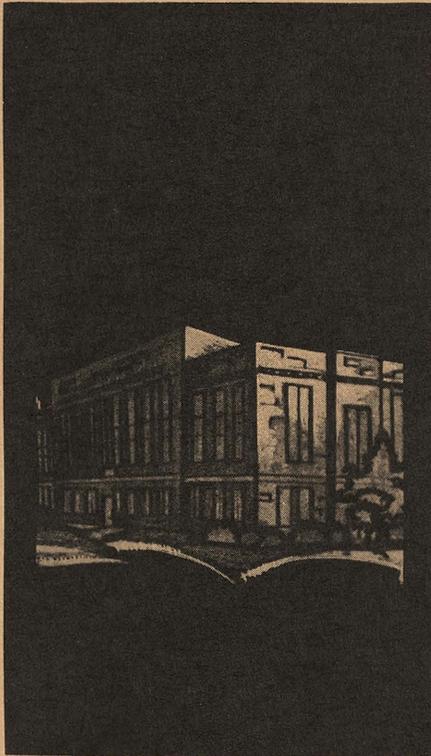

Alumni Bulletin

INDIANA UNIVERSITY



SCHOOL OF DENTISTRY

FALL ISSUE / 1966

Indianapolis, Indiana

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Indiana University School of Dentistry ALUMNI BULLETIN

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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.

Dental School Expansion

Research is absolutely essential to the continued growth and development of every productive institution: industrial, commercial or academic. Without research progress within a given area soon terminates and ultimately, as history has repeatedly proven, the institution either disappears or is engulfed by a more imaginative consort. Both applied and fundamental research have important places in any broadly-based research program; they complement each other and, for optimal results, must be balanced and cooperative.

Indiana University has long recognized the importance of research in its academic program and the School of Dentistry, in particular, has certainly been a leader in research among all dental schools in the country. Dean Maynard K. Hine, himself, both a distinguished research scientist and clinician, has long recognized the need for research in all areas of this profession and he has strongly encouraged this activity for many years throughout his entire faculty.

The latest example of his strong belief in research has been the completion of a new area within the dental school, consisting of a series of laboratories to be devoted entirely to research, both clinical and basic. Very few people, students and even dental school employees, were even aware that the newly converted research area existed within the dental school. This area actually consists of approximately two-thirds of the basement of the front-half of the dental school which had never been excavated when the original building was constructed in 1934. The dirt-floor space, measuring approximately 25 by 120 feet, was used for many years. Acquisition of the Ransburg Building by the University made it possible to use that for storage. Realizing that this area could be easily converted into utilizable space, Dean Hine, with the assistance of Drs. William G. Shafer, S. Miles Standish, Robert L. Bogan, and others, drew

plans for its conversion to a series of research laboratories in 1964. Funds for the construction were obtained from the University.

Following innumerable hours of planning with architects, mechanical engineers, electrical engineers and construction engineers, actual work began in October 1965. Since considerable excavation was necessary to deepen the original six foot high area, a large hole was created in the 16 inch-thick solid concrete foundation of the building. The most convenient site for this hole, which was of such a size that a bulldozer could be conveniently driven in and out, was located immediately below the office of the Dean and provided him with considerable noisy distraction for several months.

Many delays were encountered, as was to be expected due to shortages of materials and labor, and the completion date fell far behind schedule. However, occupancy of this area was finally authorized in July 1966 and Indiana University School of Dentistry now possesses a series of research laboratories surpassed by no other dental school in the country.

The basic plan of the area consists of a 120 foot corridor onto which six research laboratories open.

These consist of 1) a conference room and clinical examination area, 2) an Oral Pathology histochemistry research laboratory, 3) a tissue culture laboratory, 4) an electron-microscope laboratory, 5) a time-lapse cinephotomicrography room, and 6) a chemistry laboratory.

The Oral Pathology histochemistry laboratory was vitally needed inasmuch as the tissue diagnostic and cytologic services of the Department of Oral Pathology have expanded so dramatically within the past few years that these now occupy the entire space of the former oral pathology technical laboratory. The new laboratory is shown

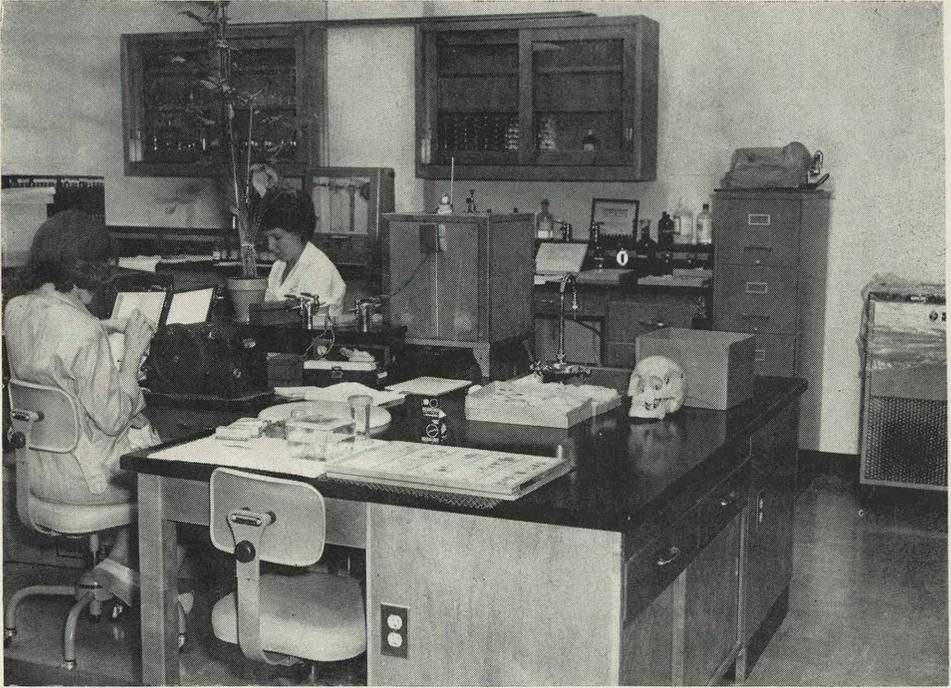


Figure 1. Oral Pathology histochemistry research laboratory.

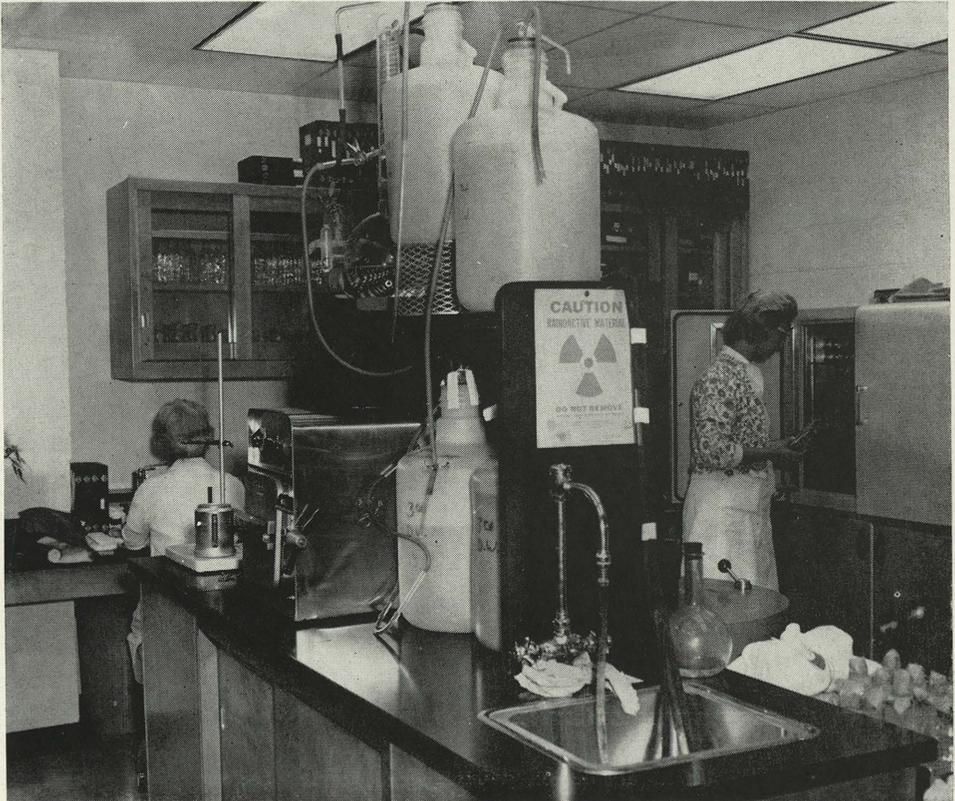


Figure 2. Tissue culture laboratory.

in Figure 1 with two of the departmental technicians at work. The tissue culture laboratory was formerly located in the Department of Pathology in the Medical Science Building. It was established in 1958 but recent space needs of that department required the moving of this laboratory into the dental school. A portion of the new tissue culture laboratory is shown in Figure 2.

The establishment of an electron-microscope laboratory was deemed essential to the continued development of the Indiana University School of Dentistry by Dean Hine and a specially designed laboratory with self-contained dark-room was constructed in the new area for this purpose. Figure 3 shows the preparation room while Figure 4 shows the electron-microscope itself. Seated at the microscope is Miss

Irene Guthrie, a high school student participating in the High School Science Student Institute at Indiana University during the summer. In Figure 5, Dr. Jack Whitten, Assistant Professor of Oral Pathology, is seated at the time-lapse cinephotomicrography unit which was presented recently to the Department of Oral Pathology by the Community Cancer Unit of Grant County.

Altogether, this new area provides an exceptionally fine arrangement of fully equipped laboratories specially designed for basic and clinical research. Once again, Indiana University, its administration, the School of Dentistry and its Dean have shown their foresight and convictions in further upgrading our dental school so that it is unquestionably one of the foremost in the country.

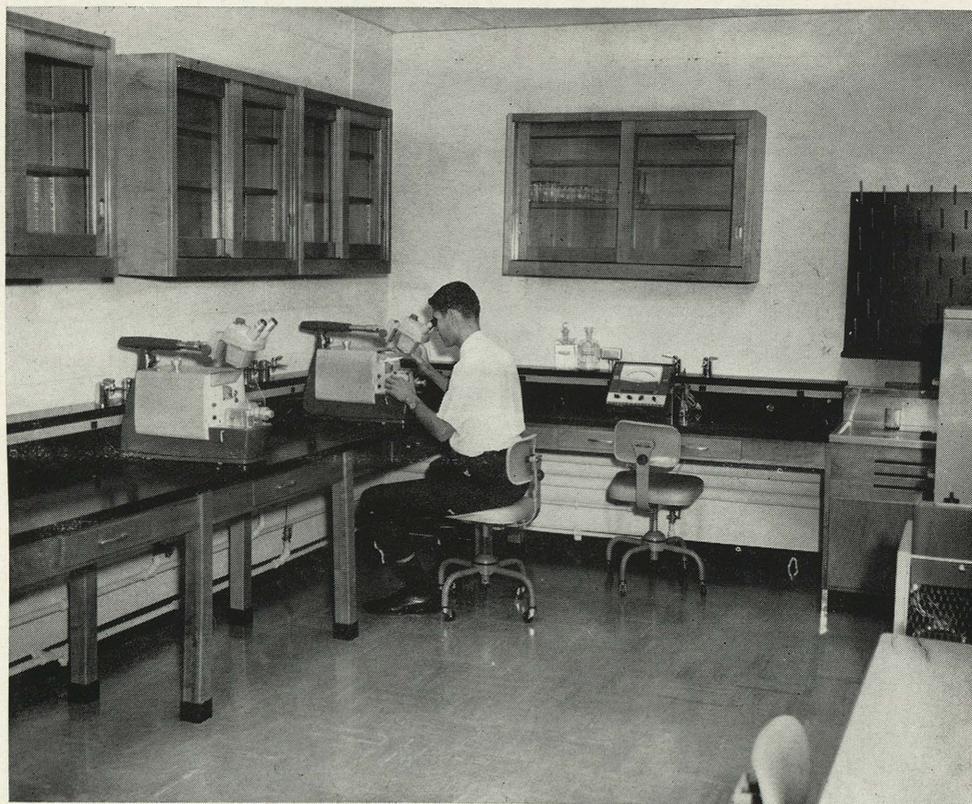


Figure 3. Electron-microscope preparation room.

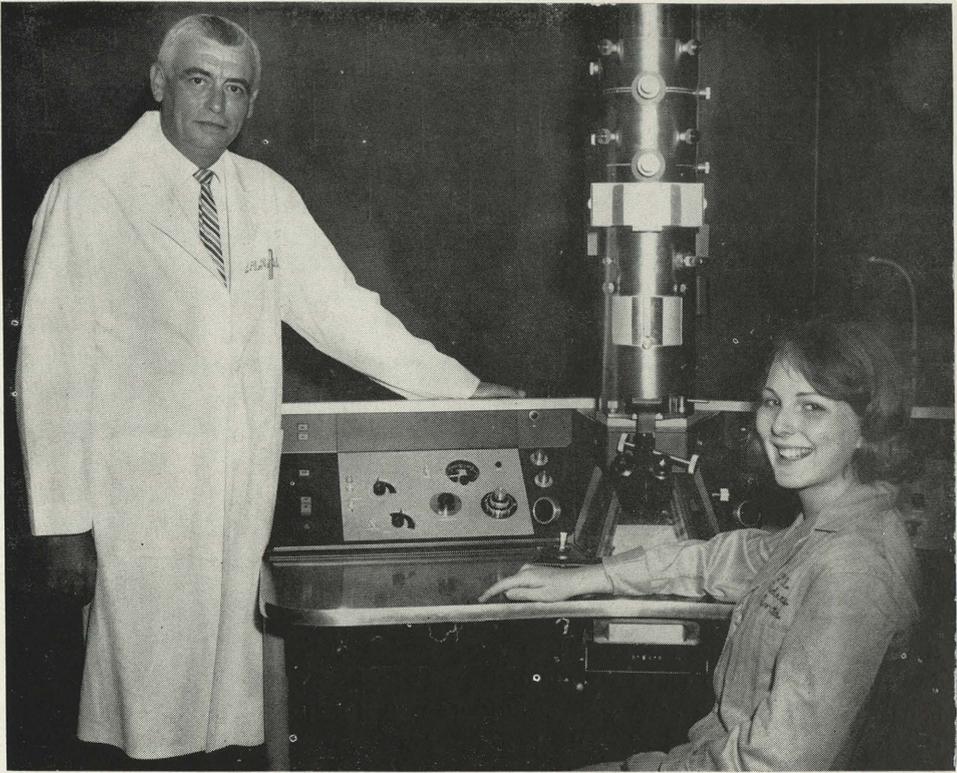


Figure 4. Electron-microscope.

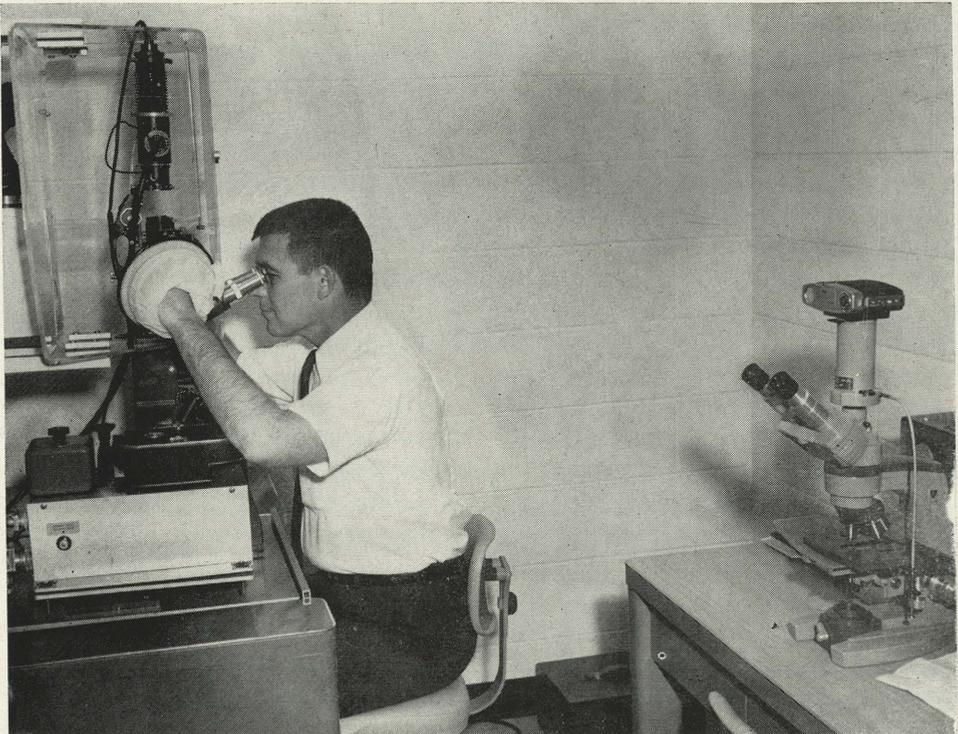


Figure 5. Time-lapse cinephotomicrography room.

Continuing Education Programs for 1966-67

Sept. 21, 28; Oct. 5, 12, 19, 26; Nov. 2, 9, 16, 1966: **Complete Denture Construction.** This is a clinical and laboratory participation course in complete denture principles and practice. For nine consecutive Wednesdays a one-hour lecture will be presented in the morning session, and the construction of dentures for patients will be the program for the remainder of the day. Faculty; Enrollment limited, 10; Fee, \$75; I.U. Regional Campus, Ft. Wayne.

Oct. 5, 1966: **The Problem of Oral Cancer in Indiana.** It has been established that oral cancer is not a rare disease in Indiana. Discussions will be presented concerning the extent of the disease in the state, on evaluation of methods of diagnosis, and the problem of "pre-malignant" diseases. Differential diagnosis for the general practitioner will be included in the seminar discussions. Faculty; Enrollment limited, 20; Fee, \$15; I.U. Regional Campus, Gary.

Oct. 12, 1966: **Biologic Clinical Endodontics.** A one-day symposium is planned to discuss present-day biologic principles and research that contribute to the success and effectiveness of endodontic therapy. Faculty, Guest Lecturer, Stephen F. Dachi, University of Kentucky. Enrollment unlimited; Fee, none; Rice Auditorium, Indiana State Board of Health, Indianapolis.

Oct. 19, 1966: **Practice Management, Case Presentation, and Conservative Measures for Operative Dentistry.** A one-day symposium has been designed to review and acquaint the practitioner with the importance of careful organization and planning for the operative care of the patient. New techniques for evaluating patients and their dental needs will be discussed. Faculty, Guest

Essayist, D. Jackson Freese, Concord, N.H. Enrollment unlimited; Fee, none; Rice Auditorium, Indiana State Board of Health, Indianapolis.

Oct. 24, 25, 26, 27, 28, 1966: **Refresher Course for Fixed and Removable Partial Prosthodontics.** This course is designed to bring the practicing dentist abreast of the new developments in partial prosthodontics. Sufficient material will be presented to develop a panoramic view of the modern restorative practice. Faculty, Guest Essayist John Flocken, Los Angeles, Calif. Enrollment limited, 15; Fee, \$75; I.U. Dental School, Indianapolis.

Nov. 2, 1966: **Methods of Caries Control for the Dental Practice.** Useful procedures in analyzing caries and informing and motivating the dental patient will be presented in addition to the scientific findings supporting their use. Everyday patient problems, and methods to support restorative care will be presented to assure useful material for the course participants. Faculty; Enrollment limited, 20; Fee, \$15; Mead Johnson Laboratories, Evansville.

Jan. 25, 1967: **Preventive Orthodontics and the General Practitioner.** Methods of interceptive and preventive orthodontic procedures, diagnosis, and appliance construction will be presented for the practicing dentist. This course will be a one-day symposium and will include lecture presentations and case demonstrations by slide series. Faculty; Enrollment unlimited; Fee, none; I.U. Regional Campus, Ft. Wayne.

Feb. 15, 1967: **Pin-Retained Amalgam Restorations.** A one-day participation course has been arranged for the restorative dentist. Color slides, diagrams and models will be used in the demon-

stration of techniques and manipulation of amalgam. Indications will also be discussed. The afternoon will be devoted to a clinical demonstration, and laboratory participation in this restorative procedure. Instruments and supplies will be provided. Faculty; Enrollment limited, 20; Fee, \$15; I.U. Regional Campus, Ft. Wayne.

March 29, 30, 1967: **Current Procedures for the Practice of Dental Hygiene.** The principles of practice of dental hygiene will be reviewed in addition to new procedures available from research data. New preventive measures and community problems will be discussed to provide information that is both current and useful. Faculty, Guest lecturer, Wesley O. Young, University of Kentucky. Enrollment unlimited; Fee, \$20; Rice Auditorium, Indiana State Board of Health, Indianapolis.

March 29, Apr. 5, 12, 19, 26; May 3, 10, 17, 1967: **Complete Denture Construction.** This is a clinical and laboratory participation course in complete denture principles and practice. For nine consecutive Wednesdays, a one-hour lecture will be presented in the morning session, and the construction of dentures for patients will be the program for the remainder of the day. Faculty; Enrollment limited, 10; Fee, \$75; I.U. Dental School, Indianapolis.

April 5, 1967: **Advancements in Dental Materials of Interest to the Restorative Dentist.** A symposium has been designed to make the general practitioner knowledgeable of newer materials and changing concepts in the field. It will include an evaluation of recent resin and silicate formulations, conservative cavity preparations and insertion of amalgam restorations, porcelain fused to gold, biologic considerations in the selection of materials and modern-day use of materials in Children's Dentistry. Faculty, Guest Lecturer Gunnar Ryge, United States Public Health Service.

Enrollment unlimited; Fee, none; Rice Auditorium, Indiana State Board of Health, Indianapolis.

April 10, 11, 12, 13, 14, 1967: **Dental Ceramics.** A comprehensive refresher course in dental ceramics has been organized emphasizing fused porcelain veneering techniques. Material will include diagnosis, treatment planning, tooth preparation, impression techniques, and laboratory procedures. The laboratory participation phase will be three days in length and limited to fifteen individuals. Faculty; Enrollment limited, 15; Fee, \$100; I. U. Dental School, Indianapolis.

April 19, 1967: **New Developments in Restorative Dentistry.** This one-day symposium will consider diagnosis, treatment planning, tooth preparation and impression techniques. A discussion of laboratory procedures involved in the construction of dental restorations with fused porcelain veneers will be included. New concepts of articulation and cavity design as utilized in the dental office will complete the program. Faculty; Enrollment limited, 20; Fee, \$15; I. U. Regional Campus, Ft. Wayne.

April 24, 25, 26, 27, 28, 1967: **The Practice of Maxillo-Facial Prosthetics.** The course is organized to present both principles and methods of clinical practice for this complex specialty. The team approach will be emphasized and particularly the desirability of cooperation between surgeon and prosthodontist for achieving the best possible clinical result with intra-oral and extra-oral prostheses. Faculty, Guest Essayists Joe Drane, University of Texas and William Laney, Mayo Clinic, Marvin Cleaver, Veterans Administration, New York. Enrollment limited; Fee, \$150; I. U. Dental School, Indianapolis.

May 3, 1967: **Oral Diagnosis and Oral Medicine.** This one-day symposium will include a review of the methods of

(Continued on page 50)

Dean Hine reports that...

Alumni will want to visit the new research area which has been developed in the formerly unexcavated part of the Dental School below the Dean's Office. This area is described in an article in this issue of the Bulletin. The area now includes a room for electromyography, tissue culture research, electron microscope (just recently installed), room for preparation of tissue for microscopic study for research and teaching, and a laboratory for dental genetics.

The architects finally devised a method of increasing the size of our balcony so that now the space devoted to periodontics has been doubled. Also, with the installation of new lights under the balcony and new operating lights for the dental units in the entire main clinic, the level of illumination is now more nearly ideal.

The Teaching Committee of the Dental School is to be complimented for the careful planning that went into the Second Annual Teaching Conference which was held in Spring Mill State Park September 11 to 14, 1966. The speakers were all carefully selected and the overall effect of the conference was commendable. Undoubtedly these conferences will be repeated annually.

The 1966 class in Dental School is now off to a flying start with a total of 99 regularly enrolled freshmen. From the point of view of statistics, this is the finest class ever admitted; the number of hours of college credits earned, the total accumulative average, and the science average earned, were higher than in any previous class. This is the largest class to be admitted to Indiana University School of Dentistry since 1925.

Our new class of graduate students is also outstanding. Dr. McDonald, Secretary of the Graduate Program, reports that over 40 new students enrolled in

graduate school in the following departments: Crown and Bridge, 4; Dental Materials, 1; Endodontics, 2; Operative Dentistry, 3; Oral Diagnosis-Oral Medicine, 3; Oral Surgery, 5; Oral Pathology, 3; Orthodontics, 7; Pedodontics, 5; Pedodontic Internship program, 3; Periodontics, 3; Preventive Dentistry, 2.

Miss Fisk reports that a full quota of outstanding dental hygiene freshman students enrolled in Indianapolis, so once again our Dental School is filled to capacity.

Dr. Schimmele sends us the information that 20 dental hygiene students and approximately the same number of dental assisting students have been enrolled in the Regional Campus in Fort Wayne.

To keep up with the expanding enrollment of both our undergraduate and graduate teaching programs, the following new faculty members were appointed: Dr. David Robert Jordan, Assistant Professor in Prosthetics. Dr. Jordan received his DMD degree from the University of Louisville and his M.S. degree from the University of Michigan. He is a diplomate of the American Board of Prosthodontics.

Dr. J. B. Whitten, Jr., Assistant Professor in Oral Pathology. Dr. Whitten received his DDS degree from the University of Kansas City and his M.S.D. degree from Indiana University.

The following were also appointed to the faculty:

Dr. Stuart A. Caplan, Graduate Assistant in Oral Diagnosis

Dr. Eugene A. Day, Graduate Assistant in Operative Dentistry

Dr. David Lee Morgan, Graduate Assistant in Pedodontics

Dr. Carlos L. Suarez, Graduate Assistant in Operative Dentistry

Dr. Rita Virmani, Graduate Assistant in Operative Dentistry

Dr. Arnold Edgar Felten, Instructor in Oral Surgery

Dr. Robert Musselman, Instructor in Pedodontics

Dr. William F. Schultz, Jr., Instructor in Oral Surgery

We are certainly sorry that Mrs. Mabel Walker has retired as Dental Librarian to move to Florida. Mrs. Walker has been librarian for so many years that her excellent services have been taken for granted. We are sorry, therefore, to lose her. On the bright side, however, we recognize that she has earned this retirement and we hope sincerely that she will enjoy a long and pleasant stay in Florida.

Also on the bright side is the fact that we have an excellent replacement for Mrs. Walker in Mrs. Helen Campbell. Mrs. Campbell has also worked in our library for many years and is thoroughly acquainted with the problems of our Dental Library and is most competent to cope with them.

While my year as President of the American Dental Association has been enjoyable, I am looking forward to relinquishing this office in mid-November. During this past year I have attended dental meetings in all parts of this country as well as England, Sweden, Finland, Israel, Egypt, Hawaii, Mexico, Panama, Canada and Japan. In all these places I found many friends and often former students of Indiana University School of Dentistry, and I was always able to "wave the flag" for our Dental School!

Dr. Timmons Honored

The Distinguished Alumni Service Award from Indiana University was presented to Dr. Gerald D. Timmons on June 12, 1966. Dr. Timmons, presently of Scottsdale, Arizona, received his Doctor of Dental Surgery Degree in 1925, is a former member of the faculty and acting dean of dentistry in 1940 and served as dean of Temple University School of Dentistry from 1942 to 1964.

Dr. Forney Receives Public Health Service Appointment

Dr. Vernon J. Forney was recently appointed as Regional Health Director of the Public Health Service, Region V, headquartered in Chicago.

Dr. Forney will be the first dental officer to serve in this capacity in an HEW Regional Office. Region V covers the States of Illinois, Indiana, Michigan, Ohio, and Wisconsin.

Dr. Forney has been assigned previously to the Denver Regional Office as program consultant and technical assistant to dental activities and has assisted in the implementation of dental health programs for the area since 1962.

Prior to that assignment he was Dental Advisor to the International Cooperation Administration, specifically assigned to the U. S. Operational Mission in Brazil for the development of dental resources, public health administration, occupational health, water supply system development, and consultation activities with educational institutions.

Dr. Forney has had two tours of duty in Rio de Janeiro, has served with the Division of Indian Health in South Dakota, and as dental officer in the Washington area.

He was born in Valparaiso, Indiana, August 28, 1914. He attended Valparaiso University, Muskingum College and received his D.D.S. degree from the Indiana University School of Dentistry. Dr. Forney served his internship at the Public Health Service Hospital in Fort Worth, Texas.

Dr. Forney is a member of the American Dental Association, American Association of Industrial Dentists, American Association of Public Health Dentists, American Association for the Advancement of Science, and is a Fellow of the American Public Health Association.

History of First Mobile Dental Unit

Ivan A. Welborn

The qualities needed by any individual to become known as a genius by his fellowmen are seldom distributed in balanced quantities. Fortunately for the State of Indiana, Dr. John N. Hurty, the first Secretary and guiding genius of the State Board of Health was such a man. Stories are numerous regarding Dr. Hurty's courage and wisdom when criticized, ridiculed and threatened with physical violence.

One example of his leadership was shown when the United States Government copied the Indiana State Health laws. These rules and regulations were written by Dr. Hurty and became the law in Indiana several years previous to the Federal law.

The high standard of leadership so well established by Dr. Hurty has continued in the Indiana State Board of Health. In 1930 following the "Big Depression" the demands upon the State Board of Health as well as all other branches of government were on the increase. This increase was expected to be met by decreased income for the usual sources of tax revenue were greatly diminished.

Following his graduation from Indiana University Medical School and an internship in the Indianapolis City Hospital, Dr. Verne K. Harvey became associated with the State Board of Health in 1930. He was the epidemiologist. Epidemics were a constant threat as living standards were compromised and as economic pressures increased. Dr. Harvey was selected as a student to receive a Rockefeller Scholarship Award at the John Hopkins University from September 1932 to June 1933. He became Secretary and Director of the State Board of Health in July 1933.

When Dr. Harvey became Secretary, he immediately recognized the need for dental education and care within the State Board of Health. Until this time Health

Education was expected to include dental health education. In 1933 Dr. Harvey organized the Department of Child Health and Maternal Welfare. Indiana University School of Medicine agreed to furnish many of the lecturers needed for the educational program and to assume leadership.

In 1934 and 1935 the Bureau of Health Education continued to give numerous meetings throughout the state. These talks were given by nurses, laymen and physicians. These meetings utilized films, exhibits and health pamphlets to supplement the talks.

Since 1930 the Indiana State Dental Association had been active regarding the dental health and education of the school children. This organization was fortunate to have Dr. Mary H. Westfall as supervisor of its "Good Health Council for Children." Through the use of films, posters and exhibits, Dr. Westfall constantly sought to supplement the work of the Bureau of Health Education with dental health information. In the July 1935 issue of the Monthly Bulletin, Indiana Division of Public Health Reports, "Dental films were shown at the convention of the Indiana State Dental Association in connection with an exhibit displayed by Dr. Mary H. Westfall." In the same publication in June 1936, "Beginning the first of May, Dr. Mary H. Westfall is to work with the Bureau and make plans for the dental demonstration which has been selected as the initial one for Indiana."

It became increasingly evident to Dr. Harvey that the dental needs of the children of the State were becoming increasingly great. When he decided to create a dental department of the State Board of Health, the only logical and experienced choice was Dr. Mary H. Westfall. He was

pleased to appoint Dr. Westfall in 1936. She was known as the Dental Health Educator.

In March of that year, Dr. Harvey was pleased to announce that Federal funds were available to the State of Indiana for use of the Bureau of Maternal Care and Child Health. This would greatly widen the scope of the educational program.

Dr. Westfall held a Dental Health Course in April 1937 for the Public Health Nurses. The lecturers were Timmons, Werkman, Morrow, Gregory, Graves, Boyd and Westfall.

Dr. Westfall also announced that including 1937, 6,630 school children had received health awards.

By 1935 Dr. Harvey was seriously concerned about the manner in which he could widen the scope of effectiveness of the Bureau of Maternal and Child Health. Positive needs for dental help were all too often apparent. Education comes much too late to be effective for an aching tooth. Dr. Harvey wondered if it would be possible to take the dental office to those patients who could not come to the dental office. He found a most enthusiastic supporter in Dr. Gerald (Jerry) D. Timmons, who was acting Dean of the Indiana University School of Dentistry. Dr. Timmons readily agreed to become a \$1.00 per year man not only to aid this project but to advance dentistry in any possible manner. When the plans for the mobile dental office materialized, Dr. Timmons at his own expense spent a week in Detroit supervising the installation of the dental equipment. This was the first mobile dental unit to be used in the United States and was the forerunner of the Dental Department of the State Board of Health.

The August 1936 (pages 132, 133) issue of the Monthly Bulletin, Indiana Division of Public Health tells the story.

NEW DENTAL UNIT MAKES DEBUT

"The new dental unit of the State Bureau of Maternal and Child Health, which has been

in the process of construction for the past sixty days, has been delivered. It is to be used in the demonstration services of the dental program which has been planned jointly by the Indiana State Dental Association and the Bureau.

A special dental committee, headed by Dr. G. D. Timmons and assisted by the late Col. Messner of the U. S. Public Health Service, designed and purchased this equipment from the Aero Car Company of Detroit. The dental unit has been designed chiefly for children's dentistry.

The furnishings and equipment of the trailer are as complete as it has been possible to make them. There is a complete dental chair and unit, a laboratory, an instrument cabinet, a clothes closet, and a leather divan. Both natural and artificial light are available. The windows in front on both sides are made of shatter-proof glass covered with screens. There are also electric lights which may be connected with either city current or with the current from the towing unit. A water tank furnishes running water. There is a gas tank for propane gas and a compressed air tank.

The trailer may easily be attached to the towing unit or may just as easily be detached from it and used separately. The body is painted a dark blue with aluminum top. The interior has a tan ceiling and is otherwise decorated to harmonize with the dental unit, which is Neptune green in color.

The first location of the unit will be in Greene and Owen Counties. This territory was chosen for two reasons. In the first place the district dental society there was the first in the state to file a request for this service.

Secondly, statistical studies made by the Bureau of Maternal and Child Health in conjunction with the Dental Society showed an unusual need for such service on the basis of the number of people on relief in that area, the average industrial income, agricultural income, and the general financial status of the two counties.

The local dental society has selected Jasonville as the first town to receive the benefits of the demonstration. The trailer will be parked in the lovely surroundings of a park accessible to all the patients. It will remain in one area until a sufficient amount of work has been completed, then taken to other towns and cities of the area in which it is located.

The unit will be operated by Dr. Robert L. Peden, who has been appointed from the dental department of Indiana University. Dr. Peden will work under the direction of Dr. Mary H.

(Continued on page 47)

Annual Honors Program

The Honors Program of the Indiana University School of Dentistry was held on June 12, 1966 in the Student Union Building. Following the invocation by Reverend Whitesel, introductions were conducted by Dean Maynard K. Hine. A list of awards and recipients follows.

John W. Geller Award in Research:
David Avery

Xi Psi Phi-Ert J. Rogers Memorial Award
in Crown and Bridge, James Herrick
Indiana Society of Oral Surgeons—Glenn
J. Pell Memorial Award, Richard S.
Baum

Rossya Kauffman Memorial Award in
Dental Hygiene, Gloria Hurwitz

Certificate of Merit, American Society of
Dentistry for Children, Lawrence E.
Ansbaugh

Award of Indiana Society of Pedodontics,
James L. Fleck

American Academy of Oral Medicine,
Lawrence Ansbaugh

American Dental Society of Anesthesiol-
ogy, Inc., Richard L. Abdon

Indiana State Dental Hygienists' Associa-
tion, Susan Brown (Indianapolis D. H.
program) and Carolyn Nofzinger (Fort
Wayne D. H. program)

Central Indiana Dental Hygienists' As-
sociation, Sandra Jeffries (1st year
D. H. student)

C. V. Mosby Awards: (Oral Diagnosis)
James Hastings; (Orthodontics) Ran-
dall McClary; (Prosthetics) John
Voges; (Dental Materials) David
Avery; (Dental Hygiene, Radiology)
Faye Dene Wolf.

American Academy of Periodontology,
James Bleeke

American Society of Periodontists, Lloyd J.
Hagedorn

Lactona Company, Abraham J. Ochstein

American Association of Oral Roentgenol-
ogy, George K. Bernhard, Jr.

American Academy of Gold Foil Opera-
tors, David P. Jarrell

Omicron Kappa Upsilon: (1st place)
David Avery; (2nd place) Thomas E.
Dunn; (3rd place) David Jarrell

Senior Essay Awards: (Special Block
Award) Carl Andres; (Special Currie
Award) David Avery; (3rd place)
Wayne Dawes; (4th place) Robert B.
Edesess

American Association of Endodontists,
Donald W. Baker

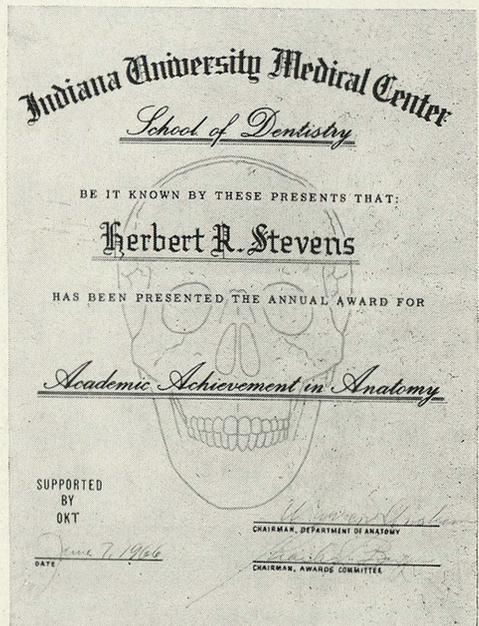
Academy of General Dentistry, Jerry W.
Raibley

Clinic contest: (Junior student) J. A.
Durward; (Senior students) John
Nelson and Steven Henley

National Chapter of Alpha Omega,
Lawrence E. Ansbaugh

Omicron Kappa Upsilon Freshman Stu-
dent Accomplishment, (Anatomy De-
partment) Herbert R. Stevens

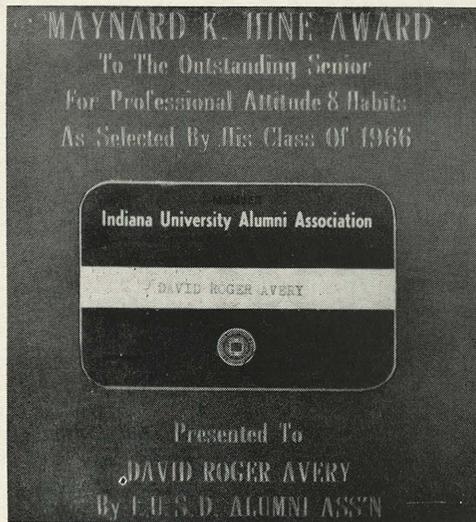
(Continued on page 48)



Picture of plaque awarded to H. R. Stevens
by the Anatomy Department.



Newly elected members of Omicron Kappa Upsilon with Dr. Roche, President of Theta Theta chapter. Back row, left to right: David Avery, Roger Shurr, James Fleck, Larry Ansbaugh, David Jarrell. Front row, left to right: Dr. James Roche, R. S. Baum, J. D. Ingleman, G. W. Johnson, J. A. Roshell and W. L. Dawes.



Picture of the new Maynard K. Hine Award to be presented annually by the Indiana University Alumni Association.



Dean Hine presents first plaque to David Avery as Dr. Malcolm Boone, President of the I.U.S.D. Alumni Association observes. Plaque includes ten year paid membership in the Alumni Association.

Faculty Publications for 1965-66

Listed below are the faculty publications for the past year. Although not entirely complete, the list includes the majority.

- Bixler, D.: A comparison of dental caries prevalence and dental care in two Indiana populations, one urban and the other rural. *J. Indiana Dent. Assn.* 44:92-7, Mar., 1965.
- Bixler, D., Muhler, J. C., and Stookey, G. K.: Evaluation of the anticariogenic effects of mixtures of stannous fluoride and soluble phosphates. *J. Dent. Child.* 32:154-69, 1965.
- Boone, M. E.: Fastest reline technic. *PDM* 48-51, Jul.-Aug., 1965.
- Boyd, D.: What's new in dentistry? Operative dentistry. *J. Indiana Dent. Assn.* 44:98-9, Mar., 1965.
- Burstone, C. J.: The mechanics of the segmented arch techniques. *Angle Orthodont.* 36:99, April, 1966.
- Carr, G. E. and Mink, J. R.: Ectopic eruption of the first permanent maxillary molar in cleft lip and cleft palate children. *J. Dent. Child.* 32:179-88, 1965.
- Cunningham, D. M., and Tchalian, V.: Maxillofacial prosthetics departments in dental schools and medical centers. *J. Prosth. Dent.* 15:570-6, May-Jun., 1965.
- Fast, T. B.: Oral diagnosis/oral medicine. *Alumni Bull. Indiana Univ. Sch. Dent.* Spring, 1966.
- Fisk, A. R.: The future role of the dental hygienist in oral health. *Dent. Clin. N. Amer.* p. 219, Mar., 1966.
- Gilmore, H. W.: Individual quantitative requirement versus total patient care. *J. Dent. Educ.* 29:230-5, Sept., 1965.
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Alumni Association News

Dr. Malcolm E. Boone, President

The next few weeks until October 8th will move by with surprisingly great speed. At that time this term of office as president of IUSDAA will come to an abrupt end. I often wonder where the days go and why we can't crowd in a few more hours and days into each month. This year has been a great pleasure for us at our house, and one that will be long remembered.

Your officers and Board of Directors have had the usual meetings in January, and May in an attempt to keep things humming. As everyone knows by now your response to our hospitality room in Chicago was great and the Alumni luncheon at which Coach John Pont was the speaker was a sell out; in fact there was an overflow crowd. Thanks for your splendid support.

In May at the Indiana State Dental Meeting our usual Alumni Booth was present, with a new audio-visual program depicting Indiana University School of Dentistry's new expansion, future plans etc. Many persons had a hand in this and it was very well done. Thanks to all of them for producing this splendid piece of work.

Your president and his wife represented this group at the Honor Dinner for Dr. M. K. Hine, President of A.D.A. and Mrs. Hine. We also represented the Dental Alumni at the State President's dinner and dance and enjoyed the honor of being asked to do so. Also at a meeting of the state delegates your president presented a gavel to the incoming State President, Dr. Harry Healey, which has been an alumni responsibility for many years. The inscription on the gavel reads: Presented by the Indiana University School of Dentistry Alumni Association.

During the year Dr. Paul Starkey, Dr. Ralph Phillips, Dr. Jean Spear and your

Board of Directors, as well as your officers, worked out the details of instituting a new and distinct award to be given to a graduating senior. It was to be given to the "Outstanding Senior for Professional Attitude and Habits." The uniqueness of this award was that the selection was made by his own classmates. The first recipient of the award was David Roger Avery, '66. Avery was class president and won many other honors at Honors Day. Your president and Dr. Bogan convinced the Dean to allow us to call the award the "Maynard K. Hine Award." He willingly consented.

During a very warm June Honors Day program, the above award was presented to Dr. Avery as well as an induction of the entire 1966 graduating class of the School of Dentistry, and the 1966 graduating class of Dental Hygienists, into the IUSDAA. A brief description of the Alumni Association was given. It had been hoped that a representative from the Alumni office in Bloomington could have done the honors, but they were scheduled heavily and asked that someone from the Alumni Association perform this honor. Their notice was so short that along with the presentation of the "Maynard K. Hine Award" your president had the honor of inducting the young men and women into our Association. This was the first time in the history of our Association that this formal induction took place.

This past week Dr. Paul Starkey, IUSDAA Executive Council Representative, Dr. Robert Bogan and yours truly attended the Constituent Society dinner and awards night, or should I say Battle Night. Dr. Starkey again did an admirable job in representing our Alumni Association to the other Constituent Societies. This meeting is self-evaluation of each group and an exchange of promotion ideas

for alumni activities. The constituent groups also are vying for the ever coveted first place award, and the voting gets too competitive at times. We all can be proud of our Alumni Association and to have Dr. Starkey's sense of fair play and honesty representing IUSDAA at this very unusual meeting.

Our Association still maintains the highest percentage of graduates who belong—this year 43%, and we also had an increase of membership over 1965 and our alumni group finished well up in the judging.

This year your Alumni Association participated in defraying a portion of the costs of the three-day teaching conference at Spring Mill State Park in September. The Committee on Teaching at the Dental School accepted the Alumni Association contribution to their program with gratitude.

As you can readily appreciate through the course of a year your alumni group is involved in many activities and is represented on several occasions. I don't believe too many of you are aware of these
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Seated: (Left to right) Foster Sheller, Fort Wayne; Oscar Pfaff, Lebanon; John Johnston, Indianapolis; Emmett Flint, Madison; James McDonald, Shelbyville.

Standing: Ralph Wilson, Crawfordsville; Forrest Hammond, Farina, Ill.; Herman Abrams, Indianapolis; Ray Peterson, Terre Haute; Paul Murphy, Connersville; Melvin Anderson, Detroit; Sherman Pyfrin, Florida; Russell Veit, Indianapolis; Adolph Schilling; Cincinnati; Joseph Potucek, Michigan City.

(Leaving before the picture was taken were Ralph McVaugh, Pendleton, and Fred Smith, Indianapolis.)

The class of 1921 held its 45th anniversary reunion dinner at the Continental Hotel during the May meeting of the Indiana State Dental Association. Arrangements were made by Russell Veit, Ralph Wilson, and John and Lavonne Johnston.

Gertrude Katzenberger, the sole remaining link with the past, thirteen wives, and Dr. and Mrs. Robert Bogan were guests. Speakers were Lavonne Johnston and Drs. Robert Bogan, Ray Peterson, and John Johnston.

The Staff of the School of Dentistry Library

June 30th at the end of the Indiana University physical year some profound changes were very smoothly made in the Dental Library Staff. At that time Mrs. Mabel E. Walker retired and Mrs. Helen W. Campbell became the Librarian.

Mrs. Mabel E. Walker has been in the field of librarianship 47 years, during which she has worked in public high school, state, scientific and technical libraries. Thirty years of this time have been spent in the Indiana University School of Dentistry Library, which she organized in 1929 and from which she retired June 30, 1966. Mrs. Walker holds a certificate in library science obtained through the Public Library Commission of Indiana. At that time she was librarian in her home town library of Orleans, Indiana. During this over-all period of 47 years, Mrs. Walker has organized three libraries—that of the Indiana University School of Dentistry, Indianapolis, Indiana; the Lukas-Harold Corporation, Indianapolis, Indiana; and the Naval Ordnance Test Station, China Lake, California. Before going to the latter, she spent some time in New York City combining the libraries of the Lukas-Harold Corporation and the Norden Laboratories. Mrs. Walker's first period of 30 year's service with Indiana University School of Dentistry occurred from 1927 to 1942. She left to do Navy organizational library work during World War II and returned to the Indiana University School of Dentistry in 1951.

Mrs. Walker is a member of the Indiana Library Association, the American Library Association, the Medical Library Association and the Special Libraries Association, the Indiana chapter of which she was president from 1943-44. She was a charter member of the former Indiana

Association of the History of Medicine and was its treasurer from 1940-41. She has organized and served as chairman of many dental library programs at both the regional and national levels. She has contributed to the literature of the above organizations as well as to dental journals. Quoting Mr. Neil S. Boardman, Administrative Assistant, Indiana University Libraries, Bloomington, Indiana, in his comments at the dinner honoring retiring faculty of Indiana University, May 3, 1966: "Highly regarded in her field, for thirty years the head of one of the outstanding dentistry libraries in the country, Mabel Walker has made outstanding contributions to her profession and her school." Mrs. Walker and her husband have retired and are now living in Miami, Florida.

Mrs. Helen W. Campbell who was Assistant Librarian became the Librarian at the School of Dentistry Library when Mrs. Walker retired. Mrs. Campbell started her career in librarianship as a student assistant in the Indiana University Library on the Bloomington campus. She became Assistant Order Librarian in the Indiana University Library in 1937 and continued in this capacity until 1942 when she resigned to be married. In August of the same year, she became librarian of the Indiana University School of Dentistry at the time Mrs. Walker resigned to take up the work mentioned above. Mrs. Campbell remained in this position until 1946 when she left to be with her family. She returned to the Library of the Indiana University School of Dentistry on a part-time basis as a cataloguer in February, 1960 and remained until she became Assistant Librarian in 1965 on a full time basis. In this position she was in charge of cata-

loguing and acquisitions and supervised the work of one full-time Clerical Assistant and the Assistant Cataloguer.

Mrs. Campbell is now pursuing college work leading to a Master's degree in Library Science. Mrs. Campbell is a member of the Special Libraries Association and assisted in the editorship of the Indiana Chapter publication, INDIANA SLAnt, when it was in its infancy and served as treasurer of the Indiana Chapter of Special Libraries Association in 1963-64. She assumed the librarianship of the Indiana University School of Dentistry July 1, 1966 when Mrs. Walker retired.

Mrs. Katherine Lehman has served as Reference Assistant in the Library of Indiana University School of Dentistry since February, 1963. Mrs. Lehman holds an A.B. degree from Georgetown University, Georgetown, Kentucky, and an M.A. in English from the University of Kentucky, Lexington, Kentucky. She served two years with the University of Kentucky press in an editorial capacity, and eight years in a similar role with other organizations. Mrs. Lehman has proved very adept at grasping the subject fields in the various discipline areas of dentistry and the allied fields of health sciences. She is very capable of assisting patrons in obtaining difficult information often only available through intricate searching. She serves as secretary to the librarian as well as being responsible for binding and rebinding for the department. Also, she has great creative ability, and we consider ourselves most fortunate to have someone with this ability to capably handle all library displays and other decorative work.

Miss Lynda Williams joined the staff of the Indiana University School of Dentistry in August, 1965. She graduated from Johnson Bible College in 1959 with a B.A. degree cum laude. She taught six years in the public schools in Corinth, Mississippi following her graduation from college. She has studied both Greek and

Spanish on the college level and is currently pursuing work towards a graduate degree in Library Science. She has quickly adapted to the requirements of a heavy circulation including handling most efficiently the many requests of the dental graduate students for interlibrary loans which include a great number of references in foreign languages. The image of the library is gained through the services of the circulation and reference assistants. The two persons in these capacities have most successfully and effectively accomplished this task in a most commendable manner.

Mrs. Jane King joined the staff of the Indiana University School of Dentistry in October, 1965, as Assistant Cataloguer on a half time basis. Mrs. King holds three degrees—an A.B. from Wittenberg College in Ohio, a Master's in French and English from the University of Michigan and a Master's in Library Science from the University of the State of New York at Buffalo and maintained a B+ average in all three degrees. Mrs. King is also an accomplished musician. The work of cataloguing requires minute detail and attention to duty, and a comprehensive knowledge of the various disciplines of dentistry and the allied fields of health sciences. Mrs. King has readily and thoroughly adapted to this and has very quickly made her accomplishments felt in this area in the library.

Mrs. Dorothy Jarrett came on the staff in December, 1962. She is a graduate of Central Business College, Indianapolis, Indiana. The duties of this assistant require the ability to produce perfect typing, the ability to take direction and consistently follow work in minute detail. Also, the ability to set up and keep in perfect order the necessary files in the areas of acquisitions and ordering, all of which she does in her natural precise manner.

Miss Katheryne McCray came on the staff in December, 1962. The orderliness of the shelves, and the reshelving of re-

turned circulation consisting of texts, bound journals, pamphlets and reprints, in fact anything circulated, is the chief responsibility of this assistant. This she does in as perfect a manner as could be desired. Also her duties consist of the mechanical aspects of cataloguing, such as pasting pockets, date due slips and book plates in all items which circulate. Too, she has charge of the "mail room" in that she has responsibility for all wrapping, labeling and weight determination of all outgoing packages.

It is the desire and pleasure of the Indiana University Library Staff to serve the students and faculty of the School of Dentistry. It is also their pleasure to serve the alumni. It is hoped that dental alumni will take advantage of the dental library facilities either in person or by mail and telephone. The description of the staff competence above indicates that in addition to direct loans of books and journals you, the alumni, may upon request receive staff help in the search for literature on subjects of dental or related scientific interest.

Library

Mrs. Helen Campbell, Librarian

History *does* repeat itself! In August 1942, I was privileged to assume the librarianship of the Indiana University School of Dentistry and follow in the footsteps of Mrs. Mabel Walker. After four years of service, I resigned to devote full time to my husband and home. Now again in 1966, after six additional years of part-time work in this library, and one additional year in a full-time capacity, I once more succeed Mrs. Walker as librarian. She is spending her retirement leisure in sunny Florida with the knowledge that she leaves here a fine and useful dentistry collection—and we shall endeavor to maintain the high level of service everyone has come to expect! To Mrs. Walker we say "thank you" for all your days and months (adding up to thirty years) which went into the building of this collection—and to any alumni who may be in Miami and want to reminisce a bit, do look up the phone number of Mrs. Paul Walker at 1060 Brickell Avenue, and chat with a suntanned librarian.

Our library, which now totals 23,334 volumes, added 911 bound volumes to its

collection in the past year. Among these were the following titles of special interest to the practicing dentist:

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- Bassett, Russell W., Ingraham, Rex and Koser, John R.—An atlas of cast gold procedures. Buena Park, California, Uni-Tro College Press, 1964.
- Bhaskar, S. N.—Synopsis of oral pathology. 2d ed. St. Louis, C. V. Mosby, 1965.
- Brislin, Jane F. and Cox, Gerald J.—Survey of the literature of dental caries, 1948-1960. Pittsburgh, U. of Pittsburgh Press, 1964.
- Burket, Lester William—Oral medicine: diagnosis and treatment. 5th ed. Philadelphia, Lippincott, 1965.
- Carnahan, Charles Wendell—Carnahan's The dentist and the law. 2nd ed. edited by William W. Howard and Alex L. Parks. St. Louis, Mosby, 1965.
- Ciba Foundation Symposium: Caries-resistant Teeth. Boston, Little, Brown, 1965.

- Clark, Henry B.—Practical oral surgery. 3rd ed. Philadelphia, Lea & Febiger, 1965.
- European Organization for Research on Fluorine and Dental Caries Prevention. 11th Congress—Advances in fluorine research and dental caries prevention. New York, Macmillan, 1964.
- Frisch, John Ernest—Trends in the evolution of the hominoid dentition. New York, S. Karger, 1965.
- Hamburg, Harold L. and Hamburg, Elaine K.—Primer for office analgesia and anesthesia. New York, Mill & Mill Publ., 1965.
- Harrison, James D. and Podshadley, Arlon G.—Cavity preparation and impression taking; a programmed manual in dentistry. St. Louis, Mosby, 1965.
- Hine, Maynard Kiplinger, ed.—Epidemiology of selected dental conditions, 1950-1963. Indianapolis, Indiana University School of Dentistry, 1964.
- Ingle, John Ide—Endodontics. Philadelphia, Lea & Febiger, 1965.
- Ingram, Frank L.—Radiology of the teeth and jaws including dental radiography . . . 2d ed. London, Edward Arnold Ltd., 1965.
- Irby, William B. and Baldwin, Kenneth H.—Emergencies and urgent complications in dentistry. St. Louis, C. V. Mosby Co., 1965.
- Jarabak, Joseph R.—Management of an orthodontic practice. St. Louis, Mosby, 1965.
- Johnston, John F., Phillips, Ralph W. and Dykema, Roland W.—Modern practice in crown and bridge prosthodontics. 2nd ed. Philadelphia, W. B. Saunders Co., 1965.
- Kerr, Donald A., Ash, Major M., Jr., and Millard, H. Dean—Oral diagnosis. 2d ed. St. Louis, Mosby, 1965.
- Killey, H. C. and Kay, L. W.—The impacted wisdom tooth. Edinburgh, E. & S. Livingstone Ltd., 1965.
- Kraus, Bertram S. and Jordan, Ronald E.—The human dentition before birth. Philadelphia, Lea & Febiger, 1965.
- Lauterstein, Aubrey M., and Barber, Thomas K.—Teeth, their forms and functions. Boston, Heath, 1965.
- Mason, George Frederick—Animal teeth. New York, Morrow, 1965.
- Mechanisms of dental caries. New York, New York Academy of Sciences, 1965.
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* * * * *

Abstracts of fourteen theses for the degree of Master of Science in Dentistry follow:

A COMPARATIVE STUDY OF THE FIT OF JACKET CROWNS CONSTRUCTED WITH DIFFERENT TECHNIQUES

Charalambos Charalambous Blazoudakis
1965

A comparative investigation of the fit of porcelain jacket crowns was made. The methods for the construction of the porcelain jacket crowns were: the shoulder bake and ditching methods for air-fired jacket crowns, and the shoulder bake and "vita" methods for vacuum-fired jacket crowns.

A total of 60 jacket crowns were constructed on individual dies.

After completion the crowns were seated on their dies and were invested in epoxy resin. These were sectioned in a predetermined incisocervical labio-lingual plane and measurements were taken at various positions using a comparator microscope. The data obtained is recorded in four tables. Photomicrographs representative of each method of construction are included.

The study showed that a definite pattern of distortion of different magnitude was present in all crowns. The vacuum methods of construction produced the best and most consistent results from the standpoint of overall adaptation. Similar results were obtained by the vacuum shoulder bake and the vacuum "vita" method. The two methods for construction of air-fired jacket crowns, that is the shoulder bake and ditching methods produced the poorest results from the standpoint of overall adaptation. Similar results were also obtained with the above two methods of construction. The variation in the length of the apron between one, two, and three millimeters was not found to influence the fit.

A HISTOLOGICAL AND CEPHALOMETRIC INVESTIGATION OF PREMOLAR INTRUSION IN THE MACAQUE SPECIOSA MONKEY

Eugene L. Dellinger
1965

It has been debated as to whether teeth may actually be intruded in their alveoli. This study was designed to measure the intrusive movement and histologic response of specific teeth to a known intrusive force.

Four Macaque speciosa monkeys were used. The animals corresponded in age to a 12-14 year old human being. Intrusive forces of either 10, 50, 100, or 300 grams were placed on the maxillary first premolars; each force value was held constant during the duration of the experiment, which was 60 days. Maxillary first molars were used as anchorage.

Cephalometric headplates proved that all force values were capable of giving intrusion. The 50 gram forces, however, gave the most efficient intrusion.

Histologic sections were made on all experimental teeth. 300 and 100 gram forces gave excessive root resorption but the 50 and 10 gram force values elicited only slight root resorption. Root resorption seemed to be directly related to excessive force.

The amount of intrusion was not related to a loss of root structure. Bone resorption appeared to allow the intrusion of teeth with minimal tissue damage if proper force values were used.

A CLINICAL AND CYTOLOGIC STUDY OF GINGIVAL TISSUE UNDER A COSMETIC GINGIVAL PROSTHESIS

Harold Elliott Hamburg
1965

Although the cosmetic gingival prosthesis has been described in the literature, histologic or cytologic response to these appliances have not previously been described.

So that the clinical and cytologic effects of this prosthesis could be studied, 18 patients were selected from the periodontal clinic of Indiana University. Each patient had received a maxillary gingivectomy. The post operative time intervals ranged from six weeks to 107 weeks. Cosmetic gingival appliances were then fabricated by senior dental students under the supervision of the investigator. Subjects were examined at weekly and monthly intervals. At the time of the original prosthesis insertion and at each time interval thereafter clinical impressions were noted and cytological smears using the Papanicolaou technic were taken.

Although there were no significant differences at the pre- or post-insertion periods from smears taken either posterior to or beneath the prosthesis, there was a direct correlation noted between the clinical inflammation recorded and the numbers of associated precornified and cornified cells.

The results of this study failed to confirm or deny any adverse effects due to the use of the prosthesis described. This is based, however, on a fairly short time interval. The investigator feels that future studies would be valuable using controlled oral hygiene, similar post-surgical time intervals, long study periods, and adjunctive microscopic examination.

THE GIANT-CELL OF REPARATIVE GRANULOMAS.

A Review of the Literature and Analysis of 146 Cases

James K. Jacoby
1965

An extensive literature review (249 references) is primarily concerned with the emergence of the giant-cell reparative granuloma as a distinctive pathologic entity involving the maxilla and mandible and emphasizes the endless controversy surrounding the histogenesis, origin and basic nature of the lesional multinucleated giant cells. Complementing this review is a clinical and histopathological analysis of 146 peripheral and central giant-cell reparative granulomas received in the Department of Oral Pathology, Indiana University School of Dentistry between the years 1950 and 1965.

The lesional giant cells were found to be indistinguishable both morphologically and histochemically from functional osteoclasts noted in apposition to bone and were felt to arise from a fusion of fibro-endothelial precursors in the periodontal ligament. Study of the site, age, and sex incidence of these lesions suggests that the shedding of the deciduous dentition may be a common etiological factor common to both sexes and the preponderance of female patients throughout the childbearing ages is strongly indicative of a dominating endocrine effect and altered tissue response.

Lesions of central and peripheral giant-cell granuloma are considered to be merely different expressions of the same pathological process.

Conservative surgical management proved to be adequate in most instances and recurrence appeared to be related to incomplete enucleation.

IN VITRO AND IN VIVO STUDIES ON A THERAPEUTIC ORGANIC TIN AND INORGANIC PHOSPHATE MOUTHWASH

Norris Lee Richmond
1965

The in vitro portion of this study concerned 72 human teeth which were treated with various combination, concentrations, and pH's of tin and phosphate compounds. The highest mean percent reduction in enamel solubility was 47.02 per cent, and the lowest was found to be 3.53 per cent, after testing all of the 18 groups of compounds.

For the in vivo study, it was decided to use a combination of S-118, an organic tin and NaH_2PO_4 , an inorganic phosphate along with the usual constituents of a mouthwash to see if a cariostatic effect would be observed on rat teeth. Thirty weanling female rats, 90-110 Gm. Harlan, were divided into five equal groups. All groups were provided stock cariogenic (corn-sucrose) diet and distilled water *ad libitum* for seven days.

Each group received a one minute topical application of the respective solutions twice daily for seven days by means of a cotton applicator. Only the mandibular teeth were treated. Following the final topical treatment the animals were sacrificed and their heads and jaws removed. Longitudinal and cross-sections of the tissues of the gingiva, tongue, and buccal mucosa were placed on slides; and the acid solubility of the intact and embedded molars were measured again.

The organic tin alone caused a 25.76 per cent reduction in enamel solubility. With the inorganic phosphate alone, and the complete mouthwash the reductions in enamel solubility were 29.94 per cent and 27.02 per cent, respectively. The mouthwash caused no detectable histological or pathological changes on the tongue, gingiva, nor buccal mucosa of the rat.

REVIEW OF LITERATURE THE EVOLUTION OF BRIDGE RETAINERS AND RETENTION

Arob Watanavicharn
1965

The development of bridges has progressed from the use of splints retained by ligature wires or soldered bands. Retainers were first constructed using wooden pivots in the root canal. These swelled when they became moist and were thus retained. Later, metal posts were used and these were held with luting agents. The luting agents used consisted of cements such as: silicate, silico-phosphate and zinc phosphate. With these changes bridge-

work became reliable and lasted longer. However, not only the cementing medium, but also mechanical retention of the restoration on the prepared tooth, is important. This latter must be considered together with the individual tooth morphology as well as the anatomical relationship of the teeth, one to another in the dental arch. Esthetic retainers on the anterior teeth present a problem, however this may be overcome by the use of porcelain veneered crowns. In many circumstances partial veneer crowns or restorations retained by parallel pins may be used with little effect on esthetics.

A CLINICAL TELEVISION RADIOGRAPHIC EVALUATION OF SPONGY BONE ARCHITECTURE IN THE EDENTULOUS MANDIBLES

Antonio Estevam de Aguiar
1966

Right and left periapical mandibular radiographs of the premolar-molar region of 36 edentulous patients were evaluated by means of specially designed television instrumentation in an effort to investigate alterations in bone trabeculae and medullary spaces architecture of edentulous mandibles related to: (1) presence or absence of a prosthetic appliance, (2) age of the patients, and (3) elapsed extraction time. No correlation was found between the average number of trabeculae per sample and the average number of medullary spaces per sample area in relation to the three mentioned factors. However, a 17 to 27 per cent increase in the width of the medullary spaces was found in the 27 patients not wearing a prosthetic appliance when compared to 39 patients wearing prosthetic appliances. This increase in width of the medullary spaces suggests that the changes in the inner structure of the edentulous mandible due to disuse atrophy or aging are better explained by an increase in the width of the medullary spaces and thinning of the trabeculae rather than a decrease in number of the latter. The results also suggested that the stimuli induced by a prosthetic appliance may collaborate to arrest, to a certain degree, changes in the inner structure of the edentulous mandible due to disuse atrophy or aging. These changes in the bone occur whether or not a prosthetic appliance is worn. It was also demonstrated that there is no definite pattern of arrangement of the bone trabeculae in edentulous mandibles. New studies are needed designed to measure width of the trabeculae and to determine influence of the elapsed extraction time. The television instrumentation utilized in this investigation proved to be a very useful research tool for radiographic evaluation.

A STUDY OF THE HEREDITARY BASIS OF CLEFT LIP AND CLEFT PALATE

Chester Tullio Coccia
1966

This study attempted to identify the incomplete manifestations of gene(s) producing cleft lip and/or cleft palate. An effort was made to determine how various oral-facial discrepancies, when considered as incomplete manifestations of clefting, might produce an obvious mode of inheritance of the clefting trait in families with a history of cleft lip and/or cleft palate. Eleven families were studied, selection being made on the basis of the degree of relationship of the affected individuals to the proband.

Oral and facial discrepancies including bifid uvula, mandibular lip pits, commissural lip pits, raphé of the upper lip, notching of the alveolus, asymmetrical nasal shape, congenitally missing and malformed maxillary central and lateral incisors, and excessive crowding of the teeth in the anterior segment of the maxillary arch were selected as possible incomplete manifestations of gene action. The results of this study demonstrated that when these manifestations were considered together with the cleft lip and/or cleft palate condition, no additional information on the manner of inheritance of the cleft lip and/or cleft palate trait was produced.

Ocular and orbital measurements, which may also be used in determining possible mid-facial discrepancies, were compared between the relatives of families with a history of clefting and a control group of individuals ranging from four to 22 years of age. A total of 166 individuals were compared. Significant differences in the circumference-interorbital index, skeletal interorbital distance, and the canthal index were found.

A COMPARISON OF PERIODONTAL DISEASE IN INDIVIDUALS WITH DIABETES MELLITUS AND THEIR NON-DIABETIC RELATIVES

Richard Beneveniste
1966

This study was initiated in order to obtain quantitative information on the periodontal tissues of diabetics. Because of the conflicting nature of the many reports on this problem, a clinical investigation was conducted in order to determine whether there is an obvious relationship between diabetes mellitus and periodontal disease. A total of fifty-three diabetic and seventy-one non-diabetic individuals were examined and scored using the Ramfjord periodontal index.

The results obtained showed no significant periodontal differences in the parameters measured between diabetics and related non-diabetics.

EFFECTS OF TWO DIFFERENT GROUP IV HEAVY METAL FLUORIDES ON ORAL TISSUES OF THE ALBINO RATS

Kenneth K. Kaneshiro
1966

Various fluoride preparations and techniques are presently accepted as effective therapy in reducing dental caries. Recently stannous hexafluorozirconate was reported as being substantially more effective than other preparations in use. The purpose of this research was to focus attention on the response of periodontal tissues to this chemical agent. Another fluoride compound, also containing zirconium, was tested comparatively with stannous hexafluorozirconate. The chemical structure of the fluoride salt referred to throughout the thesis as a group IV heavy metal fluoride was unavailable to the author. In a series of two experiments, female Sprague-Dawley strain albino rats were divided by weight into groups of fifteen animals each. Each group of rats received carefully timed topical applications to the mandibular buccal gingiva of the chemical compounds under study. The treatment solutions varied from 0.4 per cent to 40.0 per cent concentration. At each concentration fifteen rats were given a 30 second topical and fifteen rats were given a 60 second topical. Following the topical applications, each group of animals was then divided into five subgroups of three animals each. Three animals from every group were sacrificed initially, one hour, one day, one week, and four weeks after treatment. There were comparative differences in the tissue specimens taken from control and experimental animals when studied microscopically. The chief difference was in the degree of staining of the keratin treated with the two fluoride compounds. This was concluded to be insignificant.

FLUORESCENCE MICROSCOPY STUDIES OF CELLULAR CHANGES IN CARCINOGENESIS

Sigurds O. Krolls
1966

The object of this research project was to follow cellular changes as they occurred in the buccal pouches and the interscapular regions of young hamsters after they were periodically ex-

posed to a suspension of 0.5% dimethylbenzanthracene in heavy grade mineral oil. The agent was applied every other day until the animals were sacrificed.

When the animals were sacrificed, cytologic specimens from the buccal pouches and tissue from the selected skin area and the buccal pouch were examined with light and fluorescence microscopy. The fluorochromes utilized were acridine orange and acriflavin.

Utilizing the fluorescence technic, cellular changes, such as an increase in the nucleic acids, were observable somewhat prior to changes seen with the Papanicolaou technic for the cytology specimens and the hematoxylin and eosin stained tissue sections.

The fluorescence technic utilized is of value in the determination of cellular activity.

A CEPHALOMETRIC COMPARISON OF CHILDREN WITH DOWN'S SYNDROME AND THEIR NORMAL SIBLINGS

Macy J. Landau
1966

The mongoloid face and craniofacial skeleton has been characterized by many investigators using clinical impressions and soft tissue measurements on living and autopsy material. Few studies have included data derived from cephalometric radiographs. The present study was designed to describe the mongoloid face and cranial base and to analyze the data.

Twenty mongoloid children ranging in age from three years to 12 years, and their siblings were selected for study. A control group of children were selected on the basis of their essentially normal occlusion and facial skeleton.

The data obtained from the cephalometric radiographs were analyzed in three ways. Each of the three groups of children, normal, mongoloid and their siblings were divided into four age groups, approximately three, five, seven and 11 years of age and means for the individual measurements were calculated. The sibling measurements were "corrected" to the age of the mongoloid child using the growth progression data from the normal children. The mean measurements of the "corrected" siblings and mongoloids were then compared using "t" tests for statistical significance. All children were then divided into three comparison pairs, normal-sibling, normal-mongoloid, and mongoloid-sibling, and the cephalometric measurements subjected to a multivariate, step-wise regression analysis.

(Continued on page 49)

Dental Hygiene

A. Rebekah Fisk, Director

How was graduation this year? The hottest day on record for the big event. Thirty dental hygiene graduates received certificates; Baccalaureate degrees were conferred on four. As usual, all graduates had many opportunities for employment. The majority are associated in practice in Indiana. Only three left the state.

This has been a traveling summer for our staff. In May, I left for five weeks in Europe. I have no idea how many miles I covered in the seven countries I visited. It was a very interesting and enjoyable trip but strenuous. Miss Ackerman spent her vacation in California and part on a cruise of the lakes in Kentucky. Mrs. Totten and her family went to New Or-

leans—lucky people—they have an air-conditioned car. She says that it is really different down there. Dr. and Mrs. Hamilton went to Anchorage, Alaska to visit friends and see the sights. They covered more than 9,000 miles, which makes me tired just to think about it. Our secretary, Mrs. Chapman, toured Kentucky.

On March 29 and 30, 1967, we will have another Postgraduate Seminar. New preventive measures and community problems of particular interest to dental hygienists will be discussed. The guest speaker will be Dr. Wesley O. Young, D.D.S., Chairman, Department of Community Dentistry, University of Kentucky. The fee will be \$20.00.



Dental Hygiene Graduating Class of 1966, Indianapolis Campus. Picture taken following Honor's Day Program.

Fort Wayne Regional Campus News — Dental Hygiene

Gloria Huxoll, Clinical Supervisor

The graduates listed below from the first class of dental hygienists on the Fort Wayne campus are now in practice with the dentists named below.

Mrs. Donna Moeller—Dr. Roy Pownall, Plymouth, Ind.

Miss Lynda Brandt—Dr. William Bricker, Antwerp, Ohio

Miss Melinda Leer—Dr. James R. Platt—Fort Wayne

Miss Carolyn Nofzinger—Dr. David A. Bleeke—Fort Wayne

Miss Wanda Klus—Drs. Jack H. Boyd and Robert P. Leininger—Fort Wayne

Mrs. Carolyn Snyder—Dr. Robert L. Gayle—Fort Wayne

Mrs. Myrna Sowards—Dr. James A. McPheeters—Bluffton

Miss Jacqueline Nusbaumer—Dr. James D. Frey—Fort Wayne

We feel that the program here in Fort Wayne has been most successful the past two years and are all ready missing the above gals. They were great. As all new projects have growing pains, so did we but they weathered it all with us with lots of spirit and spunk. On Honors Day there were three that were recognized and honored, Carolyn Nofzinger, Donna Moeller and Myrna Sowards.

The State Boards were a success but there were some confused gals running around.

This fall we will have 13 second year students and 20 first year dental hygiene students.

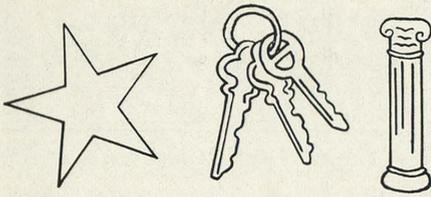
Dental Assisting Program

Bernice Rummel, Assistant to the Director of Dental Assisting

The first year in the Dental Assisting Program concluded with graduation ceremonies on June 5th for 12 students. Dr. Ralph McDonald, Assistant Dean of the School of Dentistry, presented the address at the ceremony. Certificates were presented by Dr. Ralph Broyles, Dean of the Regional Campus.

The graduates are employed in the following offices: Carol Bowles with Dr. James A. Shupe, Susan Bruns with Dr.

Harry Reith, Martha Chapman with Dr. Phillip O'Shaughnessy, Holly Heine with Dr. Glen Gardner, Becke Hoover with Dr. Jack Boyd, Candy Whitacre with Drs. Frissell and Lloyd, Lucy Workman with Dr. Ralph Merkel, Janice Ware with Dr. William Croxton. Linda Hicks, who moved to St. Louis this fall, has been working vacations for Fort Wayne assistants. Two of the assistants had summer employment and returned to the Fort Wayne area in the fall.



Dr. Paul Starkey

Alumni Association Supports Teaching Conference

Last Fall, at the annual business meeting of the Alumni Association, held during the Fall Conference in Bloomington, Dr. H. William Gilmore suggested that the Alumni Association assume the cost of printing the proceedings of the Second Annual Faculty Teaching Conference for the faculty of the Indiana University School of Dentistry to be held at the Spring Mill Inn, Spring Mill State Park, September 11-14, 1966. The motion was made and passed unanimously.

In the Fall, 1965 issue of this Bulletin, if you read this column regularly, you learned about our first Teaching Conference, held at Spring Mill the Fall of 1965. Eighty-nine members of the faculty were there from Sunday evening until Wednesday noon, learning about the importance of objectives in programmed instruction. The conference proved to be a very successful one and the faculty indicated their interest in making the conference an annual affair.

At this same business meeting of the Alumni Association last Fall, Dr. Gilmore showed the members of the Alumni Association who were present a copy of our proceedings of the first conference which were enclosed in a beautiful crimson and cream three-ring notebook. They were impressed—and that's how you've come to be involved in one of the most interesting activities of any Alumni Association of which I am aware. Let me tell you all about it.

Your faculty has just returned from this conference, which started on Sunday, September 11, and ended after lunch on Wednesday, September 14th. Members of the faculty began to arrive at the Spring Mill Inn late afternoon on Sunday. They obtained their room assignments, got settled, and then assembled in the dining room for the evening dinner. After dinner, they re-assembled in the basement conference room of the Inn to begin their first session. The Teaching Committee, who sponsors this conference, had decided on the theme of, "Evaluation." The Chairman of the Teaching Committee began with the following remarks:

One of our obligations as dental educators is to evaluate if and when our students are ready to leave the academic environment and begin the practice of dentistry. Education of the student to provide dental service to patients in private practice is our major responsibility—for it is primarily in the private practice of dentistry that the responsibility of the profession is met, that is—the provision for the dental health of the people of our nation. Without competent dental educators, this responsibility could not be fulfilled.

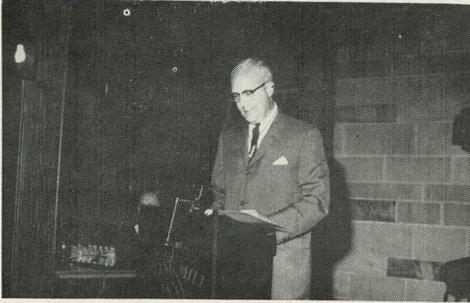
Most of us feel the frustrations of evaluating our students. We attempt to grade one student as a "B" student or above average and another as a "C" student or only average. In addition, we are asked to identify the student who is below average or not clinically and intellectually competent enough to be permitted to take the State Board Examination and obtain



Drs. Ping and Hutton of the Oral Surgery Department arriving for the conference.



Members of the faculty find their copy of the proceedings, which were provided by the Alumni Association.



Vice-President, Samuel Braden sets the tone for the conference Sunday evening.



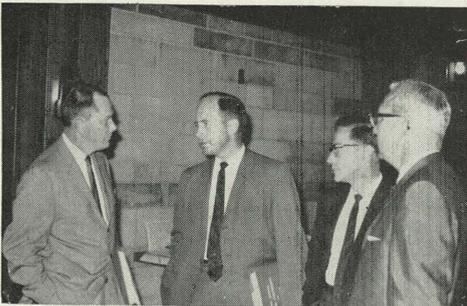
Dr. Chase addressing the faculty.



Dr. James Roche discusses, "Professional Attitudes and habits." Moderator, Dr. Johnston.



Associate Alumni Secretary Frank Jones compliments your Alumni Association's President, Dr. Malcolm Boone, for the support of this conference through the purchase of the proceedings.



A serious discussion . . . l to r. Dr. Starkey, Chairman of the Teaching Committee; Dr. Doerr, Associate Dean of the School of Dentistry, University of Michigan; Dr. Miles Standish, Member of the Teaching Committee; and Assistant Dean Ralph E. McDonald.



A group discussion.

the privilege of providing dental service to people.

It was quite appropriate that last year, at our first conference, we concerned ourselves with the importance of writing good objectives and understanding the need to do so. It is quite appropriate that, this year, we concern ourselves with evaluation, and in that order of deliberation. Doctor Robert Mager, our last year's keynote speaker, said that an objective is an intent communicated by a statement describing a proposed change in a learner—a statement of what the learner is to be like when he has successfully completed a learning experience. Dr. Mager quoted Dr. Paul Whitmore, "The statement of objectives of a training program must denote *measurable* attributes observable in the graduate of the program, or otherwise it is impossible to determine whether the program is meeting the objectives."

Aside from other reasons for evaluating our students, how else are we to know if our teaching is effective? So it seems we should be concerned with having well defined objectives and then be able to determine whether or not we have met these objectives, and this we can do by efficient evaluation.

The Committee on Teaching welcomes all of you to this Second Annual Faculty Teaching Conference. We are, as always, sincerely grateful for your support of our programs and proud to be a part of a faculty expressing such sincere concern for its responsibilities. We extend a very cordial welcome to our guests, including those from other dental schools, the American Association of Dental Schools and the American Dental Association, as well as those from the Bloomington Campus.

The Committee on Teaching is committed to developing and encouraging an in-service training program, as well as a pre-service program. This conference, along with our faculty meeting throughout the year, constitutes the major part of our In-service Program. I am very pleased to report that it is now possible for a graduate student in the School of Dentistry to obtain a minor in dental education. This opportunity was brought about largely through the efforts of the Secretary of the Graduate School, Assistant Dean Ralph E. McDonald. It is pleasant to announce that we now, for the first time,

have a well-designed pre-service program for those interested in dental education.

Last year our faculty gave much thought to the learning environment. We discussed and heard others such as Dean Allan O. Pfnister of Wittenberg University talk about the importance of the teacher's responsibility in the development of a good learning environment. At the suggestion of Dean Hine, a program is being held for our students while we are here at this conference. Part of that program will be directed toward attempting to acquaint the student with *his* obligation in the development of the good learning environment. The program is a sort of "pilot" one and should it be successful, an expanded one will be prepared for them during our Third Annual Faculty Teaching Conference.

After these opening remarks by the Teaching Committee Chairman, Doctor Samuel Braden, Vice-President of the University, was introduced and those of you who have heard him speak, know that we were in for an excellent and inspiring address. He was warmly received and certainly enriched our environment and set the tone for our second successful Teaching Conference. It was time then for a little relaxation and off to bed.

Since our theme was, "Evaluation," the Teaching Committee had selected two principal speakers for the program. First was Doctor Clinton Chase, Associate Professor of Education at Indiana University. Doctor Chase had participated in our programs before, having taught education courses in our graduate school of dentistry. His charge was to discuss with us, "The Philosophy of Evaluation of Students." He spoke the first half of Monday morning and also the first half of Tuesday morning. He was followed for the remainder of the morning, on both days, by Mrs. Grace Parkin, Secretary of the National Board of Dental Examiners. She discussed, "Test Construction and Analysis," and "The National Board." Both of these speakers were well received and throughout their entire presentations

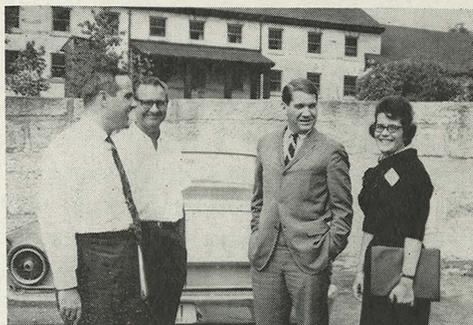
maintained an excellent rapport with the participants and certainly had a most intent audience.

After lunch on Monday, the group returned to the conference room to hear a series of three papers. The first was by Mr. Leonard Kreit, a doctoral candidate in educational psychology from the Bloomington Campus, who, for the past two summers, has been "interning" as an educational consultant to the Dental

School. His work has been part of a program administered by the Division of Educational Research of the American Association of Dental Schools, whose objective is an exchange of information between dental educators and future specialists in the field of education. He had done a study during the past summer and reported on it. The title of his paper was, "The Measurement of Dental Students' Attitudes Toward the Basic Sci-



A demonstration of a newly-acquired teaching machine.



l to r. Drs. Gilmore and Phillips, Mr. Richard Morrison, Assistant Secretary, American Association of Dental Schools, and Mrs. Grace Parkin, Secretary of the National Board of Dental Examiners.



Assistant Dean McDonald introduces five Deans participating in a panel discussion on Monday evening.



Junior Student Novak and Senior Student Boren talking with Mrs. Parkin.



A toast to our Dean. Hear! Hear!



The participants . . . count them!

ences and National Board Examinations." Two of the conclusions that Mr. Kreit reported from his study were that, as a group, senior students possess a highly favorable attitude toward the basic sciences and that the senior class possessed a neutral attitude toward the National Board Examination.

The second speaker of the afternoon was Dr. Miles Standish, Associate Professor and Chairman of Clinical Oral Pathology. He reported on, "The Second Conference-Workshop for Dental Educators," which he attended in Waukegan, Illinois last June representing the Teaching Committee. The theme of their conference was, "Evaluation of Teaching and Teachers." Dr. Standish gave a very interesting resume. The third speaker was Dr. David Mitchell, discussing, "How Can We Evaluate the Competency of Students in Research Methodology?" Dr. Mitchell is Professor and Chairman of Oral Diagnosis.

By this time, it was nearly three o'clock and time to divide the participants into two groups. The first group was to hear Dr. James Rache, a pedodontist and a member of our faculty, present a scholarly paper on, "Professional Attitudes and Habits." After the presentation of his paper, Dr. John Johnston moderated a discussion centered on many of the statements made by Dr. Roche. Excerpts from the paper presented by Dr. Roche follow:

Why are the educators' favorable expectations of recent dental graduates not always fulfilled? When the teacher's image of the dental health service differs markedly from the private practitioner's philosophy, the new graduate is torn between the previous attitudinal influence of the faculty and the new dentist's practicing colleagues. The discrepancy in professional attitudes may be commensurate with the difference between the educator's image of the dental profession and the private practitioner's experiences. The faculty's value of teaching treatment can be undermined by an illusionary feeling on behalf of the new practitioner. Practice administration problems can become major de-

terrents in the recent graduate's attempt at paralleling services outlined by the dental faculty. To accurately direct and maintain the student's future professional attitude, the instructor, in recommending a given treatment, would need to integrate possible attitudes and desires of patients, expected auxiliary personnel performance, and an awareness of the cost of supplies and services.

The faculty member who is enthusiastic and respectful with his own responsibilities and daily endeavors to be of service to people projects a desirable basis toward the image of the dental profession. If the dental educator and the private practitioner of dentistry do not respect dentistry for its service to people, the public and related services will not value professional dental care with high esteem.

The second group on Monday afternoon heard a paper read by Mr. Leonard Kreit. His paper was entitled, "Student Evaluation of Teachers." This paper stirred up a lively discussion in the group, which was led by the moderator, Dr. Charles Burstone, Chairman of the Department of Orthodontics. Some instructors felt that an evaluation of teachers in their courses by students is a useful means of improving instruction; but others felt that administrators might use such information on which to base promotions and salary increases—thereby putting the instructor at the "mercy" of the student. Still others felt that the students were not competent judges of course effectiveness. For example, a student may have a poor opinion of a teacher at the time of graduation; but, some years later, comes to appreciate the effectiveness of his teaching.

Time out for dinner and then this hard-working group assembled once again on Monday evening in the conference room at 7:30 P.M. to hear one of the highlights of the program. Dr. Ralph McDonald, Assistant Dean, moderated a panel discussion on, "Evaluation of Student Performance." The participants were: the Dean of the School of Medicine, Dr. Glenn W. Irwin, Jr.; the Dean of the School of Law, Dr. Benjamin F. Small;

the Assistant Dean of the School of Music, Dr. Charles H. Webb, Jr.; the Dean of the School of Education, Dr. Phillip Peak; and the Director of the Division of Optometry, Dr. Henry W. Hofstetter. The room was vibrant with laughter, as five Deans told their favorite "Dean's Joke." This panel of Deans discussed how students were tested and grades determined in their particular school. There was general agreement among them that any system available for evaluation today involves much subjective judgment, either on the part of the professor or, in some cases, a jury or group of professors.

After having worked on Monday from 8:30 in the morning until nearly 10:00 that evening, it certainly was time for a little relaxation and then, once again, to bed for rest.

I have already described the Tuesday morning program for you and, since the participants had been working almost solidly from the time they arrived on Sunday afternoon, they were given the afternoon as free time. Many visited the Old Village at the Spring Mill State Park and some took tours of the area visiting covered bridges and limestone quarries and other places of interest in this beautiful section of Indiana.

They re-assembled late that afternoon for a reception by the Dean of our School, Dr. Maynard K. Hine. The fellowship among the faculty was a warm thing to observe and the highlight of that reception was when Dr. Charles Gish, Director of the Dental Division of the Board of Health and member of our faculty, climbed up on a table and proposed a toast to the Dean. Loud Hear Hear's were heard, after which the faculty retired to the dining room for their Tuesday evening dinner. After dinner, they came to order in the conference room to hear Dean Hine talk about, "Dental Education in the Next Decade." He spoke of the impact of Federal Programs on the dental profession, of the electronic age's impact

on education and methods of education and evaluation, and of many other concerns of dental educators. He also gave a brief summary of his activities as ADA President, 1965-66.

On Wednesday morning, a panel discussion moderated by this columnist discussed "Evaluation of Student Performances" in several different disciplines. Dr. Charles Burstone told of the evaluation of clinical performance in graduate orthodontics; followed by Dr. Roger Noonan, telling about the evaluation of clinical performance in undergraduate pedodontics at Indiana. Dr. Miles Standish related how they evaluate student performance in the pathology lab, and was followed by Dr. Glen Sagraves, discussing evaluation of student performance in the pedodontic technic laboratory. The last member of the panel was Dr. H. William Gilmore. He discussed the Senior Practical examinations as a method of evaluation. It was most heartening to observe that each one of these participants before discussing evaluation, identified the prerequisites for the entrance of a student into his course and then meticulously spelled out the objectives of the course. They pointed out the importance of these objectives being statements of what the learner is expected to be doing after he has completed the training and that what he will be doing must be measurable in order to have an efficient evaluation and to determine whether the objectives of the course were being met. This panel performance gave concrete evidence of the maturity of our faculty, represented by these people.

You, the members of the Alumni Association of the Indiana University School of Dentistry, can take a great deal of pride in your faculty. You would have felt a glowing respect for them had you been able to witness their serious intent in their endeavors to improve their teaching. You should know that many of the participants at this conference were part-time teachers who were sacrificing time

from their practices in order to be in attendance and improve their contribution to the learning experience of the students who are preparing to provide dental service to the people of the State of Indiana.

Two representatives of the student body, Mr. Wilbur Boren from the Senior Class and Mr. Norman Novak from the Junior Class, had been invited to participate in the conference. At the close of the conference, each was given an opportunity to make a few remarks and both indicated their appreciation of the serious concern of their faculty for teaching and improving teaching. Many graduate students were in attendance at the conference and it is felt that this is an important part of their training, because it is from our graduate students that many of our future dental educators shall be recruited.

Also in attendance at this conference was Mr. Richard Morrison, the Assistant Secretary of the American Association of Dental Schools. It was quite appropriate that he be invited and represent the Association, since our Teaching Committee came into existence in compliance with a resolution of the Teaching Committee of the American Association of Dental Schools in 1963 that all dental schools establish a Teaching Committee.

Dr. Robert Doerr, Associate Dean of the School of Dentistry of the University of Michigan, had been invited and was in attendance throughout the entire conference. He was warmly received into the fellowship of our faculty and was asked to make a few remarks at the end of the conference. His remarks were very thoughtful and he spoke of the relationship between the dental schools at Michigan and Indiana. He won a friendship from our faculty that I am quite certain will be a lasting one.

As you have no doubt gathered from the program I have outlined for you, the schedule of the conference was an extremely busy one. It was very interesting to note, both in this conference this

year and in the conference last year, that deliberations and discussions were not confined to the formal programming of the conference. Throughout the conference, a cabin was kept open as a meeting place away from the Inn and the conference room. This cabin has four separate rooms and, in each of them, groups were assembled and discussions related to dental education were the prevailing subject.

Mrs. Grace Parkin's contribution to our conference was not limited to her formal presentations on Monday and Tuesday mornings. Throughout the evening, after the adjournment of the formal sessions, there were always noted a number of the faculty in her presence bombarding her with questions regarding the National Board of Dental Examiners. There is little doubt that a much better understanding and appreciation of this evaluating arm of the American Dental Association was achieved.

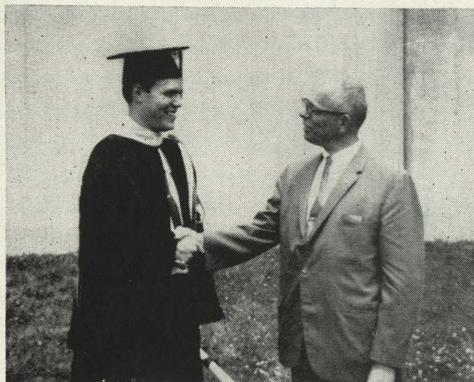
I told you earlier in this column that you, as members of the Alumni Association of the Dental School, are involved in a unique and highly commendable activity—in fact, one of the finest with which any alumni association could be involved. You paid for the proceedings of this conference which was compiled at great effort and are enclosed in a crimson and cream three-ring loose-leaf binder.

It contains the program, a Table of Contents, Messages from the President of the University, the Provost of the Medical Center, the Dean of the School of Dentistry, and the Chairman of the Committee on Teaching. A conference roster is included, containing 115 names. This is followed by five pages of candid photographs for the first conference. Additional sections of the proceedings contain abstracts of papers, the Annual Report of the Committee on Teaching of the American Association of Dental Schools, a paper presented by Dr. Allan O. Pfnister, Dean of the faculty last winter, and also includes several small pamphlets on education.

A copy of these proceedings will be on display at the Alumni booth at the May meeting of the State Dental Association and I hope that you will take time to examine it and see for yourself, the contribution you have made to your school. Many alumni associations are accustomed to giving fine support to the athletic program of their school. You have done this and I am sure will continue to do so; but, you are one of the few schools who have been so generous in your support of a program to improve teaching in your own school.

1966 Graduates, With Their Dentist Fathers

As has been my custom for the past few years, I assembled the graduating Seniors whose fathers are dentists immediately



Past President of the Alumni Association, Dr. Emory Bryan, congratulates Dr. Bryan, Jr.



Congratulations, son!

after Commencement in Bloomington, in order to photograph them with their fathers. This year, there were six members of the class whose fathers had practiced their profession and lived it in such a way that their sons chose to emulate them. They are: Dr. Richard L. Abdon, son of Dr. Horace G. Abdon, '38; Dr. Richard S. Baum, son of Dr. Maurice Baum, '28; Dr. Emory W. Bryan, Jr., son of Dr. Emory W. Bryan, '40; Dr. James Michael Herrick, son of Dr. Charles R. Herrick, '45; Dr. James K. Ohara, son of Dr. George K. Ohara, '34 Creighton University School of Dentistry; Dr. Guy B. Rutledge, son of Dr. Byron G. Rutledge, '49. To sons and fathers, alike, we offer our sincere congratulations.

Photographs courtesy of Dr. Jack Carr.



The Doctors Baum.



1966 graduating seniors with their dentist fathers and Dean Hine, from l to r. Doctors Abdon, Rutledge, Baum, Herrick, Bryan and Ohara.

Alumni Notes

Mrs. Cleona Harvey, Recorder

Once again time has slipped quickly away; a busy spring simply jumped into a busier summer, and the summer has been rushing toward the hectic activities of fall and a new dental class. I love every minute of my work, even though it is very time and energy consuming! It is such a pleasure to counsel the pre-dental students, many of whom are carbon-copies of graduates. We do take added pleasure in the knowledge that many of our students are sons and daughters of alumni! Then, as time moves on, it is pleasant to be able to write our pre-dental students advising them of their admission; it is equally difficult to write those whose averages have made their acceptance impossible. We always hope that those not accepted may be able to raise their averages and improve their records sufficiently that they may be accepted the next year. So each summer and fall bring pleasure tinged with sadness—we'd like to accept all our applicants!

The failure of many of you to write also makes me sad . . . most of you have been quite negligent these past six months; we do not have the volume of news we would like to have in this column. Let's 'get on the beam' and remember that your classmates would like to hear from you through this column!

Without chiding you further—since I now expect to hear from you ALL in the near future—we give you news of the

Class of 1904

Dr. Robert R. Gillis
5462 Central Avenue
St. Petersburg 7, Florida,

writes, "*Due to an accident a year ago, I have been forced to quit practice and my office has been closed since that time.*"

I have been busy dismantling it for several months." Then, a clipping from the St. Petersburg, Florida, Times, which was sent to Dr. Hine, gives us more information:

"Dr. Gillis moved to Florida in 1952 after retiring, at 72, from his Indiana dental practice which he set up in 1904.

He reports, "But I got tired of pulling weeds—I didn't like retirement. So I bought a lot in St. Petersburg, built an office and went back to work."

"He retired again last year at the age of 84, but not because he wanted to—he had a little accident . . . fell down in his yard and dislocated his shoulder and broke his arm. He underwent six weeks of treatment in the hospital, but strength in the arm he broke did not completely return. He lamented that he probably would still be in practice today if he hadn't had that fall.

During his 61 years of practice, Dr. Gillis became well-known in dentistry, serving as president of 12 international, national, state and local organizations. He also served on the Indiana State Board of Dental Examiners for 15 years and on the National Board of Dental Examiners for another 15 years."

Dr. Gillis visited the Dental School recently and presented us with some books, slides, etc., which we were most happy to receive. He was in excellent health, and it was pleasant to have him visit the school.

Class of 1924

Dr. Bernard A. Martin sent us a change of address, along with the note, "*Regards to all of the old gang*",

Dr. Bernard A. Martin
2212 Wason Road
Sarasota, Florida 33581

Class of 1928

A letter from
Dr. Dean O. Taggart
8212 Midnight Pass Road
Sarasota, Florida 33581,
informs us of the death of his son, Dr.
Dean M. Taggart (Class of 1951), No-
vember 12. Dr. Dean O. says he has been
out of practice since he left Whiting,
Indiana, in 1957 and has lived at the
above address in Sarasota since that time.
He sent his regards to "*any of the Old
Guard*" that may still be around.

Class of 1947

Dr. Paul J. Narcowich
1460 Old House Road
Pasadena, California,
informs us that at the meeting last No-
vember in Las Vegas he spent a few
hours discussing "*Dentistry*" with Dave
Gephart, saw Roland Dykema at the air-
port, and Jim Roche also . . . he said
he wanted to get his address into the
Bulletin so that when all his classmates
make the trip out to Disneyland they will
drop in and say "*hello*"!

He also hopes to see everyone at the
Class Reunion in 1967—saying "*It will be
20 years—WOW. As the Germans say,
'How old you grow so fast!'*"

Class of 1951

We are sorry to report the death of
Dr. Dean M. Taggart in Bradenton,
Florida, on November 12, 1965.

Class of 1952

Dr. Rith Boozayaangool, who took a
special course in 1951-52,
P. O. Box 913
Bangkok, Thailand,
was in to visit us in May. He had been
attending a special class in Chicago. He
told us he is involved in private practice,
a dental supply company and dental lab-
oratory in Bangkok!

Perhaps some of you saw the picture
which appeared in a number of papers
recently of

Commander Harold Glasser,
Naval Academy
Annapolis, Maryland
who with his 18-year-old son Donald,
rowed 100 miles in a 14-foot dory up the
Chesapeake Bay, to take up his new
duties at the Naval Academy.

We are pleased to announce the mar-
riage of our

Dr. Simon Kleeger
93 East Market
Rhinebeck, New York
on July 2 to Diana Beverly Sisson.

Class of 1952

Dr. Donald B. Wiesler,
232 Fulton Street
Sandusky, Ohio,
sent us a picture of Commander Glasser
which appeared on the front page of the
Cleveland Plain Dealer, with the follow-
ing note:

*"Thought you would like to have this
picture.*

*"Life just seems to move right along
up here in Vacationland. I'll have one
daughter out of high school next June
with three left.*

*"It's funny how you'll meet someone
up here on a visit from Indianapolis,
and find out their dentist is a classmate.
My—I must be getting on in years! The
only one I see with regularity is Wilbur
Morton in Tiffin, as we are in the same
area society.*

*"I wish I had some spectacular news
to tell you, but I haven't. We are going
to see the Indiana-Ohio State football
game and I do hope we give them
what for. The needling we have to take
from these Ohio State and Western Re-
serve men!"*

Class of 1956

Dr. David A. Ferguson
4009 East State Blvd.
Fort Wayne, Indiana

reported to us recently that he has been appointed to a 3-year Fellowship in Oral Surgery at the Mayo Clinic, to start in April 1967.

He also writes, *"Since graduation ten years ago I have been very busy practicing dentistry and raising a family. Within a few weeks after graduation I went on active duty with the Navy Dental Corps and spent what I considered a very profitable four years in both dental and personal experience. We lived in California, Hawaii and Texas; and our first two children were born during these four years. I must mention the wonderful hospitality and friendship shown us by the alumni of I.U.S.D. in Hawaii, during the two years we lived there.*

"I left the Navy in late 1960 and entered private practice in my hometown of Fort Wayne. I was the only member of our class of '56 to settle here. I have been very busy, as all the dentists in this area seem to be. There just does not seem to be enough of us to go around these days. We added a third child to our family in 1961, giving us a daughter and two sons.

"This may fill you in on what I have been up to since I left I.U.S.D. in 1956. I feel that dentistry has helped us to have a good life and am very grateful for my education!"

Class of 1957

Dr. Donald L. Hauswald,
2536 Charlestown Road,
New Albany, Indiana

was chosen as the 1965 recipient of the New Albany Junior Chamber of Commerce Distinguished Service Award, because of a list of civic activities he has headed, not the least of which was his hard and effective work as head of the Floyd County Cancer Society. After his graduation from Dental School, Dr. Hauswald served two years in the Army Dental Corps before returning to private practice in New Albany. He is married and has three children.

Class of 1959

Dr. Donald Raymond Noelke informs us that he has had his name legally changed as follows:

Dr. Donald Raymond Nelson,
2447 Harry Wurzbach Road
Apartment 201-B
San Antonio, Texas 78209.

Dr. Robert B. Purdy, Major, DC,
768th Med. Det. (Den Sev.)
APO New York, New York 09028

writes *"My tour of duty in Germany has been most pleasant, but each May my thoughts return to Indiana for the annual dental conference, which I miss very much. The chance to see old classmates is missing when one is in the service."*

Class of 1960

Dr. Theodore Simpson,
945 West 35th Street,
Indianapolis, Indiana,

recently was a speaker at the second national convention of the Jamaica Dental Association in the Sheraton-Kingston Hotel, Kingston, Jamaica.

Class of 1961

Dr. A. Merlin Wuebbenhorst,
Delray Medical Arts Building
1177 Northeast 8th Street
Delray Beach, Florida,

reports that his practice is booming. . . . he says it is nice to be a graduate of I.U.S.D. and be so well prepared. He also would welcome a visit from any of his classmates or the staff; he is quite proud of his office.

Dr. Wuebbenhorst also reports, *"We had a future dentist come to live with us December 23, 1965—9 pounds 2 ounce handsome 'David Stephen'. He is now 15 pounds and over 24 inches long."*

Class of 1963

Dr. Walter W. Y. Ching announces the opening of his office for the practice of

dentistry (limited to the treatment of children) at

Professional Center Building, Suite 304
1481 South King Street
Honolulu, Hawaii 96814.

Dr. Eugene S. Eggers
7272 USAF Hospital, Box 32
APO New York 09231

writes "Donna and I are looking forward to getting back to the States this fall. Three years is too long to be away. We are hoping these last few months will go by quickly. We still have a little traveling to do over here. So far our luck with catching military flights has gotten us to most of the Mediterranean and a few of the Middle East countries. This summer we plan to spend a month traveling through Europe by car. We are going to take our daughter Laura with us. She is just six weeks old and already runs the house."

Class of 1964

Dr. James B. Crossen
890 Laurelwood Road
Amhurst No. 2
Pottstown, Pennsylvania 19464

reports "I am serving my two years in the United States Army at Valley Forge General Hospital. Prior to May of 1966 I completed one year of my Oral Surgery Residency at the Robert B. Green Hospital in San Antonio. My address is permanent, subject only to a change in my orders."

Dr. Kenton S. Hartman
4622-B Ironwood Street
Malmstrom AFB, Montana 59402

reports on what he has been doing since he has been in Montana:

"Now that I've spent two years practicing military dentistry, I must say that it's a rather pleasant life for those who like to travel and who enjoy a group practice. I've worked with many young dentists like myself from several different schools and have come to the conclusion that the curriculum taught at Indiana

has given me a decisive edge over most of the other dentists I've associated with.

"Here at Malmstrom AFB, I function as the periodontist and oral surgeon since this is a small base and we have no specialists here yet. The training I received during my internship at Chanute AFB has been well worth the effort. During the next two years I plan to apply for a residency program either in periodontics or oral surgery.

"At the moment, I'm wondering whether or not I'll be in Viet Nam before the end of the year. The prospect is not too appealing, but it would be interesting and educational. My wife and I are expecting our third child next February or March. May it please be a son, since I already have two daughters, ages 6 years and 16 months."

Dr. Jon E. Schiff, USN
N.A.F., Navy Box DE
FPO San Francisco, California 96670

writes, "I am married and have three children, a boy and two girls. Since graduation I have been stationed at the Naval Air Facility, Naha, Okinawa. My last daughter was born on Thanksgiving Day—I delivered her myself in an ambulance on the way to the hospital—we got held up in a village on the way by heavy traffic.

"Right now I plan to stay in the Navy as I'm not ready to settle in one place just yet. My wife, Judy, likes it quite well. We were able to travel to Hong Kong together and had a wonderful time.

"I'm really enjoying practice here as we are treating dependents as well as military; I've learned so very much as we have a small clinic and I get to practice all areas of dentistry. I'm trying to do my very best on every patient as I enjoy my work."

We received a change of address for
Dr. David H. Thompson, LT.
U. S. Naval Station, Box 20
FPO New York, New York 09597.

Class of 1965

Dr. Thomas Rocke, Capt., USA DC
5801 Quantrell Ave., Apt. 411
Alexandria, Virginia

wrote Dr. Johnston, who kindly agreed to share the news with us:

"Well, they drafted me out of orthodontic school at St. Louis University. I was able to take my finals early and get down to Fort Sam Houston in San Antonio. Thought you might like to see some of the rugged soldiers who are guarding our country. Doesn't it give you a sense of security! (Wish we had the picture to show you, but Dr. Johnston didn't share THAT with us! C.H.) In the picture from left to right are Dave Bojarb, Tom Rocke, Larry Graham, Jim Lee and John Deuschle. I am now stationed at Fort Belvoir, Virginia and am living in an apartment with Deuschle. The fort is just outside Washington and our apartment is between the two places. We are really enjoying Army life. Our commanding officer is very nice and there is no pressure on us. We see one patient every hour and do all we can for him in that time. There is a rotation program through crown and bridge, prosthetics, surgery, diagnosis and DeWitt Army Hospital. That gets us off the 'amalgam line' periodically.

"Say hello to everyone for me."

Had a note from

Dr. Rodney P. Swantko
3395 Scranton Road
Cleveland, Ohio

reporting that he is presently an oral surgery intern in Cleveland and will begin his residency there this summer.

To keep you all informed regarding our alumni, here are the names and addresses of the Class of 1966:

Dr. Richard L. Abdon
3855 North Wallace
Indianapolis, Indiana

Dr. Carl J. Andres
R.R. #1, Box 229
Floyd Knobs, Indiana

Dr. Lawrence E. Ansbaugh
52174 Myrtle Avenue
South Bend, Indiana

Dr. David R. Avery
c/o Roy Fisher
903 Danbury Drive
Kokomo, Indiana

Dr. John W. Bailey
c/o Mr. Maurice E. Walter
5324 Seneca Drive
Indianapolis, Indiana

Dr. Donald Baker
29 East Tilden
Brownsburg, Indiana

Dr. Richard S. Baum
1121 West Michigan
Indianapolis, Indiana

Dr. Stephen D. Beeker
3455 Allison Avenue
Indianapolis, Indiana 46224

Dr. George K. Bernhard, Jr.
c/o G. K. Bernhard, Sr.
6643 East 18th Street
Indianapolis, Indiana

Dr. James M. Bleeke
1325 Victoria
North Chicago, Illinois 60626

Dr. Carl W. Blickendorf
1338 West State Street
Fort Wayne, Indiana

Dr. William H. Bond
1401 North Third Street
Logansport, Indiana

Dr. John T. Boyle
c/o 731 East 10th Street
Mount Vernon, Indiana

Dr. Emory W. Bryan, Jr.
510 Medical Center Bldg.
Fort Wayne, Indiana

- Dr. Raymond A. Burris
425 North 14th Street
Santa Paula, California
- Dr. Kenneth E. Camadine
102 West Linder Street
Rome, New York
- Dr. Edward L. Clausen
719 Cherry Street
Hammond, Indiana
- Dr. Wayne L. Dawes
2532 Parkwood Drive, Apt. 2002
Indianapolis, Indiana
- Dr. Eugene A. Day
501 Hume Mansur Bldg.
Indianapolis, Indiana
- Dr. Thomas E. Dunn
Lowry AFB
Denver, Colorado
- Dr. Robert B. Edesess
430 Winchester Street
Newton Highland, Mass.
- Dr. David Eichenauer
Anthony Wayne Meadows
R. R. #5
Decatur, Indiana
- Dr. Stephen Fischer
531 South Rotherwood
Evansville, Indiana
- Dr. James F. Fleck
615 "J" North Tibbs Ave.
Indianapolis, Indiana
- Dr. Jerome A. Follmar
1372 Hoffman Lane
Campbell, California
- Dr. David H. Goldstein
635 Golf Lane
Indianapolis, Indiana
- Dr. Louis R. Haag, Jr.
899 Stewart
Terre Haute, Indiana
- Dr. Lloyd Hagedorn
552 Winona Village
Indianapolis, Indiana
- Dr. James W. Hall
1504 Catula Avenue
Lafayette, Indiana
- Dr. James W. Hastings
1726 E. Cedar
South Bend, Indiana
- Dr. Kenneth J. Helm
2700 E. Chandler
Evansville, Indiana
- Dr. Stephen A. Henley
129 East Green Street
Rensselaer, Indiana
- Dr. James M. Herrick
1414 East Cleveland Ave.
Hobart, Indiana
- Dr. James B. Higgins
1226 Sheridan Street
Richmond, Indiana
- Dr. Craig L. Hills
1595 Savannah
Evansville, Indiana 47715
- Dr. Jon D. Ingleman
334 North Randolph
Indianapolis, Indiana
- Dr. David P. Jarrell
Department of the Army
Letterman General Hospital
San Francisco, California
- Dr. Gene W. Johnson
1701 Susquehanna Ave.
Superior, Wisconsin
- Dr. William E. Johnson
341 West Thomas St.
Sullivan, Indiana
- Dr. John D. Kingsbury
425 North LaSalle St.
Indianapolis, Indiana
- Dr. Norman O. Krauss, Jr.
Great Lakes Naval Training Center
Great Lakes, Illinois
- Dr. Richard A. Martens
R.R. #1
Fulton, Michigan

- Dr. Richard Martin
430 North Moreland Ave.
Indianapolis, Indiana
- Dr. Jerry D. McClarren
R.R. #1
Worthington, Indiana
- Dr. Randall L. McClary
6360 West 35th Place
Speedway, Indiana
- Dr. Raibourn McGee
508 South Manhattan
Indianapolis, Indiana
- Dr. John P. Nelson
Box 1000
Steamboat Springs, Colorado 80477
- Dr. Thais F. Nespral
18023 Burbank Blvd.
Encino, California 91316
- Dr. J. Cameron Newby
741 Kenwood Ave.
Fort Wayne, Indiana
- Dr. Sybil S. Niemann
612 North Moreland Ave.
Indianapolis, Indiana 46222
- Dr. Abraham J. Ochstein
1901 South Wayne
Auburn, Indiana
- Dr. John H. Oehler
West National Avenue
Brazil, Indiana
- Dr. James Ohara
1626 Royal Palm Drive
Wahiawa, Hawaii
- Dr. Dale W. Oliver
125 East Washington Street
Greencastle, Indiana
- Dr. Jerry L. Parnell
1912 Gillmore Drive
Fort Wayne, Indiana
- Dr. David L. Pfeifer
550 Ludlow Street
Lawrenceburg, Indiana
- Dr. Jerry W. Raibley
819 East 4th Street
Mount Vernon, Indiana
- Dr. John A. Roshel
2101 Maple Avenue
Terre Haute, Indiana
- Dr. G. Byron Rutledge, Jr.
3001 Poplar Street
Terre Haute, Indiana
- Dr. Joe W. Scales
743 South Buckeye
Kokomo, Indiana
- Dr. Don G. Scroggins
549 Darkview Drive
New Whiteland, Indiana
- Dr. Michael S. W. Shane
7121 Miami Avenue
Madeira, Ohio
- Dr. John G. Shank
North Riley Street
Kendallville, Indiana
- Dr. Roger E. Shurr
5932 West 16th St.
Indianapolis, Indiana
- Dr. Alan H. Smith
2117 East Gum
Evansville, Indiana
- Dr. Roy A. Smudde
1626 Lafayette
Terre Haute, Indiana
- Dr. Emery Spisak, Jr.
5536 Adams Street
Gary, Indiana
- Dr. Harold Stanley
427 Broadway
Dunedin, Florida
- Dr. Frank A. Szot
723 Main Street
Beech Grove, Indiana
- Dr. Dahl F. Tibbetts
720-A Porter Street
Glendale, California

Dr. Michael A. Urbanek
4049 Meadowbrook Blvd.
University Hts., Ohio 44118

Dr. John M. Voges
2029 S. Center St.
Terre Haute, Indiana

Dr. Robert R. Walden
1100 East 18th Ave.
Denver, Colorado

Dr. John E. Ward
818 East 84th Street
Indianapolis, Indiana 46240

Dr. James Weilhammer
Cincinnati General Hospital
Cincinnati, Ohio 45229

Dr. Richard W. Weinzapfel
526 North Lemcke Ave.
Evansville, Indiana

Dr. John L. Wells
U. S. Navy

Dr. Ross W. Woodburn
601 Oak Street
Terre Haute, Indiana

Dr. Marvin G. Wright
R.R. #1
Greensburg, Indiana

Dr. David G. Yater
R.R. #5
Greenfield, Indiana

Dr. Leonard Yuknis
3802 Cossell Road
Indianapolis, Indiana

ALUMNI NEWS

(Continued from page 21)

various activities so I took this opportunity to give to you a brief and sketchy outline of some of them.

In my closing comments I would like you to consider larger contributions to the Deans Fund for special equipment for our ever expanding and very outstanding dental school. Your checks can be mailed

to the Alumni Secretary at the present time; ear-marking them for this special teaching fund. Our chair project is now extinct due to circumstances beyond our control and a new fund-raising program is in the offing. Your continued support and an ever increasing membership is needed to carry on our many activities. This all takes a large amount of money and your financial support is always important.

I would like to say that it has been an honor to represent the IUSDAA for a very brief period, one of the shortest years I can recall. It seems like yesterday that Dr. H. Wm. Gilmore turned the gavel of this Alumni Association over to me. Thanks again to the hard-working officers, the Board of Directors and the Executive Council representative. Without your consistent help and support I am sure this office would have been a difficult task and not the pleasure that it has been.

MOBIL DENTAL UNIT

(Continued from page 13)

Westfall, who will continue to direct the dental educational program of the state for the coming year.

This work follows a survey made by Indiana dentists in 1933-34, which appeared in an interesting report recently issued by the United States Public Health Service.* The report showed that children of various counties in Indiana are badly in need of dental care. The dental services of this unit will be limited to children between the ages of 3 and 10 years. Only those children will be accepted as patients who have been referred by the referring agencies and local dentists in the county in which the mobile unit is located.

These children must be adjudged as being from families whose financial condition, after investigation by the public health nurse or representative of the local relief agencies or local dentists, would indicate that it would be otherwise impossible for the children to receive dental attention.

* Dental Survey of School Children, Ages 6-14 Years, Made in 1933-34 in 26 states. Public Health Bulletin No. 226.

Class and Fraternity News

SENIOR CLASS

As another hectic summer draws to an end and as the new year begins, the new Senior Class is scurrying around the school in an effort to beat the "delivery dates" in Crown and Bridge, and Partial Denture.

Now that most of the "super" seniors have parted, we finally are beginning to feel like real seniors. Our class had an excellent turnout this summer in the clinics. Everyone is "gunning" to avoid the last minute rush when next June rolls around. For some the summer was bountiful; for others it was one of little accomplishment; for everyone it was HOT!!

We wish to extend our welcome to the new Junior clinicians and commend them for their progress in the clinic. Keep up the good work.

Everyone anticipates making this senior year as swift and as painless as possible.

Jack Turnock

SOPHOMORE CLASS

The students of the Class of 1969 enjoyed their three-month vacation before the onset of the second year of dental school, which has received the reputation of being the most difficult, but beneficial year in our preparation for the dental profession. A large majority of the students spent the summer employed in their hometowns, while others ventured into some other area either for summer enjoyment or employment.

Congratulations goes to all those students who were married during the summer.

Even though last June every single student was anxious for finals to end so that he could leave and enjoy the summer, almost everyone was glad to return.

Judy Fry

DELTA SIGMA DELTA

Delta Sigma Delta has been active throughout the summer session. David Philips has been placed in charge of house and laboratory improvements. These include renovation of the existing equipment as well as the purchase of additional new items. Also, the card room will receive a newly tiled floor. Eight students will be living in the house for the coming school year.

Roland Ditto is in charge of rushing activities for the 1966-67 school year. A freshman

mixer was held September 16. Our first business meeting was September 14.

Mrs. Richard Bloomer has been elected president of the Delt Wives for the coming year.

Delts of the Class of 1966 who will be enrolling in graduate school include Gene Day in operative dentistry; Lloyd Hagedorn in periodontics; Nick Baum in oral surgery; and Wayne Dawes and Roger Shurr in pedodontics.

Charles Miller

PSI OMEGA

Activities of the Psi Omega Fraternity were centered around remodeling of the house and laboratory this summer. Of course we were all awaiting the school year and "rush" of the Class of 1970.

The officers, Bob Ongerman-President, Marc Smith-Vice-President, Bob Ketcham-Secretary and Dale Lentz-Treasurer, along with the social chairmen Roy Eversole and Bob Bratton and the aid of Dr. David Bixler and Dr. Glen Seagraves have planned an exciting social as well as professional calendar. The Fraternity is hoping to aid its members both socially and professionally in the coming year and is looking forward to a closer relationship to its alumni.

We would like to thank Dr. John Collins and Dr. J. Frank Hall for their encouragement and participation in the fraternity. Thanks also to the alumni who have attended the functions of the Fraternity and contributed so much to the success of our organization.

Chuck Simons

HONORS DAY

(Continued from page 14)

Sigma Phi Alpha, Faye Wolf, Nancy Travis and Lillian Koleszar (Indianapolis D. H. program); Donna Moeller and Myrna Sowards (Fort Wayne D. H. program)

Interfraternity Council Plaque for Scholarship, (1st place) Xi Psi Phi, (2nd place) Alpha Omega

Alumni Association Plaque, David Avery Indiana State Dental Association, (Student A.D.A. president at I.U.S.D.) Robert B. Angerman, sophomore

Omicron Kappa Upsilon Outstanding Accomplishment, (Freshman year) Ronald V. Duch

Omicron Kappa Upsilon Certificates, Lawrence Ansbrough, David Avery, Richard Baum, Wayne Dawes, James Fleck, Jon Ingleman, David Jarrell, Gene Johnson, John Roshel, Roger Shurr

Fourrageres, (High Honors) Lawrence Ansbrough, David Avery, (Honors) David Jarrell, Roger Shurr, James Fleck, Richard Baum, Wayne Dawes, John Roshel, Jon Ingleman, Gene Johnson, Emory W. Bryan, Jr., James Herrick, (Dental Hygienists) Lillian Koleszar, Faye Wolf, Indianapolis, Donna Moeller, Fort Wayne

International College of Dentists, Emory W. Bryan, Jr.

American College of Dentists, John Nelson

LIBRARY

(Continued from page 29)

RETENTIVE PROPERTIES OF PARALLEL PIN RESTORATIONS

Joseph Peter Moffa
1966

Extracted human molar teeth were prepared to a standardized diameter and surface texture on a precision lathe. Gold castings were made for each of the 273 preparations and cemented with zinc phosphate cement by a controlled procedure. After 24 hours, the tensile load required to cause separation of the cemented casting from the prepared teeth was determined. Each casting was recemented and tested three times. Statistical analysis of the data collected indicated: (1) threaded pins gave greater retention than smooth pins, providing the pin length was in excess of one millimeter; (2) increase in the pin length resulted in increased retention; (3) increase in the number of pins resulted in increased retention; (4) the influence of pin diameter on retention varies with the number and length of the pins.

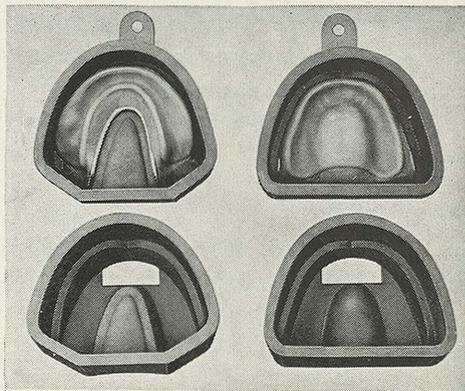
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CONTINUING EDUCATION

(Continued from page 9)

evaluation of dental ills, identification and differentiation of oral lesions, and emergency treatments. Patient management, oral examination procedures and therapeutic medicaments will be considered for the general practitioner. Faculty; Enrollment unlimited; Fee, none. Rice Auditorium, Indiana State Board of Health, Indianapolis.

May 25, 26, 1967: **Current Concepts in Operative Dentistry.** Slide presentations and discussions will cover current concepts of the major subject areas in Operative Dentistry. A clinic demonstration is also scheduled during the two-day period. Conservative practices will be demonstrated and supported. Of particular interest will be the use of powdered gold, indium, new casting investments, and porcelain inlays. Faculty, Guest lecturer, Lloyd Baum, Loma Linda, California. Enrollment limited, 40; Fee, \$25; I. U. Dental School, Indianapolis.

May 31, June 7, 1967: **Segmented Arch Refresher Course.** This course will present a review of major treatment procedures and a demonstration of recent advances in the technique. Faculty; Enrollment limited to Orthodontics; Fee, \$150; I. U. Dental School, Indianapolis.

June 12, 13, 14, 15, 16, 17, 1967: **Segmented Arch Technique for Orthodontists.** The principles and clinical applications of light continuous force therapy will be presented by lectures, laboratory demonstrations, and appliance fabrication on the typodont. A list of equipment and instructions for the typodont setup will be made available to those who are accepted. Faculty; Enrollment limited to Orthodontists; Fee, \$150; I. U. Dental School, Indianapolis.

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