ALUMNI BULLETIN

Indiana University School of Dentistry

VOL. V

JULY. 1943

No. 4

Dr. Hughes Appointed Full Time Head Of Prosthetics



Dr. Frank C. Hughes

We are proud to announce the appointment of Dr. Frank C. Hughes as a full time full Professor of Prosthetic Dentistry in Indiana University School of Dentistry effective July 1st, 1943

Dr. Hughes was graduated from Indiana Dental College in 1918 and immediately entered the armed forces where he served from June 1918 until January 1919. In 1921 he was appointed as Instructor in Prosthetic Dentistry. At the time the dental college was incorporated in the University, Dr. Hughes was Assistant Professor of Prosthetic Dentistry and retained that position until 1936 when he became full professor of Prosthetic Dentistry on a half time basis.

Throughout his entire service in dental education he has taught in the prosthetic department and has rendered valuable assistance in teaching and clinical work. The need for a full time head of our department of prosthetics has long been realized, and we feel that this step is going to place the department on a very high level comparable to those in other schools. Having served in that department for twenty-two years, Dr. Hughes

(Continued on page 4)

Students on Active Duty President Wells App-

Receive Commissions Upon Graduation

Dental students have now been placed on active duty in the Army or Navy and are in uniform. All of the students formerly held Reserve commissions in either the Army or Navy, but most of them resigned their commissions to be placed in the specialized training program. Those who did not elect to do this still remain on inactive status and will be commissioned shortly after graduation.

Inducted in July

There are 65 students in the Army program and 26 in the Navy V-12 unit. The Army men were inducted and indoctrinated at Fort Benjamin Harrison the 26th and 27th of June and the Navy cadets July 1st at the Naval Armory.

The Army staff for the Medical and Dental Schools, in command of Colonel R. L. Shoemaker at Bloomington, is composed of 3 commissioned officers and 1 noncommissioned officer. This office is located in the Medical School. Students report for reveille every morning at 7:30 when the flag is raised, roll taken, and announcements made. Drill is held two nights a week, and cadets attend military classes two hours during the week. Subjects in military (Continued on page 2)

ointed to New Post

Dean Briscoe Also Goes To Washington

President Herman B Wells has been given permission by the Board of Trustees to accept the position of Deputy Director of the Office of Foreign Economic Coordination in the United States Department of State. This office implements the State Department's control of our civil economic and financial agencies in the foreign territories libarted and to be liberated. The division of the office with which President Wells is to be connected will be in charge of preparing plans and procedures for co-ordinating the economic and financial activities of the civilian agencies with the activities of the Armed Services.

Dean Briscoe Granted Leave

Dean H. T. Briscoe has also been released by the Board of Trustees to accept the position of Chief of the Office of Professional and Technical Service of the War Manpower Commission. In this capacity he will serve as manpower representative in all relations with the Army and Navy on matters dealing with specialized training programs; his office also will serve as representative of all the colleges (Continued on page 2)

Forty-Two in Graduating Class

Many Go On Active Duty. Navy Men Take Internships

At Commencement exercises held Sunday, August 22nd, in the University Auditorium at Bloomington, forty-two seniors received the degree Doctor of Dental Surgery. This was the third class to graduate under the accelerated program of the school and the first to graduate in uniform.

Fourteen of the graduates are in the Navy Reserve. Two of these Boston; three at Indiana University School of Dentistry; one at olis; one at Zoller Institute, Chi- the next few weeks.

cago; and two will go to the State Board of Health. The remainder will apply for active duty. Both of the graduates who are now in the Active Navy will go to the State Board of Health for the time be-

Army Men Go On Active Duty

Eleven graduates are in the Army Reserve and all will apply for active duty except one who will serve internships at Forsythe, will go to Monmouth Memorial Hospital in New Jersey. The fourteen who are now in the Active Methodist Hospital, Dallas, Texas; Army will be stationed at various

Dr. Derry Joins Staff



Dr. Robert H. Derry

Dr. Robert H. Derry has been appointed full time Assistant Professor of Prosthetic Dentistry.

Dr. Derry's home has been New London, Connecticut, where he attended high school. His predental education was received at the University of Alabama from 1933 to 1936 after which he began the study of dentistry at the Medical College of Virginia and was graduated in 1940.

Has Wide Experience In **Prosthetics**

Following graduation, Dr. Derry became Director of a Public Health Clinic, which consisted very largely of prosthetic work. It was during this time that he gained a great deal of experience in this field. He now holds a Reserve Commission in the United States Public Health Department.

Dr. Derry has taken a postgraduate course in Public Health Dentistry at the University of Michigan and did research there in the treatment of tooth sockets with sulfonic drugs. Recently he has been a member of the faculty at the Medical College of Virginia and comes to us with an one at the City Hospital, Indianap- camps throughout the country in outstanding record from that school.

ALUMNI BULLETIN

School of Dentistry Indiana University Indianapolis, Indiana

A free and non-profit bulletin issued quarterly by Indiana University School of Dentistry for the purpose of keeping its Alumni informed of the activities and progress of the school.

Editor-in-Chief RALPH W. PHILLIPS

Entered as second-class matter December 31, 1941, at the post office at Indianapolis, Indiana, under the Act of August 24, 1912. Published four times a year, by The Indiana University School of Dent-istry, Indianapolis, Indiana, in the months of January, April, July, and October.

Vol. V

July, 1943

No. 4

THE LIBRARY

INDIANA UNIVERSITY SCHOOL OF DENTISTRY

On Books and Shelving

We knew that adding shelf space to our reading room would entail moving books! We even set out a nice little floor plan to guide us during the process, but we were too optimistic about the labor involved. When you have 60 per cent of a 5,000 volume library laying on the floor, you need more than a schedule of operations and optim-

Each book we've purchased in the last year - each periodical which has come back from the binder in its permanent formcrowded our shelves more, until it became evident that additional space was essential. The walls in the Library were already completely lined with bookcases but we felt that as many volumes as possible should be kept in the reading room. The only answer to the problem seemed to be the making of alcoves by projecting three sixfoot ranges of double-faced shelving at right angles to the regular bookcases against the west wall. Then by moving the shelves for current periodicals to a position between the windows, we were able to put ten sections of bookcases solidly along the north wall. The net result? We have almost 150 feet of additional space for books in the reading room.

And all proceeded according to plan, which included removing every book from every shelf of each book case! The only place to put 3000 books when you aren't using book cases is on the floor, so we carefully lined them up by classification number in long 20 foot rows, back and forth across the Library floor. The tables and formulation of plans for post-war chairs were crowded into one part education.

of the reading room near the door, and "business as usual" was the order of the day. The students were very interested in the whole proceeding and seemed to enjoy a daily inspection just to pose the casual question, "Are you moving the books?" Despite the progress we were making, the general appearance of that sea of books was enough to discourage anyone, and knowing what a task it had been to remove the books from the shelves so the bookcases could be assembled and arranged, putting the volumes back on the shelves in their proper order was no pleasant prospect. However, the greater part of the disorganization disappeared in about ten days in spite of all the work to be done, mainly because of the very excellent help of three student assistants who aided in making the change. And so order returned to the Library.

We also were given a new lease on life early in January when the Dental Bookstore equipment and stock was shifted from our reading room to the School of Medicine Bookstore — the merger forming the Indiana University Medical Center Bookstore located in the basement of the School of Medicine Building. Dental laboratory supplies are being maintained in the Dental School Building but not as an integral part of the Library as in the past.

The large steel counter which housed the Bookstore supplies left quite a gap in the reading room when it was removed, and since the library staff now consists of the librarian from 8 a.m. to 5 p.m. and one student assistant from 5 p.m. to 8 p.m., the desk was moved into the reading room. This change made it possible to convert the office space into a work room and the stack room was outfitted with a small table and a chair for study purposes.

There have been many changes in the last year, but each step was planned ahead, and our errors have not been many although there are still many details to work out. A library can never be static as long as there are new books, new periodicals and new students, and we have the additional incentive in "behind-the-scenes" activities of looking forward to new furnishings for our reading room.

President Wells

(Continued from page 1)

and universities of the country which are involved in these programs as well as in other programs of training. In addition his office will be involved in the

President Wells and Dean Briscoe accepted these positions with the stipulation that they be allowed to spand part of each week on the campus at Bloomington. Thus, in view of this fact, no administrative reorganization is necessary. The most important administrative meetings will be scheduled so that they can attend. Dean Ford Hall has been appointed to serve as Dean of Faculties and Dr. Ittner will handle the correspondence in the President's office, take care of day by day matters, and prepare full reports for President Wells and Dean Briscoe.

Although the dental school regrets to lose both men, even if only for part time, we want to congratulate them upon this distinct honor. Undoubtedly the experience they will gain in their line of duty in the war effort will be most useful to the University in future years.

Students on

(Continued from page 1)

courtesy and custom, law, etc., are discussed by staff officers.

Inspection is held on Friday mornings and special inspections of lockers and equipment are called from time to time. Cadets are subject to all the rules and regulations concerning passes, furloughs, demerits, etc. as in the regular Army. A bulletin board in the school is devoted entirely to military announcements and information. Recently all cadets were advanced to the rank of Private First Class and all will be commissioned first lieutenants upon graduation. The basic pay while in school is \$54 a month with \$2.75 per day subsistence.

Navy Program

The Navy V-12 unit is under the command of Capt. Wm. Mullan at Bloomington. Capt. Mullan was recently awarded the Silver Star for bravery in action in the Pacific. Mr. Robert Wildrick, PhM/2c, is in charge of the Navy office for the Medical Center, and his office is located on the first floor of the Dental School. The Navy cadets are rated as apprentice seamen but wear midshipman uniforms. As yet no drill or scheduled classes are given but special lectures are held from time to time. The base pay for these men is \$50 per month and \$2.75 a day subsistence. They will be commissioned Lieut. (jg) upon successful completion of their dental training.

All Fees Paid

Both the Army and Navy pay all fees and tuition for students and they rent all instruments from the school for student use. Dental students on the Bloomington cam-

pus are under the same rules and regulations as mentioned above. The attitude of both branches of the service is to be commended. Although the standards of discipline and training are to be required, military activity will normally be subordinated to academic training. Thus the Dental School, although graduating dentists for the armed forces at an accelerated rate, will not be forced to lower the standards of teaching. curriculum has in no way been altered by either the Army or Navy.

Photographic Department Enlarged

The reconstruction of the freshman laboratory into the new auditorium permitted the expansion of the Photography Department. The department was originally located off of the Dental Materials Laboratory, but this room will now be used exclusively for Photomicrography.

Due to the constantly increasing demands being made upon this department, it soon became evident that larger and better facilities would be required. Fortunately, the remodeling of the freshman laboratory and lecture room has allowed for this expansion.

The new dark room was designed for efficiency and speed in production. There is ample bench and drawer space for storing film, paper, trays, etc. Two sinks, one provided with ice water, permit the development of negatives and prints simultaneously. Special benches were constructed for the two Solar enlargers.

A separate room is equipped for copy set-ups and portrait photography. There are cabinets for filing negatives and a small desk for clerical work.

Clinical Photography

A Ritter chair and unit in the adjoining laboratory is available for the taking of colored and black and white intra-oral photographs. Patients are brought here from the various departments to facilitate the standardization and speed in securing visual records.

In our present accelerated program the value of visual education cannot be under-estimated. The time and effort spent in securing such material is small as compared to the benefits to the student of dentistry. The Alumni should feel free to call upon this department at any time for suggestions and information. Inquiries should be addressed to: Miss V. A. Hoop, Photographic Technician.

The Control of Rampant Caries

Facilities of Laboratory Available to Practitioners

The amount of dental caries present in a month varies considerably from one individual to another Some persons are immune, others relatively immune, etc., while the teeth of some persons literally melt away in a few short years. There is no doubt that if we could at least reduce some of this decay in those mouths where it is extremely prevalent, the practicing dentist could then be in a position to repair and restore the ravages of the disease which had already gone before. The dentist and the patient would also have some greater assurance that the restorative procedures when placed would remain sound for a satisfactory length of time. Except for the application of such very toxic substances as fluorine or iodacetic acid, no antiseptic material has yet been found that will reduce caries. However, certain dietary regimes have been studied and are believed to be effective in the control of this disease.

Ingestion of sugar has long been considered harmful to the teeth. Exactly how this works is not vet understood, but it is likely that sugar favors the development of a bacterial flora which is really responsible for the damage. This is in agreement with the well known chemico-parasitic theory of dental caries.

Lactobacillus Believed to be Main Agent in Caries

Many organisms have been accredited as specific agents in dental caries. Some of these arestreptococci of various kinds, staphlococci, some anaerobes, diplococci, monilia, leptothrix, and others. In recent years one species, namely, lactobacillus acidophilus, has received the most attention. The lactobacillus acidophilus is found present in large numbers in the majority of oral cavities when dental caries is active. Although this does not give conclusive evidence that it is the sole cause of carious conditions, it points to a definite association between the presence of the organism and the clinical activity of the disease.

It is significant that there are persons (about 3 per cent of the ophilus activity of the collected population) who do not develop saliva can then be made. In this caries even though they eat an way it is possible to determine the abundance of sugar. In most cases degree of susceptibility of patients of this kind it is found that the to dental caries. When the acidlactobacillus count is very low or ophilus count of the saliva has the organisms may be entirely ab- been made, this laboratory will

possible to transplant lactobacillus cent of individuals are immune to hydrate intake when necessary this organism.

Localized pH Important Factor

Lactobacillus acidophilus lives best at a pH of about 5 and under favorable conditions produces concentrations at this level. For an acid to etch the enamel and start a cavity it is necessary to assume that a considerable concentration of it is present. Saliva, even when lactobacillus is present in the mouth, is never acid enough to etch the enamel because the saliva is well buffered. It is probable that lactobacillus organisms are harbored in the dental plaque of the pits and fissues of the tooth where it can grow undisturbed. In the plaque acidophilus organisms are capable of developing a pH as low as 4.5. This is due to the fact that the acid is produced much faster than it is able to diffuse out into the saliva and thus is held in surface. As soon as the enamel is penetrated by the acid, bacteria may easily make their way into the fine tubules of the dentin. Once the cavity is definitely formed, a number of other organisms find entrance to enlarge the cavity and bring about a wide variety of dental pathology.

Correlation of Carbohydrate Intake, Lactobacillus, and Caries Activity.

It has been shown by the Michigan group and others that drastic restrictions of the carbohydrates intake will reduce the lactobacillus acidophilus activity and in most instances reduce caries activity. The procedure for controlling dental caries is based on reducing the lactobacillus acidophilus activity in the individual mouth by drasticly restricting the carbohydrate intake of the patient.

Method

The first step in caries control is to estimate the lactobacillus acidophilus activity of the individual's mouth. This may be accomplished by culturing specimens of saliva from the patient taken on two different days. The specimens are obtained by the dentist having the patient chew paraffin and expectorate the stimulated saliva into bottles which can be provided by this laboratory. With the new facilities at Indiana University Dental School, measurements of the lactobacillus acid-

sent. It has also been found im- then supply the dentist with recommended low carbohydrates diets to the mouths of these people. This so that he may in turn advise the suggests the idea that this per patient how to reduce the carboand thereby reduce the caries activity in the patient's mouth.

Laboratory Work Started

At this laboratory a few patients without dental caries and a contrasting group with rampant caries in their mouths have been selected for the study of the carbohydrate content of their diet and the corresponding lactobacillus acidophilus activity. These studies are made as follows:

- 1. Collect in a test tube for three minutes paraffin stimulated saliva.
- 2. Dilute saliva with dextrose broth, one tenth part of saliva and four and nine tenths parts broth.
- 3. Take 1/10 cc of diluted saliva and plate on tomato juice agar.
- 4. Incubate at 37.5 centigrade for five days.

5. Count number of colonies growing on plates and multiply by immediate proximity to the enamel the factor 500. The number of colonies on the plate multiplied by 500 determines the number of lactobacillus acidophilus organisms per cc. of saliva for that individual.

> When the lactobacillus acidophilus and caries activity of the patient is high (75,000-150,000) he is then placed on a diet extremely low in carbohydrate food content. At the end of two weeks on this diet another study is made on the acidophilus activity. When the number of organisms has dropped below 1000 per cc. of saliva or at about the end of two weeks, the diet is changed to include more carbohydrate material. At no time, however, is the patient supposed to partake of refined carbohydrated, particularly sugar.

Practitioner May Carry on Project

A similar project may with the assistance of this laboratory be carried out in any private practice. This laboratory is equipped and is very willing to send out test tubes with paraffin to receive from the practitioner samples of saliva for testing. After the initial number of lactobacillus acidophilus has been determined from two samples of saliva sent us, we will be only too glad to send to the information concerning recommended diets. We will also make subsequent salivary measurements of lactobacillus acidophilus to follow over a period of time the number and activity of these organisms and how well they are being controlled by the recommended diets.

dental caries is most active in usually three operators, each ig-(Continued on page 4)

Research Project on Amalgam Reported

Clinical Observations and Laboratory Tests Correlated.

A recent investigation correlating clinical observations with laboratory tests on amalgam has been conducted at the Dental School by Mr. Phillips, Drs. Boyd, Healey, and Dean Crawford. The purpose of this investigation, the results of which appear in the June issue of the Journal of Dental Research, was to observe the clinical behavior of amalgam fillings which have been placed by varying controlled technics. It is common knowledge that varying the trituration will produce widely differing expansion reactions. A short trituration will produce more expansion in the setting reaction of amalgam than longer periods of trituration. Thus it was deemed important to find out if this discrepancy in expansion and other physical properties would show up clinically in the mouth when various types of mixes were used.

Different Mixes Tested in Laboratory

The operators perfected themselves in a technic which produced an expansion of 23 to 25 microns per cm. when the amalgam was under-amalgamated. When mixed according to manufacturer's directions it expanded 7 to 9 microns and when triturated for three minutes it contracted 2 to 4 microns per cm. The same technic was used in mixing and inserting the fillings in the teeth, and it was therefore anticipated that this procedure produced fillings with the same properties as obtained in the laboratory experiments.

One hundred and thirty fillings were placed in 16 adults and 15 children, 5 to 7 years of age. Thirty-six of these fillings were under-amalgamated and should have expanded approximately 25 microns per cm. Fifty-one were mixed according to manufacturer's directions, thus having an expansion of 7-9 microns, while thirtyfour were triturated for three minutes and should have contracted 2-4 microns. None of the fillings. were polished but were left as they were carved at the time of insertion. This procedure was followed in order that changes which occurred in the first twenty-four hours would not be lost and for the purpose of observing tarnish and discoloration as being influenced by surface roughness.

All fillings were examined at It is a well known fact that the end of six months by two and

(Continued on page 4)

Dr. Pallardy **Accepts New Post**

of Dentistry

Dr. Sumner X. Pallardy has been appointed head of the Prosthetic Department of Temple University School of Dentistry in Philadelphia. He assumed his new duties there July first.

Dr. Pallardy graduated from Indiana Dental College in 1923 after having served in the Hospital Corps of the Navy in the 1st World War. The two years following graduation he held the position of instructor in Crown & Bridge. Dr. Pallardy returned to the Dental School after it had become a part of Indiana University. In Sept. 1935 he was appointed Assistant Professor of Prosthetic Dentistry and in July, 1942 was promoted to the rank of Associate Professor.

Dr. Pallardy has been most active in the State Dental Society and served as secretary-treasurer for the Alumni Association during the past two years. All of his many friends in the state wish him every success in his new posi-

Research Project

(Continued from page 3)

norant of the other observations and of the technic employed at the time of insertion of the filling. Examinations were conducted with the aid of mouth mirror and sharp explorer.

These observations must, of course, include the human element but this was reduced to a minimum by taking the average of the two or three independent observations. Usually they agreed very closely. It is, however, hard to detect apparent expansion and contraction on many restorations where the dimensional change is so small. Tarnish and roughness are easily measured but observations on dimensional change must involve personal judgment. Most of the deficiencies are very small at this stage but may possibly become more obvious as times goes

Special precautions were taken to prevent contamination by hand mulling or saliva. Thus only two restorations were contaminated to the investigators knowledge. These were marked on the chart and were class 5 preparations on permanent teeth where contamination is difficult to avoid. One of these caused severe sharp and intermittent pain three weeks after inser- amalgam.

tion, not before. This was possibly due to expansion caused by contamination. On the other amalgam, a bubble appeared on the distal surface several weeks after insertion. This appeared to be sim-Goes to Temple University School ilar to elevations on the surface of some specimens shown in an article published by Schoonover, Souder, and Beall, in which the elevation was claimed to be caused by a chemical reaction resulting in the formation of hydrogen which produced the swelling.

Charts for each restoration included remarks on preparation, occlusion, packing time, and finished restoration. All these factors were taken into consideration when the data was tabulated.

Conclusions

pertinent conclusions Several can be drawn at this time although this is only a preliminary report. These fillings will be observed at six month intervals over a period of two to three years and the deciduous teeth, upon extraction, will be examined for adaptation. All of these restorations, regardless of the type of mix, appeared to be superior to the average amalgam seen in the mouth and this can be attributed to the use of a heavy packing pressure, proper cavity preparation with no frail enamel, and cleanliness in the handling and use of the amal-

At present there is apparently very little difference as observed clinically between an amalgam mixed according to manufacturer's directions and the three minute mix. There is, if anything, a tendency for the latter to be less easily tarnished and possibly better adapted. The longer triturated does tend to show an apparent slight contraction in some cases but as yet that has not produced any cause for alarm.

The under-triturated amalgams show expansion in the mouth. This again is not great enough to give difficulty at this early stage. However, these amalgams do tarnish more and are rougher than either of the other two types of mixes.

It is, therefore, very hard to say whether the three minute mix or the one triturated according to manufacturer's directions is the better as observed clinically. Definitely though in terms of tarnish and roughness, the under is in-

The dimensional change and other discrepancies are so small on most of these restorations that they would not be detected in the casual observation. Probably if all restorations had been polished, they would appear identical except for a possible higher degree of tarnish on the under-triturated

Department of Instruments and Supplies Created

Facilitates Handling of Back **Orders**

Due to the increasing difficulty of the dental supply houses in being able to secure and supply the dental school with instruments, the piling up of back orders has necessitated the establishing of a new department for the handling and distribution of these instruments. Some instruments have been on back order for one year, and the work of keeping the files up to date and properly distributing the instruments to the right students as they arrive has called for a full time person to take charge.

Instruments Must Be Checked

Since the school now purchases all the instruments and these are in turn rented by the Army and Navy for student use, this means that all instruments must be checked out and then re-checked in at the end of the year. In this manner worn or broken instruments can be replaced so that new students will have complete out-

Located on Third Floor

This newly created department, Instrument and Supplies, is under the supervision of the heads of the various departments and is in charge of Mrs. Jean Graham. It is located under the balcony on the third floor where the clinic X-Ray chair formerly stood. Desk, file cabinets, and storage space have ben provided. Here the back order instruments are checked out, ivorine teeth and gold foil distributed, and all prosthetic and orthodontic technic supplies are dispersed.

On the first floor, space in the storage room has been provided for the checking in and out of all instruments each year. This new department will undoubtedly greatly facilitate the handling of the increasingly larger number of back orders and prove to be most advantageous to students in securing supplies and equipment promptly and correctly.

Dr. Hughes

(Continued from page 1)

is as aware of the needs for advancement in prosthetic dentistry at Indiana as anyone, and it is our feeling that he is capable of coping with the situation and rendering an excellent service in the development of the department.

Governor Speaks at Honor Day Program

Seniors Receive Awards

Governor Henry F. Shricker was principal speaker at the Honor Day Program held Friday morning, Aug. 20th, in Hurty Hall. In his very interesting talk Governor Shricker commended the professional fields in their war endeavors and emphasized to the graduating class their responsibility in the present crisis and the era to follow the war.

Five Seniors Elected to Omicron Kappa Upsilon

Dean William H. Crawford made the presentations of the various honorary awards. Following a short resume by Dr. J. L. Wilson on the history and objectives of the fraternity, Dean Crawford presented five graduates with keys of Omicron Kappa Upsilon, honorary dental fraternity. Awards were made to Drs. Edward J. Trafidlo, Horace S. Hollar, Melvin M. Klotz, Robert Q. Royer, William P. Kel-

The award in Oral Surgery and Orthodontia was given to Dr. Ernest R. Ebbinghouse. This includes a years' subscription to the "American Journal of Orthodontia and Oral Surgery." Dr. Melvin A. Ritter received the Certificate of Merit presented by the American Society of Dentistry for Children for his outstanding ability as a student in the department of children's dentistry.

The Control

(Continued from page 3)

young children. It is at this time also that orthodontic measures are often carried out for the purpose of stimulating correct growth of the dental mechanism. Since these procedures might provide retention areas for the accumulation of those factors which bring about dental caries, it has been suggested that before orthodontic treatment is instigated, the lactobacillus acidophilus activity of the patient be determined. In those cases which show a high acidophilus count, dietary adjustment can then be made to reduce the acidophilus activity in an attempt to cut down caries activity. The facilities of this laboratory will be available to those general practitioners and orthodontists who are interested in using them for the control of caries through proper regulation of carbohydrate intake. mitted by Dr. Grant Van Huysen, and Miss Janet Murphy, Department of Oral Diagnosis.