television reception. At all points there is talkback via telephone lines. In 1968 and again this year, Drs. Paul Starkey and Myron Kasle taught the *Introduction to Dentistry* course simultaneously to classes in Indianapolis and Ft. Wayne via live TV and prerecorded videotapes. Class grades were virtually equivalent in the two groups (about 35 students in each class). On Thursday, October 10, 1968, Dr. Starkey presented "Four-Handed Dentistry at the Chair" via television to a group at Ft. Wayne



Dr. Arthur Klein and Mr. Dwight MacPherson at their TV research console.

as part of the program for the 1968 Conference on Dental Health.

An all-day conference on *Orthodontics for the General Practitioner* was put on the air on January 29, 1969 by Drs. Charles Burstone, LaForrest Garner, and Stanley Braun. Viewing audiences were in Lafayette, Terre Haute, and Ft. Wayne. Again the presentations were part live and part prerecorded. Feedback from the participant viewers indicates such programs are worthwhile and desirable. It is anticipated that more such sessions will be planned and presented via television.

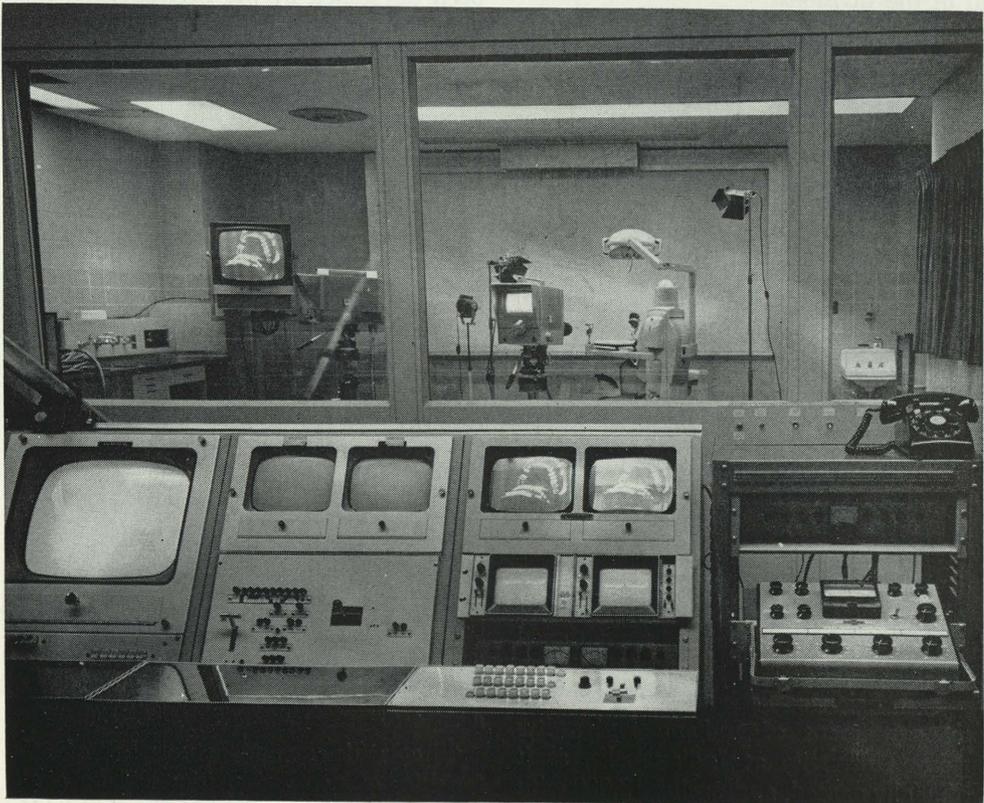
Television Now and in the Near Future at the School of Dentistry

Last year M.E.R.P. brought video and audio cables from the Medical Science Building to the School of Dentistry. Mr. MacPherson has brought these cables to his domain on the fourth floor of the dental school. From there they run to

the lecture rooms on the first floor. Room 114 has been fitted with six color monitors and Room 115 has been fitted with a large rear screen which can show television or conventional slide and film images. The room next to the fourth floor control center is being fitted out as a small studio.

To make all of this function, the School of Dentistry has acquired two Sarkes Tarzian television studio camera chains. Hopefully a film camera chain will be acquired in the near future—an addition which will greatly expand the teaching capability of the new system. Even now it would not be overly difficult or expensive to add television to any existing classroom or lab and detailed plans have been developed for making television teaching possible in the proposed dental school addition. In this new building it is hoped that some rather highly sophisticated

(Continued on page 46)



The new TV studio showing the recently acquired equipment. Photo taken from the TV control room on the fourth floor of the dental school.

Chancellor's Comments . . .

Because of the rapid growth and development of Indiana University, particularly on its various regional campuses, it has been generally agreed for several years that a reorganization of administration of the University was mandatory. Consequently, the Board of Trustees on July 1, 1968, approved an administrative structure which included a Chancellor to administer all of the Bloomington divisions of Indiana University, another Chancellor for the Indianapolis divisions, and eventually Chancellors for all of the other regional campuses. The Board of Trustees, the President of the University, and his staff, retain the overall responsibility for all of the divisions.

The new Indiana University at Indianapolis included the Schools of Medicine, Dentistry and Nursing at the Medical Center, Indianapolis Law School, Downtown Campus for general undergraduate studies, Graduate School of Social Service, Normal College of the American Gymnastic Union, and Herron School of Art. Total enrollment for this year for all of these divisions is approximately 9200 and there are approximately 1200 faculty members, including 500 volunteers who teach without compensation.

It was also generally agreed that close coordination between the Indianapolis units of Purdue University and those of Indiana University was desirable. Early in 1969 the Boards of Trustees of these two universities agreed to merge the Indianapolis divisions into one general organization of ten divisions, the eight mentioned above and the Purdue Schools of Engineering and Science Technology. Now the total enrollment of Indiana University-Purdue University at Indianapolis, as it is officially named, approaches 13,000 with some 1600 faculty members. These divisions are under the direction of one Chancellor appointed by the Board of

Trustees of Indiana University, and all long-range planning for the Indianapolis units is to be the responsibility of Indiana University. Eventually all of the divisions will be located on West Michigan Street near the Medical School. Dr. Jack Ryder, formerly Director and Dean of the Schools of Engineering and Science Technology of Purdue, has been appointed as Vice Chancellor.

All individuals who have studied the educational needs in this state and Marion County agree that this area deserves and must have a strong state-supported university. Over ten years ago, the Indianapolis Star published a "master plan" which had been developed by the Metropolitan Plan Commission that included development of a joint Indiana-Purdue University Campus adjacent to the Medical Center. Since that time progress toward this goal has been slow, although in recent months the pace has definitely accelerated, doubtless due to the interest and activity of the Marion County legislators in establishing a new independent State University of Indianapolis.

We plan to develop a multi-purpose, urban institution of public higher education for the Indianapolis metropolitan area and for the state. The development will be in four orderly phases as we build upon existing strengths. Each of the phases will include specific actions that work toward the institutional status and service that all desire. I believe that the plan as adopted will give residents of this area more and better educational opportunities, sooner and at less cost, and with no sacrifice of quality, than through establishment of a separate state university.

The wide-ranging strengths of the faculties of two universities will be available to reinforce IU-PU-I's developing programs, but even with large sums of money, it would be impossible to expand

the faculties in Indianapolis with sufficient rapidity to create an "instant university" of comparable quality. For some time to come, we must draw upon the special library and laboratory resources of the two universities. We simply do not have enough of these facilities to avoid serious problems of accreditation. Eventually, as the IU-PU-I campus develops, it can stand alone; But a separate university would have to acquire its own reputation and this takes time and would require major expenditures on an immediate basis.

There are also extremely important, although intangible, strengths accruing from affiliation with the parent universities, both of which have earned the prestige of national and international renown. Purdue University is now celebrating its centennial year, and I.U. will observe its one-hundred and fiftieth birthday next year. Because of prestige and tradition,

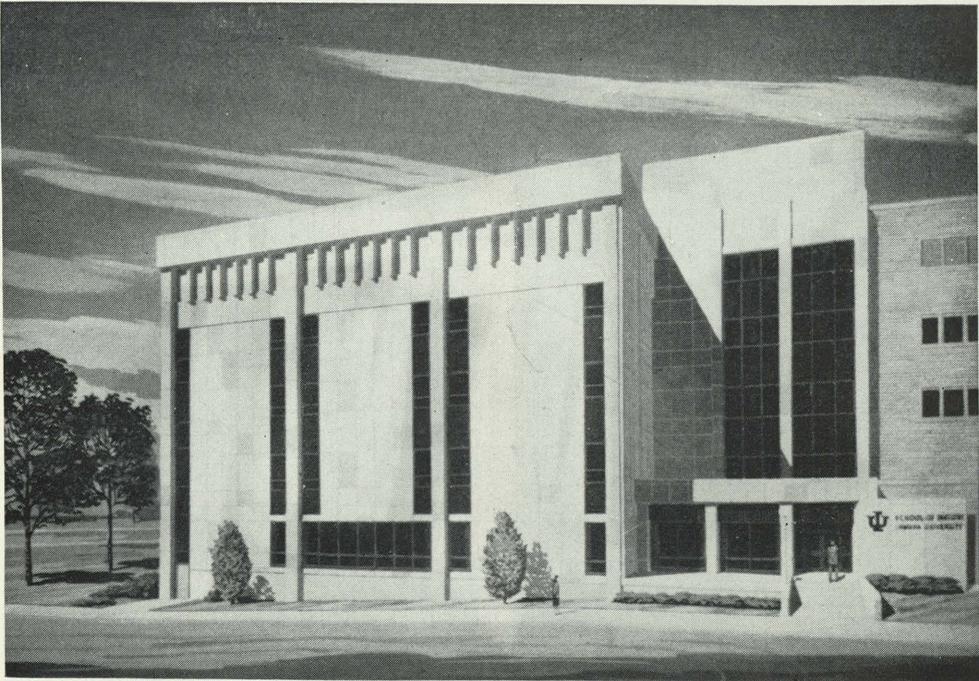
recruitment of faculty is now much easier than it would be with a new and separate university. Indiana's two Big Ten universities are magnets for excellence, and Indianapolis should share that magnetism.

Another important asset both universities enjoy is alumni loyalty. More than 19,000 I.U. alumni and some 5,400 Purdue alumni reside in Marion County, and their loyalties are to their alma maters. We can assure these alumni we want and need their support, and want to continue to serve them. The unification plan as approved by the two parent universities will result in an orderly evolution toward the great university in Indianapolis which is needed and deserved.

Maynard K. Hine

Chancellor

*Indiana University-Purdue University
at Indianapolis*



An architect's drawing of the East entrance to the new addition to the dental school. The view is of the patient's entrance which will lead directly into a large waiting room in the Oral Diagnosis—Oral Medicine admissions area.

A tower interposed between the new and the existing clinical areas is the main verticle traffic-way, containing a bank of elevators, patient waiting accommodations on each floor and receptionists for each department.

Notes from the Dean's Desk . . .

Ralph E. McDonald, Acting Dean

Only a few of our Dental School faculty members have worked with a dean other than Dr. Maynard K. Hine. One faculty member commented recently, "It is hard to imagine the role of the Dean being played by anyone else." This thought was shared by all. Naturally, there was much concern and anxiety among the faculty members when Dr. Hine announced that he had accepted an even greater challenge, the appointment as first Chancellor of Indiana University at Indianapolis. The faculty and staff reacted to the announcement with a conviction that they would carry on the fine programs directed for so long by Dr. Hine and make the Dental School one of the truly outstanding divisions of the newly created I.U.I.

I would like to thank everyone on the faculty and staff for the support they have given me during my assignment as Acting Dean. They have demonstrated, daily, their loyalty to the School and have done many things to lighten my load during the interim period.

It was announced on January 28, that the Board of Trustees of Indiana University and the Board of Trustees of Purdue University had agreed to the merger of the facilities in Indianapolis and the formation of a joint operation in Indianapolis, known as Indiana University-Purdue University at Indianapolis. The resolution sets forth an orderly, long-range plan through which I.U. and Purdue propose to work together to develop programs of higher education that will effectively meet the needs and aspirations of the Indianapolis metropolitan area and of the State of Indiana. The plan envisions building upon respective strengths of the two institutions, as we move together toward an increasing degree of academic autonomy, while still retaining administrative flexibility.

Our long-range plans for dental education in Indiana include the expansion of

dental auxiliary education and several additional hygiene programs and dental assisting programs at regional campuses. Dr. John W. Ryan, Vice-President and Dean for Regional Campuses, has announced an allocation of funds to finance a third Dental Hygiene Program at the Indiana University South Bend Regional Campus. Dr. Ralph G. Schimmele, Director of Dental Auxiliary Programs, Regional Campuses, has expressed optimism that the new Program at I.U.S.B. can be started in September, 1969. The members of the St. Joseph County Dental Society and the North Central Dental Society have reaffirmed their support of the new Program and have generously contributed financial aid to it.

Dr. David F. Mitchell, Professor of Oral Diagnosis, became the Editor of the *Journal of Dental Research* at the conclusion of the meeting of the International Association for Dental Research at Houston, on March 21. The *Journal of Dental Research*, which has more than 3,000 subscribers, was the first journal devoted to the publication of dental research and associated arts and sciences and has been published continuously since 1919. Dr. Mitchell has been an Associate Editor and member of the Publication Committee since 1958. This prestigious appointment will bring considerable recognition and honor to Dr. Mitchell and to Indiana University School of Dentistry.

I am hopeful that many of our faithful alumni will plan to attend the Fall Conference in Bloomington, September 25-27, 1969. The Fall Conference continues to attract a larger number of dentists and their wives each year and those who attend the scientific lectures and social events agree that it has been a worthwhile experience that they will support this program on an annual basis.

Dr. David Bixler, Associate Professor of Basic Science and Medical Genetics, has

been granted a sabbatical leave and has accepted an assignment to the laboratory of Dr. Paul Fough-Anderson in Copenhagen, Denmark, for the period October 1, 1968 to July 31, 1969. Dr. Fough-Anderson is a recognized world authority on the hereditary aspects and treatment of cleft lip and cleft palate. Mrs. McDonald and I had the privilege of visiting with Dave and Gloria Bixler and their children in Copenhagen on our return from the Soviet Union in November. I am pleased to report that the Bixlers are enjoying very much their many new experiences in Denmark and Dave is deeply involved in his research project.

Dr. Ralph W. Phillips, Distinguished Professor of Research, was given the additional title of Assistant Dean for Research by the Board of Trustees on December 1, 1968. Dr. Phillips will continue to play an active role in teaching and research, as related to the Department of Dental Materials. In addition, he will assist the members of the faculty in developing research projects and help them identify sources of funding for their per-

sonal and departmental research. During the twenty-five years that Dr. Phillips has been a member of the faculty of Indiana University School of Dentistry, he has published more than 150 scientific papers, written four books, and contributed to seven textbooks. In 1968, Dr. Phillips served as President of the International Association for Dental Research. Other past honors include the Callahan Award of the Ohio State Dental Association in 1968, the Wilmer Souder Award, the Research Award of the Chicago Dental Society on two occasions, and the Gold Medal Research Award of the Alumni Association of Columbia University.

I am pleased to announce that Miss Joan Catherman will join our faculty on July 1, as Director of the Dental Hygiene Program. Miss Fisk, who has been the only Director of the Program for the past nineteen years, has agreed to delay her retirement and remain as Program Coordinator, and as advisor on dental hygiene curriculum. Miss Catherman brings to our Program a great deal of experience

(Continued on page 46)



Dr. Ralph W. Phillips, Assistant Dean for Research.



Miss Joan Catherman, new Director of Dental Hygiene.

How to "Handle" Secondary Impression Trays

Malcolm E. Boone, Assistant Professor of Complete Denture

A functional wax handle on a secondary impression tray should look very much like an occlusion rim as far as the occlusal and incisal height and the thickness of the posterior occlusal surface are concerned. It should also closely resemble the anterior segment of the completed denture, being just a little thicker than the anterior denture teeth. The occlusal plane on the lower wax rim or wax handle and occlusion rim should be no higher than the retromolar pad. The reason is that when secondary impressions are obtained, muscular action must be as functional as possible. Static impressions may sometimes be acceptable but impressions which take into account the action of the muscles—that is, the physiology—will give a better fitting and more stable complete denture which is more acceptable to the tissues.

Let us first discuss the mandibular secondary tray handle. After appropriate corrections have been made for overtension or undertension, certain muscle activity or function should be considered. This includes the activity of the genio-glossus muscles and the tongue itself, and of the freni, the buccinator, and the orbicularis oris. Obviously, it is difficult to make an accurate static impression with all of this activity going on.

The action of the tongue is a case in point. Many authors contend that the tongue should be placed high and forward during the making of the impression. This reasoning probably stems from the fact that for many years the tray handles on the secondary impression trays were merely little stubs of metal or resin in the incisor area which projected out toward the lip. In such a situation, the tongue would have to go up; it could not come forward. Overactivating the genio-glossus muscles, as when the tongue is extended anteriorly to touch the upper lip or posteriorly to touch the soft palate, results in a shorten-

ing of the lingual extension of the anterior segment of the denture base.

On the other hand, having the wax handle in the form of an occlusion rim makes it easy for the patient simply to moisten the lower lip. It is not necessary to ask him to be a gymnast with his tongue movements. Bringing the tongue to the corner of the mouth and sliding the tip around to the opposite corner are the only actions that are of concern during impression-making. When the tongue is moved to the corner of the mouth, it also activates muscles in the opposite retromylohyoid area.

The buccal musculature, starting at the retromolar pad and going clear around to the opposite retromolar pad, is brought into play by asking the patient to perform a "drawing action" on your finger, as if he were smoking a cigarette. The sounds *Ee*, *Oo*, *Ah* also are associated with definite muscular activity, especially the *Ee* in the orbicularis oris or in the anterior segment of the mandibular denture area. The patient can utter these sounds if you steady the secondary tray by placing your fingers in the anterior area. Also, with fingers in the molar area, you can ask the patient to bring the lower lip up over the wax and this again activates the musculature in the anterior segment. If the handle were protruding out over the lip, the lip could not be activated in an upward direction.

In the making of the maxillary impression, the occlusion rim handle again has the same labial and lingual contour and the same incisal length as the finished denture. The patient is once more asked to "draw in" on the finger which is retaining the maxillary secondary impression tray. The pressure is held gently, and passively, right in the center of the impression tray. "Drawing in" on the finger

(Continued on page 47)

The Scope of Continuing Dental Education

Robert H. Derry, Director, Continuing Education

As was announced in the last Bulletin, Dr. Robert Derry has been appointed Director of continuing education and has become a full time member of the faculty. A graduate of the Medical College of Virginia, Dr. Derry joined the Indiana faculty in 1945. He has received innumerable honors, including Fellowships in both the American College of Dentists and the International College of Dentists and several offices in the American Association of Dental Schools. Well known by our Alumni, Dr. Derry brings to this post a fund of knowledge and enthusiasm. With this appointment most surely the dental community will be even better served in their needs in continuing education.

R.W.P.

There is every indication that continuing education will continue to be an important factor in dental practice. The dental profession through its professional societies (Bylaws and Principles of Ethics) and dental schools has supported the proposition that "every dentist has the obligation of keeping his knowledge and skill freshened by continuing education through all of his professional life."

Now, it seems, more than ever before, we hear about the need for continuing education. Last May the Indiana Dental Association House of Delegates established a Council on Dental Education with one of its main objectives being "to study and advise the Indiana State Board of Dental Examiners and the Indiana University School of Dentistry on matters of continuing education." Following this action the American Dental Association House of Delegates in November, 1969 passed a resolution urging state dental associations, in consultation with state boards of dentistry, to develop mechanisms to foster the continuing education of dentists licensed in their jurisdiction. From other states we hear about government agencies outside of the dental profession forcing

rules and regulations, regarding continuing education requirements, onto the dental practitioner.

Fortunately in Indiana we have had the good leadership and strong cooperation between the Indiana Dental Association, Indiana University School of Dentistry, and Indiana State Board of Dental Examiners which provide and plan for the continuing education needs of Indiana dentists and his patients. Representatives of all these groups will meet this spring and work on the guidelines as urged by the American Dental Association House of Delegates. These will be presented to the Indiana Dental Association House of Delegates for consideration and follow-up action.

The need for continuation of study and clinical experience in the techniques and armamentarium of dentistry is an established fact. Indiana University School of Dentistry presents herein a program of continuing dental education for the dentist and his auxiliary personnel. These courses will be designed to integrate new techniques and research developments with accepted dental practice, in order to give the dentist insight and experience as he advances in his continuing education. Short intensive courses, as well as longer more comprehensive courses, are offered to permit the student to partake of them in his available time. With the introduction of Medicaid to our state, continuing education could be made compulsory to the profession, as is the case in some states. It is our hope that the dental profession in the state of Indiana will be a jump ahead of any type of compulsive training and run the programs as it sees fit.

Indiana University School of Dentistry, in cooperation with the Indiana Dental Society and the Indiana Dental Alumni Association, plans to bring the dental

profession and its assistants programs of their desires. This will be done by use of television, movies, slides, and using local speakers and guest lecturers. A booth on continuing education will be at the Indiana Dental Meeting in May, at which time dentists and their personnel can fill out a survey requesting programs of their choice.

As Director of Continuing Education, I hope that we can all work together and place Indiana high on the list for courses and participation in the United States.

Continuing Education Course Offerings—1969-1970

September 24

Business Law for the Dentist
Indianapolis

October 1

Design, Operation and Management of a Dental Office

Closed-Circuit television
Indianapolis (origin)
Lafayette, Terre Haute,
Evansville, Fort Wayne

October 8

Preventive Dentistry
Indianapolis

October 22

Periodontics
South Bend

November 4

Efficient Utilization of the Chairside Dental Assistant
Indianapolis

November 12

Endodontics of Value to the General Practitioner
Indianapolis

November 19

Dental Materials for Dental Assistants
Indianapolis

December 3

**Immediate Complete Dentures:
Two Approaches**
Indianapolis

January 7, 14, 17, 21, 28, February 4

Periodontics
Indianapolis

January 13

Efficient Utilization of the Chairside Dental Assistant
Indianapolis

January 17

Clinical Program for Dental Laboratory Technicians
Indianapolis

January 21

Symposium on Gold
Indianapolis

January 22, 23, 24

Post Graduate Course in Operative Dentistry
Indianapolis

February 11

Modern Practices in Removable Partial Prosthodontics
Indianapolis

March 11

Orthodontics for the General Practitioner
Closed-Circuit television
Indianapolis (origin)
Lafayette, Terre Haute,
Evansville, Fort Wayne

April 1

Precision Attachments
Indianapolis

April 15

Modern Concepts in Dental Materials Important to Dental Assistants
Fort Wayne

May (dates to be announced)

Diagnosis and Correction of Occlusal Problems
Indianapolis

May 20

Contemporary Operative Procedures
Indianapolis

June (dates to be announced)

Diagnosis and Correction of Occlusal Problems
Fort Wayne

Additional course offerings will be announced at a later date.

Dean Buhler Elected Officer

Dr. John E. Buhler, Dean of the new School of Dentistry at the Medical College of South Carolina, has recently been elected secretary-treasurer of the Southern Conference of Dental Deans. A graduate of the class of 1935 and former faculty member at Indiana University School of Dentistry, Dr. Buhler was one of the original group of deans who organized the Association.

Table Clinics Are "In" at Alumni Fall Conference

A significant contribution to the success of the Annual School of Dentistry Alumni Association Fall Conference this year, as last year, was the program of table clinics and exhibits. Organized initially in 1967 when Dr. Joseph C. Muhler was president of the Association, the clinic and exhibit program in only two years has become one of the anticipated highlights of the conference.

The first year seventeen table clinics were presented by practitioners, dental school faculty, and dental hygienists. The many favorable comments which were heard indicated that the clinic program was highly successful and enthusiastically received. One person was very much impressed, and his interest in the program led to the establishment of awards for the outstanding clinics of this year's conference, and for future conferences.

Dr. Charles F. Pope, Jr., graduated from Indiana University School of Dentistry in 1943. He presently practices general dentistry in Cincinnati. He is a loyal Alumnus, and regularly attends the Annual Fall Conference. After seeing the clinics at the 1967 conference, Dr. Pope decided that they were such an asset he would provide awards to be given to the outstanding table clinics each year. He informed a classmate, Dr. Paul Starkey, who is on the Board of Directors of the Association, and Dr. Starkey informed the Association officer of Dr. Pope's wishes.

Thus, at the 1968 Fall Conference, according to Dr. Pope's wishes, clinics were judged to select the outstanding presentation. Dr. Pope decided to give two \$25.00 awards, one for the best student clinic and one for the best clinic by a practicing dentist. Because a majority of the clinics have been presented by faculty members of the dental school, and some by dental hygienists, it was agreed that the categories for awards would be (1) graduate or undergraduate students, and (2) practicing

dentists, faculty members or dental hygienists.

The most important criterion for judging was the type of information which the clinic presented. It is Dr. Pope's wish that information which is practical and useful to the general practitioner be considered the prime judging point.

The Table Clinic Chairman suggested that additional items such as effectiveness of presentation, and organization of material should also be considered in the judging. However, since some clinics were elaborately endowed with electronic devices and special equipment, and since all the clinicians did not have equal availability of such aids, it was decided that use of special equipment or devices would be disregarded in judging unless the effectiveness of the clinic would be totally lost without the use of such equipment. In other words, the use of fancy gadgetry to present material is not as important as the quality of material being presented.

The judges this year, Drs. David McClure, Charles Bewick, and Stan Hyslop, did an excellent job in performing a most difficult task. The award for the best student clinic was won by Dr. Howard Epstein, graduate student in Pedodontics, and Mr. Douglas Barton, senior dental student. The title of their clinic was "A Five-Minute Formocresol Pulpotomy". Two hygienists from The Preventive Dentistry Research Institute, Misses Almeda Allen and Carol Smallwood won the award for the best clinic by a practicing dentist, faculty member, or hygienist. The title of their clinic was "Visual Education Materials for Office, School, and Community."

The new president of the Dental Alumni Association, Dr. David CcClure of Anderson, Indiana, has already started planning for the exhibits and table clinics at the 1969 Conference. The interest of the clinics at this year's conference indicates that this portion of the program is eagerly anticipated. The officers of the Association and members of the Table Clinic Committee, Drs. Charles Pope, Jr., James Jinks, LaForrest Garner, and David K.

Hennon, Chairman, extend to all members of the Association, faculty members, dental hygienists, and students the invitation to present a table clinic at the 1969 Confer-

ence. It is not too early to start planning for this activity. Please support your Association.

David K. Hennon

Alumni Association News

David B. McClure, President

This has been a particularly eventful year for the officers of your Alumni Association. Upon returning from the A.D.A. meeting in Miami, we were informed of Dr. Hine's appointment as Chancellor of Indiana University at Indianapolis. This news was received with mixed emotions until it was realized that the change was made in the best interest of the University. We will miss Dr. Hine, but it is good to know that he has not burned his bridges behind him and we still will be able to seek his advice.

I am honored that Chancellor Wells has appointed me to the Search and Screening Committee for the selection of a new dean. This committee has been meeting every other week and soliciting nominees from all alumni. Each committee member realizes the seriousness of his assignment and I can assure you that the Indiana University School of Dentistry will have a dean whom we all can regard with pride and confidence.

When Dr. Sutton became the thirteenth president, the I.U.S.D. Alumni Association offered him congratulations and expressed its willingness to do everything possible to add to the success of his administration.

The Mid-Winter Meeting of the Board of Directors was held at Stouffer's Inn in Indianapolis on January 15. This was a most informative meeting with Chancellor Hine present to report on the future development of I.U.I. Because I.U.I. is growing so rapidly there has been some concern about the advisability of placing an Alumni Secretary in Indianapolis. Dr. Paul Starkey was appointed chairman of

a committee to investigate the need for the secretary and to report his findings to the Board in May.

Certainly, many of you are aware that I.U. will observe its Sesquicentennial in 1970. I feel that the I.U.S.D. Alumni Association should present a Sesquicentennial program and Dr. Ralph McDonald has been appointed chairman of the committee to plan for the celebration.

The remarkable success of the Chicago meeting was largely due to the enthusiasm and cooperation shown by everyone who participated. We want to thank Frank Jones for being our guest speaker. Perhaps we will be able to enjoy hearing this talented man again. Dick Bishop is to be commended for organizing the Chicago meeting so well. Dr. Jack Carr gave a comprehensive Mid-Winter report on the progress of the Dental School Fund. If you have not contributed this year, please send Jack your contribution.

Eddie Young is forming his Membership Committee. He hopes to have a representative at most of the district dental society meetings.

Ralph Schimmele has promised us an outstanding program for the Fall Conference. Remember to mark September 25, 26, 27 on your calendar. The "Fighting Hoosiers" will face California and Coach Pont plans to keep the grid warm for the West Coast team. We could have still more table clinics for the Fall Conference. Contact Dave Hennon at the Department of Preventive Dentistry to inform him that you can participate.

I wish to thank all of you who have helped to make this year successful.

Dental Hygiene

A. Rebekah Fisk, Director

INDIANAPOLIS CAMPUS

1952

Mary Lou Dreher is now living and practicing in Merrill, Wisconsin, which is a town of 10,000. Her daughter Sarah is a junior in high school. She has musical talent and sings solos in the school chorus and at church. Son Charles is in the eighth grade and all boy—then along comes Richard who is four and looks like Charles and is unpredictable. As her nephew, who is a senior in high school has been living with them because his father is in Bangkok, Thailand, Mary Lou has quite a family. Pauline Revers was President of Theta Chapter of Sigma Phi Alpha last year and presided at the May meeting. We talk to Gloria (Horn) Huxoll frequently to coordinate the Dental Hygiene program at Fort Wayne with that at Indiana University School of Dentistry.

1953

Juanita Huitema and Marylou (Shideler) Halle remembered us at Christmas—no other news from this class.

1954

Joan Kline organized a reunion of her class during the May meeting. Those present were Ann (Finley) and John Oldham, Carol (Ottinger) and Dick Rosebrock, Barbara (Rambo) and John Herrold, Adrienne (McKinney) Esberg, Janet (Perry) Tarnow, Carla Totten and me. Several members of the class, who could not attend, sent letters and pictures. We all enjoyed a very gay dinner. Marjorie (Lloyd) Meier and family are living in Lititz, Pennsylvania, (the home of the pretzel). Her husband who is with the Radio Corporation of America and five children keep her busy. Pat Boone still enjoys her 2-3 working days per week. Gerry Bailey and family really enjoy living in Ticonium, Maryland. Gerry is a volunteer dental hygienist one day a week at Johns Hopkins Hospital which she

finds to be a new and rewarding environment.

New addresses:

Marcella (Mitchell) Keefe, 2015 116th N.E., Bellevue, Washington 98004
Barbara (Rambo) Herrold, 1107 Indiana Avenue, LaPorte, Indiana 46350

1955

Carolyn (Tucker) Reighly has moved again—this time clear across the country to 6206 Auth Road, Washington, D.C. 20023. Mary Ann (Penn) Rolanda says they are still in the frozen north country. As the twins are in kindergarten she has her mornings free—when they are all in school she hopes to practice again. Christmas greetings but no note was received from the Klitzke's.

1956

Phyllis (Wolf) Rhodes enjoys working three days a week. Her husband has taken up flying and hopes to have his commercial rating soon. She and Don fly with him whenever possible. Phyllis is also a Den mother and practices baseball with Don's team. Don is a very good-looking little boy.

New addresses:

Marilyn (Kirchenbauer) Duling, 1608 Rosehill Drive, Charlottesville, Virginia
Betty Jo Knafel, 525 Oxford Drive, Wabash, Indiana 46992
Priscilla (Robards) Veatch, Hq.-1st LOG, APO-SF COMM. Calif. 96384

1957

Jan (Miller) Compton would like to organize a class reunion during the state meeting in May. As she is a very busy mother, it would help if you would send some suggestions to her at 1836 Alta Vista, Munster, Indiana 46321. Corinne (Nowinski) Patton sent a family picture. The two oldest girls were in their First Holy Communion dresses. Corinne added

a special note that she had jogged off 20 pounds since the picture was taken. In July we received a note from Carol (Beckman) Klinker that she had lost her husband in May and would like to take a refresher course as she wished to return to practice. Her request was granted and she and her three boys are living in Lafayette where Carol is associated in practice with Dr. Y. B. Hall and Dr. Jack Mollenkopf. Peg (Fixel) Hensley says her children are all happy, healthy and normal(?). Shirley (Corine) Emmett has returned to practice. Greetings were received from the Hogans and the Remleys. Jeanne Anne (Wright) Collins, her husband and parents attended the wedding of Dr. James Wright, D'68 and Ida Hordijk, D.H. '67 in Nymegen, The Netherlands in June and visited several other countries before returning home.

New address:

Carol Klinker, 1420 Rochelle Drive,
Lafayette, Indiana 47905

1958

This class had a reunion on July 13th at Kendall Inn Motel in South Bend. We have never received a report of the proceedings—wonder if there were any survivors. Donna (Doss) Hales and her husband have returned from China and Dr. Hales is an Assistant Professor in the Department of Linguistics, Oriental and African Languages, Michigan State University. Donna has been brushing up on taking radiographs, mixing cements, etc., in preparation for the Michigan Board. Sister Mary Paul (Judith Becker) wrote us a note when she was home this summer. We were sorry that she was unable to come in to see us. She has been going to school during the summer and teaching in the elementary grades during the school year. She attends the San Diego College for Women which requires a minor in philosophy. She stresses the importance of dental hygiene and teaches her students about their teeth.

As the Kaisers (Sue Kraybill) are only an hour from the slopes in New York they caught "ski fever". Last summer they enjoyed a trip to France, Germany, Denmark and Sweden. In Sweden they visited a family Sue had lived with as an ex-

change student and friends and relatives in other countries. Pat Obergfell attached a picture of Amy Anne, her pretty blond daughter who answers the phone. Amy is 4½ and attends nursery school. Pat is practicing part time with Dr. Carmody and enjoys being back in her old surroundings. Betty (Hoehn) Plantz says 1968 was a fast year—new baby, new house, class reunion and practicing dental hygiene again. We received greetings from Martha (Coplen) Crawford and The Langleys.

Ann (Buche) Spedding is busy with her family and is President of the Bluegrass District Dental Hygiene Association. The new dental school at the University of Kentucky is developing very well. They really enjoy living in Kentucky.

New addresses:

Ann (Smith) Beechy, 2405 Kickapoo,
Lafayette, Indiana 47905

Nancy (Burford) Modlin, 1830 Summit
Drive, W. Lafayette, Indiana 47906

Donna (Doss) Hales, 1536 Cambrin Drive,
East Lansing, Michigan 48826

Sister Mary Paul (Judith Becker),

St. Lucy's Priory, 19045 E. Sierre Madre
Avenue, Glendora, California 91740

1959

Myrtle (Starr) Austin says it was a short three years in New York but they are glad to be back in the midwest. She is not practicing at present and enjoys being home with her two little girls. We always look forward to something new and different in a Christmas card from The Meyers (Kay Camp). Her husband is in charge of the Handiwork Department of Hallmark Cards. This year the card was a gold cut-out Christmas tree with ornaments, name and greetings attached on a small card. Karen Sue Lucus will receive a B.S. degree from Butler University in June. She majored in literature. Nancy (Hammel) Fendley brought her niece in to see the school as she is interested in Dental Hygiene. Nancy has three children, Beth Ann 6, Bonnie 4 and Paul 2 years old. The family lives on a farm on the southside.

New addresses:

Myrtle (Starr) Austin, 1500 Bell Avenue,
Mattoon, Illinois 61938

Carol (Arnold) Roberts, 2527 Eastgate Lane, Bloomington, Indiana 47401
Deanne (Milan) Conrad, 1710 Brentwood, Apt. F-10, Anderson, Indiana
Tamara (Clift) Graham, 32 Lawndale Avenue, Indianapolis 46224
Nancy (Hammel) Fendley, 5920 South Meridian Street, Indianapolis 46227

1960

We were sorry to learn that Sally (Alcock) Pfafflin has had to retire from dental hygiene because of trouble with her wrist which started with the removal of a ganglion cyst when she was a student. She is attending classes at Evansville College and hopes to complete requirements for a baccalaureate degree with a major in history. She was visited this summer by Jane (Polson) Maddock, Kay (Owens) Hays and Marolyn (Gill) Simpson. Marolyn is working for Dr. Parker in Evansville, Jan and Carolyn are busy taking care of two children. Kay works one or two days a week and her daughter occupies the rest of her time. A picture of "our three" was attached to Marilyn (Lorenz) Peterson's Christmas greeting. Jane is in 1st grade, Larry in kindergarten and Liz in nursery school. After some research and telephone calls we found that Patricia (Martin) Strunk returned to Indianapolis. Her husband is a landscape architect. Seasons Greetings from Jane (Hazledine) Blue included a group of six pictures of her husband and children, Jane on one of their horses, the dog and the house. This class should plan a reunion for 1970.

New addresses:

Sally (Alcock) Pfafflin, R.R. No. 2 Box 351, Newburgh, Indiana 47630
Judith (Cunningham) Hall, 2545 E. Campbell, Phoenix, Arizona 85016
Jane (Polson) Maddock, 3003 Morton Avenue, St. Joseph, Michigan 49085
Marolyn (Gill) Simpson, R.R. No. 8, Box 117, Evansville, Indiana
Carolyn (Gill) Hayes, 1714 17th Circle, Russellville, Arkansas 72801
Patricia (Martin) Strunk, 5925 Haverford Avenue, Indianapolis

1961

Karel (Engle) Dressen writes that they will be residents of Kansas for a year. In June they will start catching up with the rest of the class—children. Charlotte (Levan) Gross after five years absence expects to start practicing again with her husband. Stefanie is in kindergarten and Jessica is into all of her sister's toys. Carol (Mager) Hurst finds time to practice with her husband and take care of Stephen, Charles and Jodille. It was good to see Pat (Koss) Robinson at the state meeting and Sheri (Robinson) Abrams and her two children when they came in the office during the summer. Phyllis (Ordway) Freeman sent a picture of very happy looking children—Keith 5 and Paige 2. Donna (Ross) Abrams is active in the local dental hygiene group.

New address:

Shari (Ross) Abrams, 430 So. Maple Drive, Beverly Hills, California

1962

Lorna Bonnett is still teaching at Idaho State University in Pocatella and enjoys living in the West. Karen (Masbaum) Yoder is President of the Indiana Dental Hygienists' Association this year and is very busy supervising arrangements for the May Meeting. The I.D.H.A. is to be congratulated on the first edition of a printed Journal.

New addresses:

Audrey Gotsch, 48-10 Ninety-first Place, Elmhurst, New York 11373
Barbara (Cohen) Solomon, 433 West 64th Street, Indianapolis
Karen (McCoskey) Beard, 24 South Jenny Lane, Indianapolis 46201
Carol (Tuftland) Risk, 511 Valley View Lane, Lafayette, Indiana 47905

1963

The Borens (Nancy & Butch) think that San Francisco is a marvelous city. Nancy likes her work in the Dental Health Clinic, U.S. Public Health Service, and Butch is very enthusiastic about his oral surgery program. Ellen (Jones) Morrell will be sorry to see their tour in Okinawa end be-

cause they have enjoyed being there so much. This has been a travelling year for the Osborns. They attended the I.A.D.R. meeting in San Francisco, had a nine day canoe trip to Algonquin Park, Ontario, Canada and two trips to Indiana. John received his M.S.D. degree in June. They still love East Aurora, N.Y. Sheri Stropko had heart surgery at the Mayo Clinic in May—it was unexpected but she is in perfect health now. She is busy taking care of Scott 3 and Kelly 1, and is active in the dental auxiliary. From Pat and Chuck Wade a card—"We've Adopted a Baby—Robert Earl Wade—born November 29, 1968."

New addresses:

Nancy (Bitter) Boren, 882 Potrero, San Francisco, California 94110
Nancy (Glassburn) Bond, 4748 Moeller Road, Indianapolis 46254
Pamela (Pershing) Becherer, 1930 N. Rensselaer, Griffith, Indiana 46319
Sarah (Helmbock) Blackwell, 2255 Winter Pkwy., No. 87, Cuyahoga Falls, Ohio 44221
Shermie Schafer, 190 So. Plaza Drive, Indianapolis 46227
Martha Friehe, 1005 E. Chatfield Drive, Indianapolis 46220
Patricia (Mylinski) Durkin, 7310 S. Maplewood, Chicago, Illinois 60629
Kay (Conaway) Hinshaw, 6061 Beachview Drive, Indianapolis 46224
Connie R. Hamilton, Oakhurst Trailer Park, No. 124, Brownsburg, Indiana

1964

Kathy (Heath) and Bruce Bryn announced the arrival of their little Champ on May 2, 1968. On October 1st, Kathy started to practice again two days a week and is happy to be back in the profession. "Our First Baby" Christine René, for Linda (Olson) and Bill Monroe, on September 29th. Dawn Michele Stamper joined the family of Sandy and Steve Stamper on September 11th. Joe and Sue (Starkey) Morris were "tickled pink" with their baby Leslie Ellen born on March 19th and want a place saved in the Class of 1984 for their little red head. In De-

ember, we learned that the Morris's had moved again and that Sue had accepted a position as a clinical instructor in Dental Hygiene at the Loyola University School of Dentistry in New Orleans. Sara Draves enjoyed a long vacation in Hawaii in the Fall.

New addresses:

Kathy (Heath) Bryn, 315 So. Elm Street, Hagerstown, Indiana 47346
Nancy (Nieman) Current, 2207 W. Purdue, Muncie, Indiana 47304
Sarah L. Draves, 3916 Newport Avenue No. 2, Fort Wayne, Indiana 46805
Diane (Clinton) Laxon, R.R. No. 1, Box 354, Zionsville, Indiana 46077
Karen (Michener) Schilling, 4465 Berkshire Road, Indianapolis 46228
Gay (Gossard) Winslow, 5339 O'Hara Lane, Apt. D, Indianapolis 46224
Sue (Starkey) Morris, 3520 Edenhorn, Apt. 101, Metairie, Louisiana 70002
Bonnie (Moore) Zarse, R.R. No. 1, Reynolds, Indiana

1965

Aloha from Marcia Keith who is working for the Department of Health in Hawaii. She is going to take the Board in February. Leni Zucker says she is a travelling dental hygienist. She received her Bachelor of Science degree from Ohio State in June, worked in a private dental office in Louisville, Kentucky during the summer and is now one of two clinical instructors in Dental Hygiene at the Northwestern University College of Dentistry in Chicago. She finds it quite different to be on the other side of the fence—a teacher instead of a student. Sandra (Schwartz) Krebs is teaching at the University of Kentucky where her husband is in graduate periodontics. She was pleased to find four alumni from Indiana on the faculty there. The Robbins, Caroline (Brown) and Fred expect to return from Germany in September. Caroline is the only paid American dental hygienist working in a U.S. Army hospital because preference for employment is given to local Nationals. She and three other hygienists gave fluoride treatments to 650 children whose par-

ents are connected to Embassies in Bonn. Although it was a lot of work they thought it an enjoyable break in the routine. Karin (Warriner) Cobb is back in Texas. While they were stationed at Ft. Belvoir, Virginia she worked in the periodontics department, an experience which she found to be very rewarding. When her husband went to Viet Nam, she returned to Salem, Indiana. Currently she is working part time and finds it nice to have some time at home. The Pieters (Carol Cudek) have established a new residence in Reno, Nevada. They enjoy camping and hiking in the mountains. Lindsay Mitchell is very busy completing degree requirements and making plans for her marriage in June to Mr. Stephen Miller.

New addresses:

- Betty (Bush) Brown, 6059 Hillside, E.Dr., Indianapolis 46220
 Rosemary (Edge) DeBacker, 3305 S.W. Patton Road, Huntsville, Alabama 35805
 Sandra (Schwartz) Krebs, 1592 Alexandria, Lexington, Kentucky 40504
 Carol (Cudek) Pieters, 300 W. Pueblo No. 3, Reno, Nevada
 Julie (Heaton) O'Hara, 1230 26th Street, Sacramento, Calif. 95816
 Karen Wright, 2507 E. Toll Gate Road, Huntsville, Alabama 35801

1966

Gloria Hurwitz was married to Terry M. Gernstein on June 30th, and is living in Pittsburgh, Pennsylvania where she is a School Dental Hygiene teacher. She enjoys her work which is quite varied but says it has it's up and downs. As she only works with a dentist three mornings a week, she misses being in an environment which is completely professional. The Clausen's (Susan Rauschke) and son Ed are back in Indiana. On August 2nd, Connie Nicholson will be married to Ron Slyby D'67 who is practicing in Fort Wayne. Marcia Wilks will be married to Donald Bozic, D'67, a graduate student in pedodontics, in April. Carol Joslin will receive her Bachelor of Science degree in June.

New addresses:

- Gloria (Hurwitz) Gernstein, 444 Chatham Park Drive 1-D, Pittsburgh, Penna.
 Jeri (Bly) Scott, 3156 Hudnall No. 260, Dallas, Texas, 75235
 Susan (Rauschke) Clausen, 2723 North Drive, Apt. No. 1, Highland, Indiana 46322
 Julian Gray, Route No. 2, Box 40, Fairland, Indiana 46126
 Nancy (Travis) Koehn, 325 Seventh Avenue, Salt Lake City, Utah 84103
 Susan (Brown) Mervar, 5129 Southgreen Drive, Apt. No. 1, Indianapolis 46227
 Mary (Kochert) Golightly, 5307 Glyndon Way, Valley Station, Kentucky 40272

1967

In June I flew to The Netherlands primarily to attend the wedding of Ida Hordijk to James Wright D'68, on June 29th. Els Apon met me at the airport in the pouring rain, typical Dutch weather. I spent three days seeing the country then joined Els for the trip to Nymegen, Ida's home town. We met Ida, her mother and sister at the beauty salon where we had our hair done for the festivities. Later I joined Jim's family and some other guests at the hotel for dinner. This was a pleasant reunion because I had not seen his sister, and her husband since they graduated in 1957. The wedding the next day began with the traditional ceremony at the home of the bride when the groom came to claim his bride and present her to the entire wedding party. The wedding entourage moved to the town hall for the formal civil ceremony. The religious ceremony was performed in Dutch and English in a 13th Century Dutch Reformed Church. This ceremony was a service of worship, including congregational singing, prayers, and scripture. In the afternoon there was a reception at the hotel. It was during this event that Dr. John Pell, D'67 arrived from Okinawa. Els could then relax because she knew that he had made it in time

(Continued on page 47)

Indiana University at Fort Wayne

DENTAL AUXILIARY PROGRAMS Fort Wayne Campus

Dr. Phillip E. O'Shaughnessy

We have reached the half-way point in our academic year and everything appears to be moving along smoothly.

Dr. Swenson has completed his flying trips to Fort Wayne for another year. Every Wednesday during the fall semester, Dr. Swenson flew his airplane to Fort Wayne to teach our second-year dental hygiene students the fundamentals of periodontics. We are quite pleased to be able to have a man of Dr. Swenson's caliber involved in our program and, in addition, this helps maintain our close ties with the Indianapolis Campus.

As this article goes to press, we are busy preparing for Children's Dental Health Week. Our students will be visiting the classrooms of the Fort Wayne Community School System during the week and presenting a program of better dental health to the school children. Although this is the high point of our efforts, we are involved in teaching dental health to the school children of the Fort Wayne area throughout the year.

Last year we completed a study, which was recently published in the *Journal of Dental Education*, concerning the effectiveness of teaching radiologic technique with DEXTER (Dental X-ray Teaching and Training Replica). The results of

this study were very gratifying, and we have purchased a newer model, which is more easily operated, to be used in teaching both dental assisting and dental hygiene students.

During the Christmas season, our dental assisting students participated in collecting toys for the Allen County Crippled Children's School. For several weeks the school office was filled with toys. This project was especially meaningful for everyone involved, and it is our hope to continue it on an annual basis.

Arrangements are being made to have all of our students make a tour of the Upjohn Pharmaceutical Company in Battle Creek this spring. We are all looking forward to leaving the cares of the academic life behind as we enjoy the hospitality of the Upjohn Company.

Students in both of our programs (dental assisting and dental hygiene) are assigned at the dental clinic at St. Joseph's Hospital at different times during the year. All types of dentistry are performed in the clinic using general anesthesia as well as local anesthesia, making this clinic unique for Northern Indiana and affording our students an opportunity to be involved in a facet of dentistry.

DENTAL HYGIENE ALUMNI NEWS Fort Wayne

Gloria H. Huxoll, R. D. H.

We are always happy to hear from our former students and learn of their whereabouts and events that have occurred since graduation.

The holiday season always brings vacationing dental hygienists into the office to say "hello," as well as many very appreciated cards and notes. Greetings came to us from Rosseau, Ontario, Canada, from Lynda Brandt Kernohan, where she is affiliated with the Public Health Program, and Wanda Klus Bell who is now in Baltimore, Maryland.



Dr. Henry Swenson

The wedding of Melinda Leer to Daniel Stout on January 4, 1969, brought together their class of 1966. Myrna Sowards, who had just returned from Germany with her husband, Ned, arrived in time to join the well wishers. Also in attendance were Donna Moeller, who is still in private practice in Plymouth, Indiana; Carolyn Nofzinger from Fort Wayne; and Carolyn Snyder, who is now Supervisor of the Dental Assisting Program here on the Fort Wayne Campus. Both Donna and Carolyn will be doing their student teaching this next semester and will graduate in June with the B.S. degree in Education. The only two missing were Lynda and Wanda.

Wedding bells rang out this past year for several of the '67 graduates. Diane Kay Ulrich became Mrs. Robert E. McGregor. Diane spent one year in private practice in Elkhart, and is now completing her student teaching and will graduate in June with a degree in Education. Patricia Sue Riley and Jack Skelton were united in marriage in November. She is associated with Dr. Jack Boyd in Fort Wayne. Linda Licking from Bluffton became Mrs. Gary Gerhold on August 24. Linda took the Michigan Board, and upon leaving the state her "own" little sister, Betty ('68), took over her dental hygiene duties at Dr. James McPheeters' office.

During this past year, Mrs. Roberta Williams Akers and husband, Ken, and Mrs. Linda Whitmore Finley and husband, Hodge, became the very proud parents of a girl and boy, respectively. Both Bobbie and Linda reside in Indianapolis. Miss Julee Ervay spent a year in Fort Wayne and is now practicing in Boston, Massachusetts. Mrs. Judith Haffner Bobylia has returned to Fort Wayne to practice while her husband, Ed, is serving as a helicopter pilot in Vietnam. Judy is also pursuing her degree on a part time basis; and so is Patricia King, another classmate. Pat became Mrs. Warren Keller in February. Mrs. Peggy Laesch is still very happy in the Pedodontics practice of Dr. James Shupe here in Fort Wayne. Kay Gillespie

remained in Fort Wayne and is associated with Dr. Emory Bryan. Miss Nannette Friend left our fair city to pursue her degree in Public Health in Indianapolis and was graduated in June. She is now in Indianapolis in private practice.

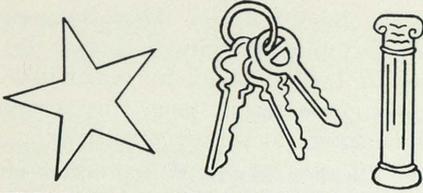
Mrs. Eleanor Myers Wilson has been helping her husband, Jim, complete his degree in Pharmacy from Purdue and has been employed by Doctors Guthrie Carr and Ray Price in Lafayette.

News is always welcome from Rebecca Gremaux, who left two days after her Indiana Boards to go to the Virgin Islands. Her address is c/o Dr. Felix Lindo, Director of Dental Services, Public Health Service of the Virgin Islands, St. Thomas, Virgin Islands 00801. It has been a real challenge to her and to the Public Health Department to set up a program of this type—that of teaching young natives to become interested and motivated toward dental health.

Mrs. Carol Fuhrman's pilot husband, Kenneth, is very proud of his wife's accomplishments and very glad to have her home part time and associated with Dr. E. C. Errington part time.

Those who heard wedding bells since graduation in June of last year were Elaine Brown Foley, who with her athletic coach husband, Bill, is now in Grayslake, Illinois. Both Cheeri Federle and Almeda Allen took positions with the Dental Research Department in Indianapolis and have changed their names. Cheeri became Mrs. David Dennis. David is a freshman dental student at I.U. Almeda became Mrs. Michael Doty. Talked to them and they are very happy with their marriages, as well as their dental hygiene positions. Miss Kitty Kay Erb was another graduate who took a position in Indianapolis. She became Mrs. Ronald E. Swygart in November, and when her husband finishes his mortician schooling, may return to our area. Miss Victoria Hohman is associated with Dr. Robert Getty; Lind Kind with Doctors James Favorite and Darrell Alexander; Sandra Meyer with Dr. Robert Leininger; and Deborah

(Continued on page 48)



Paul Starkey

DAU

The name DAU has become a very familiar one in most of the dental schools in the country. DAU stands for Dental Auxiliary Utilization and refers to programs which exist in 49 dental schools.

The DAU programs are supported by a grant from the United States Public Health Service. The purpose of the program is to assist dental schools, through the award of these training grants, to develop continuing programs for teaching all dental students the effective use of trained chairside dental assistants, thus preparing each newly graduated dentist for the proper utilization of well-trained auxiliaries in his practice.

Dental manpower is in a very short supply and the situation is becoming steadily worse. Population growth of unusual and unexpected size has occurred. Along with this, however, the number of dental practitioners has not kept pace with this increase. The effect of this is reflected in the fact that the number of dentists per 100,000 population dropped from 58 in 1930 to 45 in 1965. This is a decrease of 22 per cent.

It seems rather apparent that it will be impossible for the dental schools of the country to graduate enough dentists in the next decade to, in this way alone, meet the demands for dental care, let alone the needs for dental care. One of the proven ways in which we can improve this situation, however, is the efficient utilization of dental auxiliaries. A substantial increase in the productivity of a dental practice is seen when a dentist adds one auxiliary. One survey showed a 53 per cent increase. As additional auxiliaries

are added, this increased productivity can exceed 200 per cent.

Here at the Indiana University School of Dentistry, we have had a DAU Program since 1960. Teaching efficient utilization of a chairside assistant to the dental student should enable him in his practice to substantially increase his productivity, make it possible for him to provide more services of equally high or even higher quality to many patients and to provide a partial solution to the problem of the growing dental manpower shortage.

I think you would be interested in a review of what has been accomplished here at Indiana through this program. The grant request which resulted in the securing of this discipline was written by now Acting Dean Ralph E. McDonald way back in 1958. The program was integrated into the undergraduate pedodontic clinic discipline.

In 1958, the equipment in the pedodontic clinic included a unit of the traditional type. It had a swinging cuspidor. The chair was a junior size chair, but of the old traditional style. Pedestal type stools had been acquired and an attempt was made to encourage the student to operate in a seated position. Students brought their own instrument cases with them to the clinic for their half-day assignments. My guess is most of you still have your old instrument case up in the attic or have some of your favorite mechanic tools now stored in them.

When this program was begun, additional pedestal stools were obtained and both the student and dental assistant were required to be seated during the operative procedures. By utilizing time-lapse movies,

for evaluation purposes, inefficiencies in the use of the existing equipment immediately became apparent. For example, the dental assistant was positioned on the stool to the left of the operator in the exact position (three o'clock) in which the cuspidor was placed when the dental student had been operating alone. Thus, each time a child needed to use the cuspidor, it was necessary for the assistant to stand up, swing the cuspidor in and after the child had expectorated, swing it back again and be re-seated. To solve this problem, we turned the chairs around so that the cuspidor was virtually on the lap of the child and the dental assistant seated in the aisleway. Then, the child could just lean forward to use the cuspidor and the dental assistant remain seated. Since that first change, there has been a steady series of adjustments, changes, eliminations and additions of equipment which has led to the current equipment which is in use.

We obtained instrument set-ups and trays, supplying all equipment and instruments so that it was unnecessary for the dental student to bring any of his own. We purchased small treatment tables for the dental assistant's use and attached to it a three-way syringe, an evacuator, and an electric handpiece. We attached lights to our chairs. We removed the old units. Just a few weeks ago, new contour chairs were placed in the clinic.

The student today has approximately

30 half-days of experience working with a trained chairside assistant in the undergraduate pedodontic clinic. He begins his orientation in his junior year by participating in groups of three in a training session in the efficient utilization of the chairside assistant. He is taught the position of his stool (See Fig. 1), the position of the dental assistant's stool, the positioning of the chair, instrument transfer, and the correct use of the evacuation tip. He is taught to look at the patient's face as though it were a clock. He sits on a stool, generally at the eleven o'clock position, but varying according to procedures between the 8:30 and eleven o'clock positions. The dental assistant lowers the operator's stool to its lowest position in preparation for the seating. The dental student sits on the stool and, by grasping both sides of the cushion, lifts the stool to a height which places his upper leg parallel to the floor (see Fig. 2). The dental assistant's stool is positioned so



Figure 1: Supervisor of the dental assistants, Miss Aida Mena, demonstrating stool positioning to Junior student Sandmeier.



Figure 2: Student positioned so upper leg is parallel with floor.

that her eye level is four to six inches above his eye level. The patient's chair is placed in the supine position by first using the switch on the back of the chair which brings the foot end of the chair up. This slides the patient back into the chair. The back rest portion of the chair is lowered next. This is done in two stages, to avoid an unfavorable psychological reaction to a quick reclining of the chair. All of this preparation is accomplished by the dental assistant. The operator then lowers the chair until the back just touches his left leg.

Instrument transfers are specific and pre-planned in detail. Each student is taught, during the indoctrination period, these procedures. He practices these with a dental assistant during the indoctrination sessions, using a mannequin for a patient (See Fig. 3).

The dental assistants are considered to be instructors in dental assisting. They

have the responsibility for assuring that all of the procedures related to efficient utilization of the chairside assistant are observed.

Certainly this DAU Program is having its impact on the recent graduates' decisions as he plans his purchase of equipment and his office. We have come a long way in this Program. During the next few years, considerably more emphasis will be placed to teaching the dental student how to train a dental assistant. To accomplish this, the dental student must be placed in the role of a dental assistant for a brief training period.

Plans are being made now to provide for a number of continuing education seminars at the University, so that a dentist may bring his dental assistant with him for a day or two to become familiar with what we have learned and to practice the techniques. Perhaps you will be interested.



Figure 3: Mannequin being used while student learns instrument transfer techniques.

The Bookshelf

Mrs. Helen Campbell, Librarian

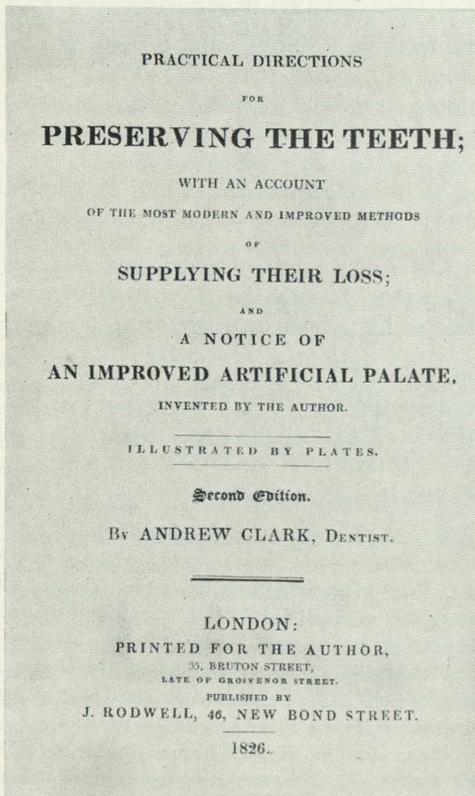
Along with a nineteenth century mode of expression, the dental information presented for the patient in a recently acquired rare book makes fascinating reading. This 1826 publication, PRACTICAL DIRECTIONS FOR PRESERVING THE TEETH by Andrew Clark, was published in London "not to teach the public how they may contrive to dispense either with the preventive or restorative operations of the dentist, but merely to put them in possession of as much simple and practical information as may assist them in judging whether these operations are or are not performed in the best manner."

In developing his subject, Dentist Clark divides the first part of his text into four

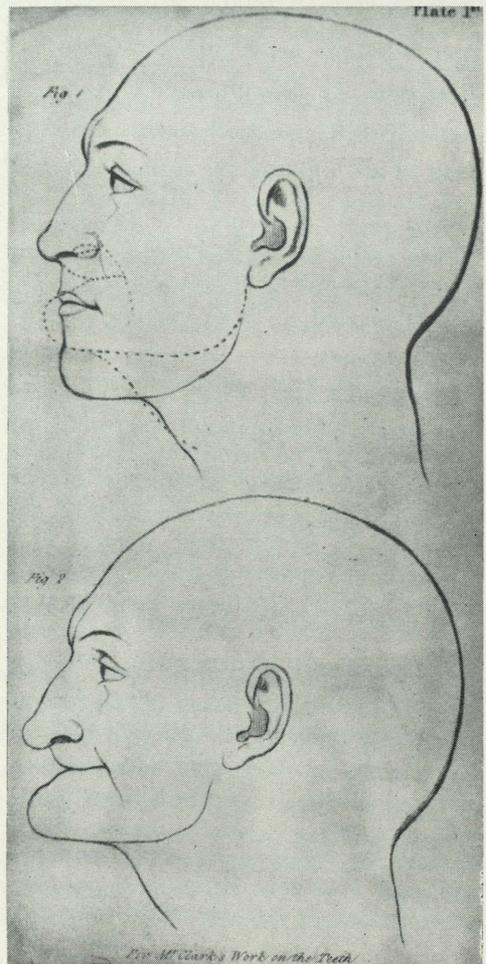
sections dealing with "the maxillary, or jawbones; the alveoli, or sockets of the teeth; the gums or soft sheathing, for the protection of those sockets against hard substances; and the teeth themselves." (p. 3) The deciduous teeth are termed "shedding teeth" and the dentition is described in the following quotation:

"The order and number of the shedding teeth in each jaw are as follow:

- 4 Incisores, incisors, fore-teeth, or butter-teeth.
- 2 Cuspidati, canine-teeth, or eye-teeth.



Reproductions of pages taken from rare dental book published in 1826 which is now in library of the dental school.



4 Molares, or grinders.

Those of the permanent teeth, in each jaw.

5 Incisores.

2 Cuspidati.

4 Bicuspides

6 Molares, of which two are dentes sapientiae." (p. 18)

Among the observations made by Dr. Clark are the following: ON THE JAWS: "In the most general, and also the most regular, beautiful, and convenient confirmation of the jaws, the teeth of the lower jaw, which is a segment of a smaller circle, fall within those of the upper. When this is not the case, the result is an unpleasing projection of the chin, and also a slight affection both of the voice and of the operation of masticating. As this conformation is both a deformity and an inconvenience, it should be remedied at as early a period as possible; and if it be taken in time, its correction is neither dangerous nor difficult." (p. 5)

ON PARTIAL DENTURES: "As many teeth as are wanting are strongly rivetted on a plate of gold, made hollow, and fitted for the gum to rest in; the plate, containing the teeth, is attached to the adjoining teeth, by means of elastic gold claws, or springs, placed so as to embrace them." (p. 76)

ON ARTIFICIAL TEETH: "The artificial teeth, called mineral, are composed of baked earth, covered with an enamel flux, and coloured to imitate nature. Many of them, however, have but little resemblance to nature, their opaque, livid appearance, very much resembling earthenware." (p.72) In the author's opinion, "the art of making mineral, or enamel teeth, is still capable of great improvement." (p. 72)

ON TOOTHACHE: "In cases of pain seated in the jaw-bones, it is of importance to know whether it proceeds from toothache, properly so called;—namely, disease or decay of one or more of the teeth; or be merely a nervous affection of the bone or periosteum of the jaw. If proper tooth-

ache, and the disease can be traced in the tooth itself, extracting will give immediate and effectual relief; but if nervous, extraction will be of no use; and, if under such circumstances, a sound tooth be extracted, it should immediately be replaced, where it will soon become as firm as ever. Even a diseased tooth, which is not too far gone, may have the diseased part filed off, or the perforation cleaned, and carefully stopped up; and then, if it be immediately returned into the jaw, it will fasten, and become serviceable; while, in all probability, the bleeding occasioned by the operation will remove, or at any rate mitigate, the pain." (p. 6-7)

One paragraph, however, is as fundamental in 1969 as it was in 1826: "The love of a pleasing personal appearance is a principle implanted in the human heart, to which nothing contributes more than a beautiful set of teeth. The effect is the same whether these be natural or artificial; too much stress, therefore, cannot be laid on every argument in favour of preserving the teeth in a sound state, as long as possible, and, when they fail, to have their places properly supplied with artificial ones." (p. 57)

The Library has received copies of the following Master's theses, written by candidates for advanced degrees:

EFFECT OF A STABLE 30 PER CENT STANNOUS FLUORIDE SOLUTION ON RECURRENT CARIES AROUND AMALGAM RESTORATIONS

William Everett Alexander

This was a study to evaluate the effectiveness of a stable 30 per cent stannous fluoride solution on recurrent caries around the margins of amalgam restorations. Two hundred ninety deciduous and permanent teeth were restored in 34 children, ages six to nine years. Cavity preparations were treated with either stable 30 per cent stannous fluoride solution or a placebo solution (double blind technique) prior to the placement of amalgam restorations. A comprehensive coded system was used to record the description and position of conditions as

sociated with recurrent caries after a one-year period.

Children receiving the stannous fluoride treatment experienced a 58.9 per cent reduction in recurrent caries when compared to the control children. The children receiving the stannous fluoride treatment showed a 60.7 and 46.7 per cent reduction in recurrent carious lesions in permanent and deciduous teeth, respectively, when compared to the control children. The reduction in recurrent caries was attributed to the anticariogenic effect of the stannous fluoride treatment.

Conditions associated with recurrent caries were mainly inadequate extension in fissures and grooves, overextension of the cavity preparation, marginal fractures of enamel and amalgam, marginal excess, and deterioration of the amalgam margin. Recurrent caries around the margins of restorations appeared to depend on (1) the caries susceptibility of the adjacent tooth structure, (2) the extension of the cavity preparation, and (3) the condition of the amalgam-enamel margin.

AN ORAL HEALTH SURVEY OF INDIANA FARM FAMILIES

Frank Edward Bean

The purpose of this thesis was to investigate the oral health status of rural farm families which differ in social status and gross income in order to provide information which might contribute to a better understanding of the dental health problems of such population groups.

Two Indiana farm counties were selected on the basis of differences in median family income for evaluation in this study. A socio-economic test indicated that Owen County subjects represented a lower median family income group than Bartholomew County subjects.

The results suggest that dental disease is prevalent in both Bartholomew County and Owen County farm families. A dental I.Q. test failed to show differences in dental health knowledge between the subjects in the two counties. Bartholomew County subjects had significantly better oral hygiene, gingival, and periodontal health than Owen County subjects. Dental caries in the deciduous and permanent teeth is prevalent in subjects from both counties. Bartholomew County subjects had significantly less decayed teeth and had received more dental restorations than Owen County subjects.

The dental needs of rural farm families have been presented with the ultimate hope that the information obtained will lead to the development of improved preventive measures which are directly applicable to rural families. Muhler's new concept in fluoride therapy, which concerns the use of self-application of a new prophylactic paste by the individual patient, is one step which might be used to prevent and control dental caries in farm families.

HISTOLOGIC STUDY OF THE APICAL PERIODONTAL TISSUES FOLLOWING ROOT CANAL FILLINGS WITH CALCIUM HYDROXIDE

Herman Albert Blair

This investigation was designed to evaluate the histologic response of root canals filled with calcium hydroxide.

Endodontic therapy was preformed in four dogs, two with vital pulps and two with necrotic pulps. Periodic radiographic examinations were performed. One animal of each group was sacrificed at three and six months postoperatively. Following sacrifice, block sections were removed, fixed, decalcified, sectioned and stained with hematoxylin and eosin for microscopic examination.

A chronic inflammatory reaction ranging from very mild to severe was seen in the periapical tissues following root canal filling. The reaction varied somewhat with the material used and with the apical extent of the filling. In general, regardless of the material used, a less severe reaction was noted when the root canal filling was short of the apex.

This study indicates that calcium hydroxide alone is not a good root canal filling material, but does point toward the possible use of calcium hydroxide in combination with some other filling material as an effective and desirable adjunct to more successful endodontic therapy.

CONTINUED APICAL DEVELOPMENT OF PULPLESS PERMANENT TEETH FOLLOWING ENDODONTIC THERAPY

Joe Henderson Camp

This was a histologic study of continued apical development in the pulpless permanent teeth of dogs. The vital pulps were exposed to the oral fluids for one week. The root canals were filled with either calcium hydroxide

and camphorated parachlorophenol (CMCP) or calcium hydroxide and distilled water. A vital dye, Procion red was injected to demonstrate the formation of calcified tissue. After four months, the animals were sacrificed. Decalcified semi-serial sections were studied.

In 31 of 61 pulpless permanent teeth, with incompletely developed roots, continued apical development occurred. Apical calcified tissue resembling cementum was observed in 55 per cent of the specimens treated with calcium hydroxide and CMCP and in 42 per cent of those, with calcium hydroxide and distilled water. Complete closure of the apical foramen was observed in 29 and 11 per cent of the specimens respectively.

Inflammation of the periapical tissues was present in 48 per cent of the calcium hydroxide and CMCP group and in 79 per cent of the other group. A significant association was found between the degree of inflammation and apical closure, ($P < .001$) for the calcium hydroxide-CMCP group, ($P < .005$) for the calcium hydroxide-distilled water group.

The results suggest that calcium hydroxide and CMCP was superior to calcium hydroxide and distilled water and that the addition of CMCP to the paste reduced inflammation. Procion dye was shown to be an effective *in vivo* dental hard tissue marker.

EFFECTS OF CHRONIC SYSTEMIC STRESS ON THE INITIATION AND PROGRESS OF PERIODONTAL DISEASE IN THE SYRIAN HAMSTER

Denis Forest

This study was designed to determine what effects, if any, chronic systemic stress has upon the initiation and/or progression of periodontal disease in hamsters.

One hundred weanling female, Syrian hamsters, averaging one month of age were used. The pre-treatment period consisted of 160 days in which 50 animals were kept as controls on a standard laboratory diet and the other 50 fed a finely powdered cariogenic and periodontal disease inducing diet. All the animals were injected with a Procion red vital dye at the beginning and the end of this period. The treatment period consisted of 29 days in which half of the animals received bi-daily subcutaneous injections of formaldehyde.

The animals were sacrificed at different time intervals. The weight of their adrenals, thymus

and spleen reflected the stress induced. Gross examination of the soft tissues of their jaws was performed. Decalcified semi-serial sections of the mandibular molars were made. The sections were stained with H&E and some were left unstained for examination with the fluorescent microscope.

Periodontal disease was produced in the hamsters fed the high carbohydrate diet. The stressed animals on the standard laboratory chow also developed periodontal disease. No differences were observed in the severity of periodontal disease in the stressed and non-stressed animals fed the cariogenic diet. A high incidence of dental caries was observed among the stressed animals regardless of the diet they were fed. This type of periodontal disease was associated with the accumulation of bacterial plaque, apical migration of the epithelial attainment and loss of bone and cementum as shown by the interruption in the vital marking of the Procion red dye.

DENTAL EDUCATION AS MOTIVATION: A MEASURE OF PATIENT RESPONSE

Ramon L. Gonzalez

A dental education program was designed in order to determine the influence dental education may exert on the response of patients to oral hygiene instructions.

Seventy-five patients were randomly assigned to three different study groups. Simplified oral hygiene indices were taken and recorded on each patient; afterwards a thorough prophylaxis was rendered. Each individual received instructions pertinent to the selected study group. At the end of three and six months, simplified oral hygiene indices were taken and a prophylaxis rendered again.

Statistical analysis of the study indicate that in order to motivate patients to improve oral hygiene, dental education alone is not enough. Human beings show different reactions to the same stimuli.

SCREENING TEST METHODS AND THEIR APPLICATION IN MEASURING ADHESION OF SELECTED DENTAL RESINS

Gilberto Hanke

Two proposed test methods were evaluated with respect to the feasibility of their use for screening restorative materials for adhesion to tooth structure. Based upon the experience

gained with these two methods a third technic also employing tensile stress was developed to eliminate some of the difficulties encountered in the first two methods. Three resin systems were evaluated by the latter procedure. The resins were a conventional methyl methacrylate restorative resin, Sevriton, and two experimental epoxide systems, one designated as Alpha and the other as Epoxylite. The influence of various surface treatments of the tooth structure and the use of certain cavity lining agents was investigated. The effect on adhesion of the variables of storage in water and of thermal and mechanical stress was studied.

The highest values for adhesion of the Sevriton material were obtained when the tooth surface was pretreated with citric acid. The Epoxylite material showed better adhesion to enamel than to dentin while the reverse was true with the Alpha resin. Mechanical and thermal stress did not reduce the adhesion of the Epoxylite resin to enamel or of the Alpha resin to dentin when the dentin surface was coated with silane liner and polymer interliner. Stressed specimens of Alpha resin showed a reduction in adhesion values when the polymer interliner was omitted.

AN EVALUATION OF FIVE GOLD INLAY INVESTING TECHNIQUES AND THE EFFECTS OF CERTAIN VARIABLES IN THE PROCEDURE

Clive Beverley Goldsworthy Jenkins

This investigation compared the fit of small gold castings made with five currently popular investing materials and a conventional gold alloy. In addition the influence of certain variables associated with the techniques were studied. In Part I the comparative accuracy of the material to reproduce the original wax pattern was assessed by using a critical, Bureau of Standards, full crown, steel die. Having secured this base line data, in Part II the clinical significance was evaluated by the use of five different dies whose cavity preparations were comparable to those used in clinical practice. The marginal discrepancies of the castings were measured with a comparator microscope. A total of 183 castings was made, and the results were statistically analyzed.

To alter reliably the size of castings produced with Cristobalite, LusterCast and Beauty-Cast the gauging water must be varied by increments of at least 2 ml. Two liners effectively increased

the expansion with some clinical type castings, but not with the Bureau of Standards, full crown which had very thick walls. The relation of the liner to the open end of the ring and to the pattern can significantly alter the size of the casting produced. The use of an oven preheated to 500° C. produces greater expansion with Beauty-Cast. LusterCast and Ceramigold, in general, produced acceptable castings over the range of preparations when a standard technique was employed. Kerr's Cristobalite did not appear to produce adequate expansion for critical extracoronal castings.

A STUDY OF SHADE MATCHING USING THE DENTAL SHADE COMPARATOR AND OTHER CONTROLLED LIGHTING CONDITIONS

Gerald A. Niznick

The object of this study was to evaluate the relative ability to match shades under various conditions by people with different amounts of knowledge and experience pertinent to shade matching.

Pairs of porcelain specimens for shade matching were fabricated such that the difference between adjacent specimens was less than the Just-Perceptible difference level and thus could not be distinguished in every observation. Shades were matched under four conditions of observation: room light, light from a daylight lamp, and using the Dental Shade Comparator, with and without a blue daylight filter. Two groups of observers were employed in this study.

The data indicates that there was an improvement in ability to match shades using the Dental Shade Comparator with the filter from the ability to select shade under room lighting conditions. This improvement was considered by the author to be too small to be of any clinical significance. There was no improvement using the instrument compared with matching shade using a daylight-type lamp.

A HISTOLOGIC STUDY OF GINGIVAL TISSUE RESPONSE TO AMALGAM, SILICATE AND RESIN RESTORATIONS

Louis Sanchez Sotres

Ten young dogs were used to study the histologic changes in the crevicular epithelium that covered Class V sub-gingival restorations. Finished and unfinished amalgam, silicate
(Continued on page 49)

Notes from the Recorder's Desk

Mrs. Cleona Harvey, Recorder

Hello again from the Recorder's Office!

With the spring-like weather we have been enjoying we know it won't be long before another class of eager dentists is graduated.

We surely enjoy sending best wishes to all of you but, most of all, are so very pleased when you write and tell of your activities. Regardless of how many times we say this, we still mean it and along with that we still need your new addresses so we and your classmates can keep up with you.

November 1, Dr. Hine was appointed Chancellor of Indiana University at Indianapolis and since then Indiana and Purdue have combined forces on the Indianapolis Campus so he is really Chancellor of Indiana University—Purdue University at Indianapolis—some 13,000 students. We shall miss him very much as dean of the dental school but know he will make outstanding contributions in his new assignment. On December 16, Dr. Ralph E. McDonald was appointed Acting Dean and we are doing our best to be helpful to him. Enough news about us so let's get on with news about you! First is the

Class of 1901

We are sorry to report the death July 17, 1968 of Dr. Chester C. Miller.

Class of 1909

We are sorry to report the death June 27, 1968 of Dr. Harry W. Cawley.

Class of 1910

With deep regret we announce the death of Dr. George W. Havens, who passed away June 11, 1968.

Class of 1913

Dr. Raul V. Montero
3a A #8810 Miramar
Havana, Cuba

sent greetings and wrote that he enjoys reading so many interesting things in the Alumni Bulletin.

Class of 1914

We are sorry to report that Dr. George L. Canada passed away June 24, 1968.

Class of 1917

We announce with deep regret the death of Dr. Charles J. Kramer, July 6, 1968.

From the Southland come greetings from

Dr. Carl A. Frech
1515 Chevy Chase Drive
Sun City Center, Fla. 33571

Class of 1921

Season's Greetings were sent from
Dr. and Mrs. John F. Johnston
225 E. North St., Riley Center,
Tower 1, Apt. 1802
Indianapolis, Indiana

Class of 1923

Dr. and Mrs. Sumner X. Pallardy sent greetings and wrote they had seen Dr. and Mrs. M. K. Hine at the National meeting at Miami Beach.

They missed Dr. Harry Healey but had opportunity to see many I.U. Hoosiers they hadn't seen in years. Dr. Pallardy wants everyone to know he's still an Alumnus at heart.

Class of 1926

We are sorry to report Dr. Perry E. Staley, passed away July 15, 1968.

Christmas Greetings were received from

Dr. and Mrs. H. K. Maesaka
509 Olive Avenue
Wahiawa, Hawaii 96786

Class of 1928

Dr. and Mrs. Leon W. Berger
732 Main Street
Beech Grove, Indiana 46107

remembered us with Season's Greetings.

Class of 1929

Greetings were also received from
Dr. and Mrs. James Sakurai
2715 Tantalus Drive
Honolulu, Hawaii 96815

Class of 1935

Greetings were received from
Dr. and Mrs. Max J. Bean
5 Pangborn Place
Hackensack, N. Jersey
and who also wrote a note from Spain
where they vacationed recently.

Class of 1944

Dr. and Mrs. Ralph McDonald
5040 Potters Pike
Indianapolis, Indiana 46234
sent Christmas greetings.

Class of 1946

Dr. and Mrs. Malcolm E. Boone
4706 Melbourne Road
Indianapolis, Indiana 46208
sent best wishes for the Holiday Season.

Class of 1947

From New Jersey came greetings from
Dr. and Mrs. Marvin A. Tuckman
599 Broadway
Paterson, New Jersey

Class of 1948

Col. Robert H. Marlette
Dept. of the Army
Landstuhl Medical Service Area
Office of the Dental Surgeon
APO New York 09180

writes *"I am taking this means to notify my friends in the University and particularly the class of 1948 that Bob and Margaret are still in the U.S. Army and have returned to Europe after a four year assignment at Fitzsimons General Hospital in Denver, Colo. We certainly would have enjoyed participating in the 20-year reunion of our class this year but obviously a return trip from the continent was out of the question.*

"For those who remember that the Marlettes had three little ones while in

school, it must be noted that time passes and we are now enjoying a second honeymoon with the girls being married and the son a sophomore at Colorado State University. We frequently see old Indiana friends at various professional meetings but since we have spent the last seven years out of 11 overseas, it is difficult to keep in close touch with our classmates.

"At the present I am the Dental Surgeon for a Medical Service Area here in Germany, Chief of a Hospital Dental Service and Consultant in Oral Surgery to the United States Army in Europe. As can be expected these various 'hats' keep me busy and the challenge of new ideas and concepts certainly prevent any professional stagnation. We plan to return to the States next summer and are hoping for an assignment on the West Coast. If time permits, we'll stop in and renew old friendships in and around Indiana."

Class of 1949

Season's Greetings were also received from

Dr. and Mrs. Ernst Rosenthal
1266 Oliver Avenue
Indianapolis, Indiana
The local papers announced that
Dr. Walter J. Dean
411 Hume Mansur Building
Indianapolis, Indiana

had been appointed to the Indiana State Board of Dental Examiners by Former Governor Roger D. Branigin. *"His appointment will run through 1971. He is a 1942 graduate of Butler University and a 1949 graduate of the Indiana University School of Dentistry. He served four years in the Navy during World War II. Dr. Dean is a past president of a national dental fraternity. He served as president of the former Off-Street Parking Commission under five Indianapolis mayors."*

We also learned that Dr. Charles W. Gish is president of the American Association of Public Health Dentists. Dr. Gish's address is:

1330 West Michigan Street
Indianapolis, Indiana 46207

Class of 1952

We regret to report the death of Dr. Wilson L. Ward, December 25, 1968.

Dr. James E. Humphrey
2637 North 8th Street

Terre Haute, Indiana
stopped in to see us here at the Dental School.

Class of 1954

We received a change of address for Dr. Leonard A. Stahl to

311 North Range Line Road
Carmel, Indiana 46032

From Vietnam, comes a note from

Lt. Col. Theodore C. Clarke
Commanding Officer

650th Medical Detachment
APO San Francisco 96384

who writes he arrived in Vietnam August 27, 1968 and is stationed at Long Binh which is just 19 miles from Saigon. He recently finished building a new 14-chair clinic and found that learning to run a KJ team is somewhat of a change from teaching oral medicine at Fort Lewis.

Season's Greetings were received from

Dr. and Mrs. Robert L. Bogan
4550 Manning Road

Indianapolis, Indiana 46208

Hearing from

Lt. Col. and Mrs. Robert C. Johns

Tachikawa USAF Hospital Box 7006
APO San Francisco 96323

we learn that Bob is Prosthetics Officer at Tachikawa hospital and plans on staying in Japan for three years.

Class of 1955

We also received Best Wishes during the Holiday season from

Dr. and Mrs. Jordan Scull
5564 Madison Avenue

Indianapolis, Indiana

Dr. Ursula and Dr. Werner Bleifuss

18786 San Quentin Drive

Lathrup Village, Michigan

wrote and said "With the same mail I wrote a little note to Dean Hine, telling that Juergen has decided to study medicine and is presently enrolled at the medical

school of a West German university. He is spending a very interesting time there, but looking forward to coming back in the Spring to do part of his hospital duty here in the States.

"We sure hope you have been well and had a pleasant summer. We ourselves visited Spain this year together with Juergen and took a little side trip to Morocco, which was very enjoyable.

"Could you send us the addresses of our two classmates Waldemar Rifkohl and Delgado in Puerto Rico. We are going on a little cruise between Christmas and New Year and would like to say Hello to them, but would like to write a little note before.

"Wishing you a very happy Christmas and a good New Year."

Class of 1956

Holiday Wishes were received from

Dr. Young Ok Lee, Dean

College Dentistry

Seoul National University

Seoul, Korea

Class of 1957

Dr. and Mrs. Waldo Scales

160 Marine Street

St. Augustine, Fla. 32084

wrote in December:

"Greetings Yo'all:

"Well, 1968 started out about like all other years with the Scales, big plans, and a lot of goals to achieve.

"We have all enjoyed good health this past year.

"Our greatest achievement for 1968 was the building of a new Dental Office. We had wanted a lot across from the hospital for several years to build a new office. This year we were able to purchase this lot and after a big fight with the zoning board, we were finally able to start on the office. The building is constructed of used (new) brick veneer over concrete block, ranch style, with colonial columns on the front. It has 1250 sq. feet floor space with four operatories in his new building. Waldo is very happy

in his new office. It makes it so nice for his surgery patients as he is right across from the hospital.

"Billy is now 8 years old and is in the second grade. He is having to work very hard to stay in the top group of his class. He accepts the competition well and is in there fighting to hold his position. He is still a TV bug.

"James Raymond is 5½ years old and is a very happy little Kindergarten child. He is very particular about his clothes and wants his hair just so when he leaves for school every morning. He comes home very much the opposite as he is all boy. He loves to go to the farm with his father on his days off and spend the whole day getting filthy dirty.

"Janie is one year old and as her father loves to describe her, 'She's a doll'. She walks everywhere, says several words, and in our prejudiced opinion is a beautiful, lovable, little girl.

"Elizabeth has had a good year, busy as usual with her office work, home-making, vice-president of the PTA, and part time farm hand.

"Waldo has enjoyed a busy year with the construction of his new office. He enjoys his Dentistry even more in his new spacious office. He is busy farming in his spare time.

"We want to wish to all our readers, the most joyful season, a very Merry Christmas, and the happiest New Year.

"We are looking forward to a wonderful Christmas Season with our children. God bless you all and let us hear from you real soon."

Also received a card from
Dr. and Mrs. Pedro G. Colon
Box 1222
Caguas, Puerto Rico 00625

Class of 1958

From Manila, Philippines came a card from

Dr. Alegria C. Zita
1357 Felina Paco
Manila, Philippines
who said "Please extend my warmest regards to all my friends at the dental

school. I hope I will get a chance to visit with you in the future."

Class of 1959

Dr. and Mrs. James Beck
4932 Elliot Avenue South
Minneapolis, Minnesota 55417
writes "The transition back into dental academics continues to progress quite well. I was real pleased to read of Dr. Hine's new position and responsibilities with I.U. at Indianapolis."

Received a card and note from
Dr. Hala Henderson
3113 West 49th
Indianapolis, Indiana 46208
who wrote: "It's ten months now since we've been back in the States, but we're still not acclimated! I'm glad I came back to Dental School—I really needed to." (Dr. Henderson is back with us working toward a D.D.S. degree. C. H.)

Class of 1960

We received greetings from the following:

Dr. Don C. Nesler
Hume Mansur Building
Indianapolis, Indiana 46204
Dr. Dilia C. Rieser
3719 S. East Street
Indianapolis, Indiana
Dr. and Mrs. Ray K. Maesaka
3989 Meadows Drive, Suite 3A
Indianapolis, Indiana
We received a change of address for
Dr. Monte E. O'Connor to
7216 Madison Avenue "T"
Indianapolis, Indiana 46227

Class of 1961

Christmas greetings were received from
Dr. and Mrs. Gerit Hagman
6190 Rivercliff Dr. N.W.
Atlanta, Georgia 30328
who also sent "Greetings to all from the Capitol of the South. We are enjoying staying busy with the practice and other activities in the community. I am still teaching one half a day at Emory in the Perio. department. We are supposed to get into the new school at Emory this

fall. *Our little girl, Melissa, is two years old now and is a real joy. She keeps us busy and we love it. Hope you all have a nice Christmas and New Year.*"

We received cards from Dr. and Mrs. R. J. Schoeps and family, 457 James St., Spencer, Indiana 47460 and Dr. and Mrs. Robert A. Winkler and family, 2021 North Central Avenue, Phoenix, Arizona 85004.

We received the following letter from Dr. Alphonso Trotman with his new address:

4910 Forest Park Blvd.
St. Louis, Mo. 63108

"This letter is to inform you that I have established permanent residence in St. Louis, Mo. I finished the graduate program in orthodontics this past summer and received an M.S. degree in dentistry from St. Louis university.

"I have opened an office here for the exclusive practice of orthodontics. I am also teaching part-time at St. Louis University School of Dentistry.

"I feel very fortunate to have had the opportunity to continue my education, and I wish to thank all of those at Indiana University who wrote letters of recommendation and assisted me in any way during the time that I was entering graduate school.

"I thoroughly enjoy receiving the Alumni bulletin and I am anxiously anticipating the next issue."

Class of 1962

Dr. and Mrs. Clarence E. Wentz
5108 North Flora Avenue
Kansas City, Mo. 64118

also sent wishes for the holiday season.

Class of 1963

Several changes of address were received in the Recorder's Office as follows:

Dr. Richard Lee Fisher
13 Arrowhead Drive, R.R. #9
Lafayette, Indiana 47906

Dr. Daniel B. Crane
1430 Moline St., Apt. 306
Aurora, Colorado 80010

Dr. James E. Dice
Dental Dept.

USNAS Alameda
California 94501

who also added a note to Dr. Hine:

"Thank you for your consideration and best wishes as you begin further service to Indiana University and the educational community."

Dr. and Mrs. Peter Leonard & family
1601 Audubon Drive
Columbus, Indiana 47201

also sent a lovely Christmas card.

Class of 1964

Class notes consist of address changes.

We'll start with

Dr. F. S. Bryant
USS Dixie (AD-14)
FPO San Francisco, Calif. 96601

Dr. Jerome Friedman
R. R. #8, Box 300F
Indianapolis, Indiana 46234

Major Charles Ligon, Jr.
267-B Wesson Circle
Red Stone Arsenal, Ala. 35809

Dr. Scott H. Polizotto
809 Wall Street
Valparaiso, Indiana 46383

who also stopped in to see us here at the dental school.

Dr. D. H. Thompson
1752 Halley Street
Imperial Beach, California 92032

Class of 1965

Capt. John C. Hoerath also sent in a change of address:

Qtrs. 6301 F
U.S. Air Force Academy
Colorado 80840

and wrote us a letter too:

"Seems the last time we corresponded I was stationed in Thailand with Kent Hartman ('64). Have been back to Colorado at the Air Force Academy since last September and like it here so much. I've had some good opportunities for Endo training in the Air Force and really like it. It was good to see Dean Hine, Doctor Boyd and many others at Chicago mid-winter. Since our five year reunion is May of 1970 perhaps I'll see you and can catch up on all that's new at busy IUSD."

Also received address changes from:

Dr. Charles W. Myers
Myers Dental Clinic
116 5th Street
Attica, Indiana 47918

and:

Dr. Arob W. Ridge
Tufts University School of Dental
Medicine
Dept. of Restorative Dentistry
136 Harrison Avenue
Boston, Massachusetts 02111

Class of 1966

We received a new address for
Cdr. Kenneth Kaneshiro USN
Dental Dept., Bldg. 15
MCB Camp Lejeune
North Carolina 28542

From Dr. and Mrs. David Jarrell in
far away Germany:

"Once again I was delighted to receive a copy of the Alumni Bulletin. Somehow the Bulletin always manages to catch up with me. I thought my location was a well kept 'secret.'

"Much has happened in the last three years. First, there was my marriage to the former Barbro Hultberg. She may be best remembered as the red-headed Swedish assistant in the Pedo Clinic.

"Immediately, we left for a one year stay in San Francisco, compliments of the Army. I took an Army internship there at Letterman General Hospital. Practicing hospital dentistry was an interesting experience.

"Next, we were off to an European assignment. We are in a rather remote area, 60 miles from Frankfurt, Germany, and a few kilometers from the E. German border. Although you may have heard of Germany's dangerous Autobahns, my biggest problem driving to work is to dodge the cows, sheep, and assorted sheepherders. We are in a rather 'farmy' area to say the least.

"Presently, I am the so-called 'Chief' of our four chair clinic. It is an excellent opportunity to conduct a general practice. I also get a chance at being the frustrated administrator.

"Of course, one of the big benefits over here is the chance to travel. We have done rather extensive travelling from Scandinavia to Italy's Isle of Capri. However, we still have many places to visit. On a recent trip we ran across John 'Steamboat Springs' Nelson ('66) in a ski lodge in the Alps. I guess it is a small world.

"In the future (August '70) I hope to return to civilian life and establish a practice in Indiana. So until then we both send our greetings to everyone."

Class of 1967

We received a very informative letter from

John A. McAleer Lt. (DC) USNR
NSAD, Chu Lai, Box 243
FPO San Francisco, Calif. 96696

who writes: *"I thought you would be interested in hearing how IUSD, through the efforts of her graduates, has been contributing to the cause of the free world in the Republic of Vietnam. I must speak in the first person, but be assured that the other IU dentists here are in similar circumstances.*

"To begin with, a broad knowledge of basic sciences is invaluable here in a combat zone, for the Doctor of Dental Surgery often performs duties which go beyond the usual confines of his specialty. As an example, my current assignment places me as the officer in charge of a small medical-dental clinic in the Chu Lai Combat Base. The staff of our clinic includes four hospital corpsmen, two dental technicians, and two Vietnamese student nurses. As you might imagine, dentistry occupies the majority of my time, but there are occasions when all of us must treat general medical problems. You can also see where Indiana's training in practice management pays off both in times of crisis and in our more routine moments.

"Dentistry does occupy most of my time, and I am pleased to say that we are able to practice the widely known Indiana University type of ideal dentistry even in Vietnam. In our clinic we become in-

involved with diagnosis, preventive dentistry, oral surgery, operative dentistry, endodontics, periodontics, and minor prosthetic dentistry. May I add here that of all the military dentists I have observed, the Indiana graduates are as well equipped to perform all phases of dentistry as are those from any other school.

"My dental practice is not just limited to a modern American clinic. We travel to small thirteenth century Vietnamese hamlets where we participate in the well-known Civic Action Program. Unfortunately, ideal dentistry cannot be practiced in these villages because of inferior sanitation facilities, no possibility of radiographs, and the limitation of our equipment to what we can carry. But we do alleviate pain. The treatment results are surprisingly excellent, and the people are truly appreciative.

"All things considered, being an Indiana dentist in Vietnam is a very rewarding experience. This is where all the time spent studying the 'unimportant' little things in dental school really pays off.

"I'll be looking forward to seeing you next summer and observing all the improvements at IUSD. Give my regards to all."

We received a card from
Dr. and Mrs. Jerry Travelstead
916 East Main Street
Brownsburg, Indiana 46112
and a change of address from
John R. Pell, II, D.D.S.
51st USAF Disp. Box 4188
APO San Francisco, CA 96235

Class of 1968

We recently received a letter from Dr. Stephen L. Fehrman, Lt., DC, USN, in Vietnam whose address is Hq. Co. 11th Eng. Bn., FPO San Francisco, CA 96602 and who informed us:

"Cullen Athey belongs to the same outfit as myself but attached to a different unit. I have seen him only 2 or 3 times. Saw Bill Schelm in Da Nang last weekend at the I Corps dental meeting. Leonard Vincent is in Chu Lia and I will see him next month. There are a lot of us here.

I'm sure I have some more classmates around here somewhere as it seems everyone is here or is coming to Vietnam."

A recent letter from Dr. Geraldine Chan of Central Nurses Residence, Welfare Island, N.Y., N.Y. 10017 tells us "In just a few days, the year of the Ram will terminate. So, before it ends, I would like to wish you all the best for the coming year. Hence, Happy New Year and Greetings—Chinese style of course!

"Please pardon the long delay in writing this letter. I just came back from Anesthesiology training in Metropolitan Hospital. During the course of Dental Internship, two months are spent in anesthesiology. I found it very interesting. It wasn't enough time to learn all there is to be learned but I managed to leave there with some of the most pertinent knowledge concerning general anesthesia. By that I mean such things as intubation, induction, etc. The different kinds of surgery were interesting also. All in all, it was quite an educational and enjoyable experience to me.

"Metropolitan Hospital is about 20 minutes drive from where I live. Early about 7 in the morning, traffic is not bad at all. However, I am glad that I don't have to drive there every day. Any little thing, such as rain, wind or snow flurries can make the New Yorkers quite agitated. And traffic becomes a jam. I have not quite seen anything like it. So, I am thankful that I am regularly stationed in Coler Hospital which is on Welfare Island. (I still wonder why the Island is named as such??) It is between Manhattan and Queens—The East River. Goldwater Hospital and Central Nurses Residence are also on the same Island. It's only about a mile between Coler and C.N.R., making it quite easy to get to work. I walk to Coler sometimes in the summer, but when I don't feel like it, there are buses to take us back and forth. Our Dental Clinic serves about 1600 patients. Many of them come for dental care in wheelchairs. All phases of dental care are provided. We have a lab technician to do the crown

and bridge work and we send the complete dentures to commercial labs.

"I like what I am doing very much. I am planning to stay on for an additional year. Metropolitan Hospital is developing a new program in Pedodontics. I was asked to be part of it. So, if all works out, I'll be working with children quite a bit of the time, next year. As you can see, I am happy with my work. However, with all the glamour, subways, people, cars, etc. of New York City, I still miss the serenity and friendliness of Indiana. Meanwhile, I do enjoy the fine restaurants in Chinatown, as well as being close to my relatives. I intend to come back to Indiana when my vacation comes up.

"Please give my best regards to friends."

In October 1968 Dr. Hine had a letter from Dr. Ronald M. Hand whose address is Capt. R. M. Hand, 4951 B, Avenue C, Malmstrom AFB, Great Falls, Montana 59402. We are going to quote excerpts from the letter as follows:

"I joined the early commissioning program of the Air Force. In August, after basic training in Texas, I was stationed here at Malmstrom Air Force Base, Great Falls, Montana. Our clinic isn't very large, having only eleven dentists. There is no oral surgeon. Our commander, Col. Bertram Beneville, has started a program in which any interested dentist has the opportunity to do the oral surgery for a period of time. Presently, I'll be doing all the surgery for the next couple of months. I realize that if I were in private practice I couldn't do a lot of the surgery that I have been doing. However, my education at Indiana University has given me enough background to know my limitations as well as my capabilities. I am learning quite a lot about hospital procedure. I had the opportunity to wire a fractured jaw, recently.

"By the way, Col. Beneville knows Dr. William Shafer quite well and recognizes Indiana University as an excellent school."

Then later we had a letter that their son David Aaron had arrived and just recently Ron and Claudia (you will remember she worked in the order office for several years) with David Aaron were in to see us.

They are all looking well; we hope they come back again real soon.

Several address changes have been received. They are:

Dr. Joseph H. Antonini
P.O. Box 37
Santa Claus, Indiana 47579

Capt. E. M. Feltman, D.D.S.
21 Twin Lakes Circle
Hampton, Virginia 23366

Dr. C. R. Foster
1619 W. 86th Street
Indianapolis, Indiana 46260

Dr. David M. Phillips
215 B. Dyer Circle
Redstone Arsenal, Ala. 35808

Dr. Robert P. Lindeman
674 Middle Drive,
Woodruff Place
Indianapolis, Indiana 46201

Dr. Robert L. Siefker
Everroad Medical Center
2760 25th Street
Columbus, Indiana 47201

Lt. C. L. Athey, Jr., DC
USNR 735400
3rd Mardiu (REINF) FMF
3rd Dent. Co. Hq. Bn.
FPO San Francisco, Calif. 96602

and we received Christmas greetings from

Dr. and Mrs. Tony Lubarsky
2740 Embassy Row
Speedway, Indiana 46224

Dr. and Mrs. Thomas Lapp
614 North Moreland
Indianapolis, Indiana 46222

If you wrote us a letter or sent us a card and we failed to mention it please forgive us. We try! Just don't give up—write us again, please!

Class and Fraternity News

SENIOR CLASS

The Senior Class has been enjoying their final year; and as it stands the majority are in good position as far as clinic requirements. Many of those who have finished their requirements now, are starting in the "excel" program. These students are given more difficult cases to complete. For example, in Complete Denture, under the guidance of Dr. White, the excel students may be constructing dentures on such difficult cases as the Class II (Retronathic) or Class III (Pragnathic) patient. In Operative, Dr. Hohlt has a special excel session for those who are interested in hydrocolloid impressions after they have completed preparation of an entire quadrant of inlays.

On December 6th the entire class was invited to tour the Eli Lilly McCarty Street Plant. The representative for Eli Lilly had a very well organized day for us; half of the class toured the packaging division, while the other half toured the biomedical and biochemical division. In the afternoon the sections switched. Eli Lilly presented us with a delicious lunch, cafeteria style, and a movie on "The 500 Mile Race" and "How Much is a Miracle." That evening at 6:30 P.M. our class met again at the Sheraton Lincoln Hotel for hors d'oeuvres, a delicious filet mignon dinner with all the trimmings.

It has been a pleasure to present to Dr. Gregory, instructor of Oral Surgery and to Dr. Cunningham, professor of Oral Rehabilitation, a plaque with their names inscribed for being elected the most outstanding lecturers for the months of November and December.

During one of the Dean's hours on Wednesday, our class was presented with an interesting discussion on the importance and construction of mouth guards. Most of the class showed an extreme interest in this subject after the speaker from the Department of Public Health finished his presentation. The important concept was to make the coach of the various athletic teams understand the importance of the mouth guards for every single player and the fact that it must be worn at all times while the player is active in the sport.

The second semester will be a busy one as we finish up those remaining clinic requirements, take the National Boards in April, and

finish our senior papers and projects. We're all looking forward to June.

Judy Johnson

PSI OMEGA

The men of Psi Omega are currently expending their efforts in an attempt to improve the chapter's laboratory facilities. Once again our expression of gratitude is extended to our alumni for their support through continued donations of equipment and coverage of repair costs.

The Psi Omega social calendar of the immediate past shows good times were had by all at the annual tree-trimming party, including the traditional egg nog and singing of carols. Mid-January saw the wives' organization serving its men a smorgasboard dinner. The annual Casino Night found Psi Omegans of active and alumni status pitting their wits against Lady Luck in early February, and a hearty welcome was extended the new members. Among events on the spring social agenda is the annual golf tournament. No specific date has been set.

But the prime objective of Psi Omega has its foundation in far more worthwhile areas. Won't you join us in our pledge for the betterment of dentistry through more concentrated effort and self-dedication.

Jay Hernly, Secretary

DELTA SIGMA DELTA

First on the agenda for the spring will be the pledging of new member Deltas. Early in January the Deltas held a "get to know the freshmen" stag. From all indications we may look forward to just as large a pledge class this year as we had last year. Let's hope so. Our thanks to Don Wilkins, this year's rush chairman, for a job well done!

Dick Janzaruk completed plans for the alumni banquet held February 27, 1969, at Stouffer's Inn. The highlight of the evening was the guest speaker, Mayor Richard Lugar. We saw many of our distinguished alumni in attendance at the banquet.

Although the winter weather may provide an excuse to many to stay home, attendance at meetings has been remarkably good. This could be attributed to the excellent manner in which

Grand Master, Rick Papineau, conducts the meetings or possibly to each class trying to outdo the others in total number present.

Tony Kenworthy, house manager, has done a very good job keeping the house "ship-shape" this winter. Not only has Tony organized clean-up crews after each monthly dance, but he has also been responsible for house maintenance. The lab equipment continues to be in great shape due to Tony's diligent efforts.

The annual District Conclave was held in Milwaukee, Wisconsin, this year. March 7th and 8th were the dates, and the host chapter was Eta Eta of Marquette University School of Dentistry. The conclave topic was "Why Professional Dental Fraternities." Each year the conclave proves to be an enlightening experience for those in attendance. We're sure this year was no exception.

Bailey Hinton, Scribe

WHAT'S IN IT FOR ME?

(Continued from page 5)

dozen I.D.A. activities, for it encompasses many areas. Prepayment (public and private) is the responsibility of the *Advisory Committee on Prepayment Plans*. The Association has maintained a dominant leadership role in this field. There was a time a few years ago when the House thought Indiana should have a dental service corporation to manage and promote prepaid dental care programs. However, this idea was not to prevail. Instead, the House decided that dental insurance was the business of insurance companies. The Association has provided guidance and direction to companies and members alike regarding what Indiana dentists expect in any prepaid program. The Advisory Committee on Prepayment Plans developed a Manual including a national claim form to help the dentist and his staff follow a prescribed method of dealing with these programs.

Now, it looks as if more government-sponsored health care programs will be using the prepayment method (e.g. Medicare and Medicaid). In addition, there are strong indications that large groups of employees will be seeking dental care pro-

grams in coming contract negotiations. To meet some of these growing responsibilities, the Association is attempting to remain alert and change its pattern of organization and operation. A reorganization of Association councils and committees, all with related responsibility in this field, has been proposed and will receive attention by the May 1969 House of Delegates. The business of prepayment is most complex and time-consuming. It requires the diligence and knowledge of people who are fairly expert in such things. By dividing up some of these responsibilities and by employing a field staff person who is knowledgeable and able to spend almost full time on the subject of prepayment, the Association will be providing its members with a more direct service. And, it will be in an area that has the potential for growth in almost all directions.

A field staff person with this assignment could help local dental groups with representation in Welfare (medicaid); Head Start, School and related poverty programs providing dental care and using the prepayment mechanism. The same would be true with local employers, unions, and insurance companies representing groups of people with dental care prepayment plans. In addition he could spend some time with dentists and their staff to help with problems or processing claims. Having a manual on this is one thing but getting everyone to utilize it is another.

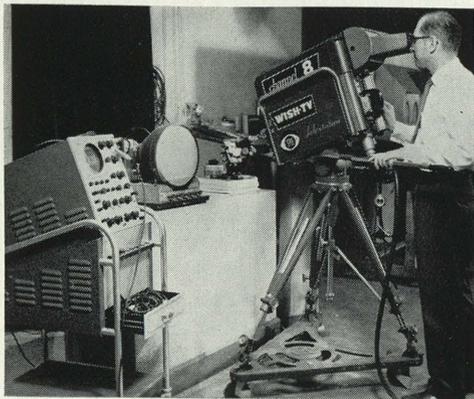
What's In It For Me?

Dr. Cantrell continued in his article to list many other Association membership benefits—*dental health education programs; public relations; student loan programs; and relief funds for emergencies*. Any one of these are worthy projects and excellent examples of membership benefits, but probably enough's been said. While a most important benefit of membership is just plain good fellowship there is much in answering this question, "What's in it for me?" Like any good corporation, shareholders have many benefits if they will take a little time to examine and look into what they are.

TV AND DENTISTRY

(Continued from page 11)

educational technology may someday be employed—integrated carrels for self-instruction; student response systems in the major teaching areas; computer-assisted instruction.



Dr. Arthur I. Klein at TV station WISH with early experimental TV camera-microscope.

The future looks bright with regard to the incorporation of television into dental instruction at all levels in Indiana—undergraduate, postgraduate and continuing dental education. The School of Dentistry has a capable and motivated faculty; the equipment is being acquired; the melding of the two should benefit all of us.

References

1. Romano, Michael T., *Television in Dental Education*, Jour. Dent. Educ. vol. 28, no. 4, 431-493, 1964.
2. Klein, Arthur I., *The Television Microscope in Dental Research*, Dent. Prog., vol 3, no. 4, 274-279, 1963.
3. deAguiar, A. E., A. I. Klein, J. O. Beck, *Spongy Bone Architecture of Edentulous Mandibles: A Television Radiographic Evaluation*, Jour. Pros. Dent., vol. 19, no. 1, 12-21, 1968.
4. Kerkove, B. C., S. C. Herman, A. I. Klein, R. McDonald, *A Clinical and Television Densitometric Evaluation of the Indirect Pulp Capping Technique*. Jour. of Dent. for Child., vol. XXXIV, 192-201, 1967.
5. Klein, Arthur I., & D. MacPherson, *Television Measurement Pulse Generator-Mixer*. Med. & Biol. Engng., vol. 5, 267-270, 1967.
6. Klein, Arthur I., & D. MacPherson, *Intra-oral Television Micro-Measurement Instrumentation*. Med. & Biol. Engng., vol. 5, 259-265, 1967.
7. Horwitz, B. A., A. I. Klein, R. E. McDonald, *Intraoral Television of Cavity Margin Deterioration*. Jour. Dent. Res. vol. 46, no. 4, 700-707, 1967.
8. Klein, Arthur I., *Clinical Television Research Instrumentation*. Jour. Amer. Dent. Assoc., vol. 74, no. 6, 1210-1219, 1967.

NOTES FROM DEAN

(Continued from page 15)

in dental hygiene education and also experience in private practice. She is a 1952 graduate of Ohio State University School of Dental Hygiene. In 1961, she received the B.S. degree in Education from Youngstown State University and in 1962, she earned the Master's Degree at Columbia University. Miss Catherman served for three years as dental hygienist for the Youngstown Public Schools. Following this assignment, she served as a member of the faculty at Columbia University, St. Petersburg Junior College, The University of Nebraska, and most recently, as an assistant professor at Ohio State University. Miss Catherman co-authored with Dr. Frances A. Stoll the book, *Dental Health Education*.

Dr. H. William Gilmore has reported to me that the Teaching Committee is planning the fourth Faculty Teaching Conference for September 3-5, 1969. Last September, approximately 100 members of our faculty met at Spring Mill State Park to participate in a program designed to improve our teaching methods. We feel that this is a very worthwhile project and we are most grateful for the financial contribution that the Indiana University School of Dentistry Alumni Association has made in support of this conference.

DENTAL HYGIENE

(Continued from page 25)

for their wedding the following Saturday. My experiences in The Netherlands were the highlight of the whole trip. It was really an honor and a privilege to be included in the warm relationship of the family group at the wedding. The Wrights enjoy living in Iceland. We have not heard from Els since she joined her husband in Okinawa. Mary Fifer received her B.S. and Mrs. degrees in June 1968. She is now Mrs. Lee Wann and is working for the State Board of Health. Sharon (Griffith) Bryant has been spending the winter at home while her husband is on temporary duty in Okinawa. Carol Smallwood and Charlotte (Smith) Seip will receive their Bachelor of Science degrees in June. Carol is working for the Institute of Preventive Dentistry.

New addresses:

Susan (Huffman) Arnholt, 10 Beach Avenue, Trailer Court, Columbus, Indiana 47201
Kathleen Johnson, 7669 Lieber Road, Indianapolis 46260
Bonnie (Enlow) Sanders, 1130 Franklin Street, Columbus, Indiana 47201
Carol A. Smallwood, 6013 Beachview Drive, Indianapolis 46224—Apt. 271
Anita (McCrackin) Steel, 3555 Red Lion Road, Philadelphia, Penna. 19114
Mary (Fifer) Wann, 6001 Beachview No. 85, Indianapolis 46224
Maria (Karlakis) Dolatowski, 120 Kingston Place No. 12, Bloomington, Indiana
Ida (Hordijk) Wright, c/o James Wright D.C., FPO 09571, New York, N.Y.

1968

Most of the news of this class pertains to new names and addresses. Those we have on record are listed below. Terry Cobb, Christine Fisher, Diane Lievense, Diane Rohlfling, Susan Schrey and Pat VanDorn are working diligently to complete degree requirements. Doris Burger is planning a spring wedding. Carol Wil-

liams is very enthusiastic about her work. Cindy Hare finds hers even better than she ever hoped for. Darlene (Duncan) West and Jane (Horton) Browning presented a table clinic on the uses of Therapeutic Zircate at the Midwinter in Chicago. They were surprised to learn that so many people were unfamiliar with Zircate. They considered this a "once in a lifetime experience" and appreciated the opportunity to participate.

New addresses:

Jewell (Byers) Arthur, 3829 Camelot Lane, Columbus, Indiana 47201
Lisa (Blum) Bonham, 52 Hennessey Avenue, Brunswick, Maine 04011
Nancy (Cline) Holtzclaw, 9858 Colony Drive, Bellefontaine Neighbors, Mo. 63137
Sharon (Davis) Swinehart, 1541 Henley Road, Troy, Ohio 45373
Darlene (Duncan) West, (new address unknown) home: 1217 E. Third, Mishawaka, Ind. 46554
Carol (Hawkins) Walters, 2550 Yeager Road, No. 10-1, W. Lafayette, Indiana 47906
Jane (Horton) Browning, 1006 40th Ave., Apt. 1-C, Griffith, Indiana 46319
Jacqueline (Kuhn) Wonsowicz, 429 Lansing, Indianapolis 46202
Sandra (Rice) Pickrell, 729 N. Dixie, Apt. No. 2, Bloomington, Indiana 47401
Jane (Russell) Osborn, 610 W. Poplar, Zionsville, Indiana 46077
Kathryn (Stute) Fessler, 6401 Consulate Court No. 1720, Speedway, Indiana 46224
Pamela (Phillips) Thiesing, 520 Fairlawn Drive, Urbana, Illinois 61801
Patricia (Ortman) VanDorn, 3869 Forest Grove Drive, C-3, Indianapolis 46205

SECONDARY IMPRESSION TRAYS

(Continued from page 16)

activates the buccal musculature and the labial musculature as well and the patient is thus performing some of the same muscular movements that are required for talk-

ing, smoking, or merely opening the mouth.

Next, if the patient is instructed to open his mouth about half-way and move the mandible from side to side, any contact of the ascending ramus in the tuberosity area may be observed. The patient should also be asked to open the mouth really wide a couple of times, activating the pterygo-mandibular raphe and causing activity through the hamular notch. Finally, the patient is asked to bring the upper lip down across the wax while the tray is still being held in place and to move the lip gently from side to side. This movement establishes the anterior segment (in other words, the muccobuccal fold of the maxillary denture).

These are all simple actions that the patient himself performs. No longer is it necessary to take the fingers and tug and pull to simulate the muscular action. Border molding of this type has often proved acceptable, but it certainly seems preferable to have the patient's musculature go through movements which closely simulate the actions he will be performing when the denture is finished and inserted.

INDIANA UNIVERSITY AT FT. WAYNE

(Continued from page 27)

Rhodes with Doctors Donald Sheller and P. E. O'Shaughnessy. These dental hygienists are very active in the local acticvs, as well as Debbie and Sandi pursuing further work toward their degrees. Marcia Grissom and State Police Trooper Micki Hudson were married October 19, and moved to a little house in the country at Norman, Indiana, near his patrolling area.

Kay Oser and Ronald Fulkerson were united in marriage on August 24. Kay works with Dr. Donald Glassley while her husband, Ron, finishes his pre-dental work here on the regional campus before entering I.U. School of Dentistry next fall.

Belva Mutzfeld Meyer and husband, Sidney, took their vows in September and live in Waterloo, Indiana. She commutes to Dr. Robert Stetzel's office every day and says she would not change "one" thing—job or husband. Darlene Richards and Edward Kohne were married in August and maintain their home in Decatur. She is associated full time with Dr. Harold Bohnke in Decatur. Betty Licking Frantz was the lucky one to step into her sister's footsteps at Dr. James McPheeters office in Bluffton. Can't beat that, can you? Sisters—and even Linda planned her wedding so that sister Betty would be available to pick up the instruments where Linda left off. Betty's mortician husband is now in the service, and she hopefully plans on joining him soon.

It's always so good to hear from you alumni dental hygienists, so let us hear from you "wherever you are."



The Class of 1969 has designed this plaque which hangs in the main corridor of the dental school. It is their proposal that each month a lecturer will be selected to be so honored. The first professor to be so honored was Dr. G. Thaddeus Gregory who lectures to the class on oral surgery.

THE BOOKSHELF

(Continued from page 35)

cement and resin filling materials were selected. Restorations were in place two weeks prior to sacrificing the animals. Clinical observations revealed an accumulation of marginal debris on all teeth whether they were filled or unfilled. Generally speaking, the unfinished restorations collected more debris than the finished fillings. No gingival pathology was observed clinically.

Blocks of tissue containing the teeth and restorations were fixed and decalcified. Semi-serial histologic sections were prepared and stained with hematoxylin and eosin. Only the representative sections from the 40 teeth were evaluated for the study.

The histologic material demonstrated inflammation on the operated buccal side more than on the control lingual side. Finished restorations showed less "inflammation intensity" than those left unfinished. The data suggested that the tissue response to sub-gingival Class V restorations was not severe enough to initiate deeper periodontal changes. It was concluded that the establishment of proper hygiene and massage could make the local irritative factor induced by the properly placed restorations unimportant.

ORAL LICHEN PLANUS— A REVIEW OF ONE-HUNDRED AND NINETY CASES

José Carlos Borges Teles

A study was carried out based upon the clinical and histological analyses of one-hundred and ninety selected cases of oral lichen planus, from the files of the Department of Oral Pathology of Indiana University School of Dentistry. Attention was concentrated on the clinical aspect of available data with regard to sex and age incidence, preferential age group, race predilection, location of the lesions, symptoms, and accuracy of clinical diagnosis.

A careful review of the pertinent literature and a histologic study of all cases was also accomplished. The histologic sections were prepared in the usual manner and stained with hematoxylin and eosin.

The possibility of malignant transformation in oral lesions of lichen planus, as has been reported in the literature, also constituted one of the principal objectives of the present study, as well as a correlation between the histologic

features of the oral lesions and those present in cutaneous lesions. No cases of malignant transformation were observed in the present series.

A close correlation was observed between the clinical aspect of oral lesions in its typical form and the histologic features, since all the cases clinically diagnosed as lichen planus were confirmed by microscopic examination.

It became increasingly clear during the course of the present study, that the occurrence of oral lichen planus is independent of the existence of skin lesions.

AN EVALUATION OF PROCION BRILLIANT RED H-8BS AS AN IN VIVO HARD TISSUE MARKING AGENT

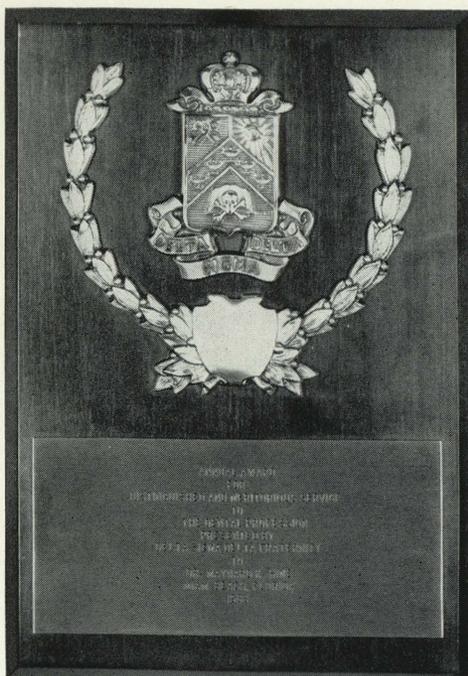
Charles Edward Tomich

This study was undertaken to establish a dosage of Procion dye which will produce adequate hard tissue labeling and to determine what toxic effects are produced at this dosage.

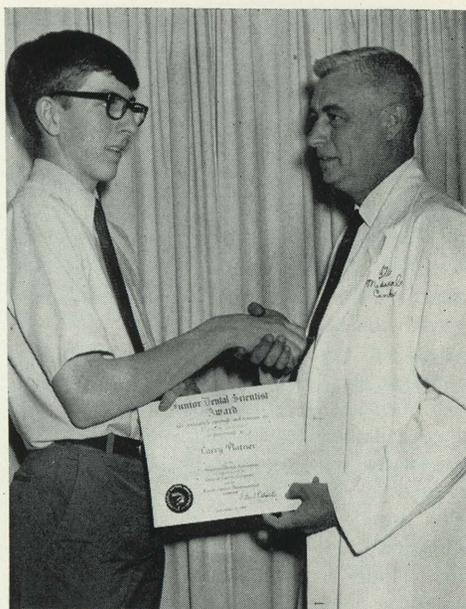
One hundred young adult male albino rats were divided into four groups. One group served as a control group and received intraperitoneal injections of sterile distilled water. The remaining three groups were experimental and received aqueous solutions of the dye at 25, 50 and 100 mg per Kg of body weight respectively. All animals received four injections at weekly intervals and were sacrificed one week after the fourth and final injection.

At the time of sacrifice, a blood sample was drawn from each animal for hematologic examination. The kidneys, liver, femurs and mandibles were removed and representative tissues from each group were prepared for microscopic examination.

The results of the study showed that animals receiving 100 mg of the dye exhibited a monocytosis and a slight lymphopenia; that Procion dye is an effective hard tissue fluorescent marking agent for undecalcified ground sections at a dosage of 25 mg per Kg and is visible with ordinary light microscopy at a dosage of 50 mg per Kg; and that a dosage of 100 mg per Kg is necessary for fluorescent labeling in decalcified paraffin embedded specimens. No labeling was evident in decalcified paraffin embedded specimens. No labeling was evident in decalcified paraffin embedded sections of seven microns thickness viewed with ordinary light microscopy.



Plaque presented to Chancellor Hine for distinguished service by Delta Sigma Delta Fraternity at Miami Beach last fall.



Dr. William G. Shafer, Professor of Oral Pathology, presents Junior Dental Scientist Award to Mr. Larry Platner who studied in his laboratory last summer. This program is sponsored by the ADA, General Electric Company and Warner-Lambert.

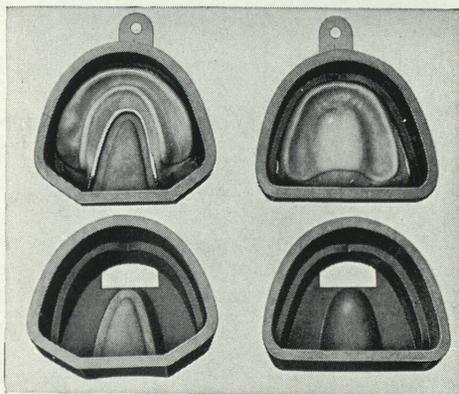
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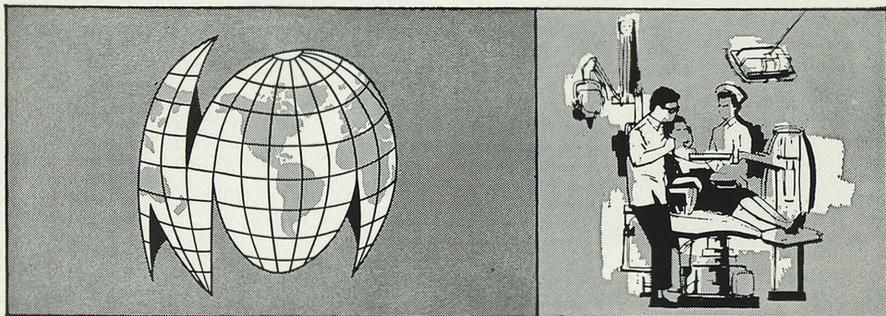


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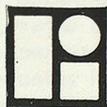
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