







Indiana University School of Dentistry

# ANNUAL REPORT

Alumni Bulletin Special Edition

Vol. 6, No. 1 Fall 1991

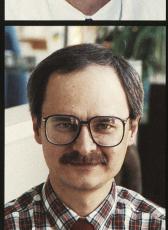
























# INDIANA UNIVERSITY SCHOOL OF DENTISTRY ANNUAL REPORT

Alumni Bulletin Special Edition Vol. 6, No. 1 Fall 1991

DEAN H. William Gilmore

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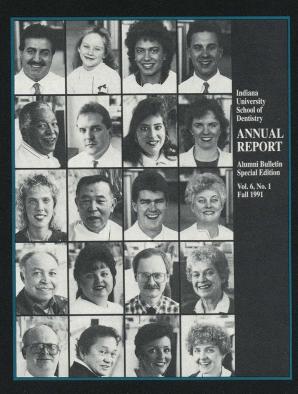
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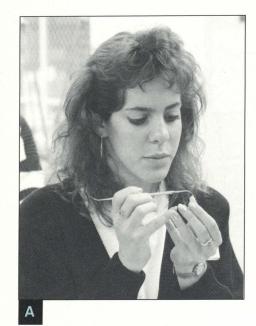


#### **ON THE COVER**

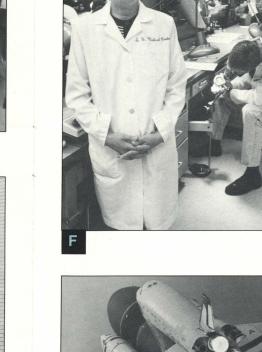
Indiana University School of Dentistry builds its reputation as one of the finest dental schools in the world by continually evolving to maintain the highest standards in dental education and health care. Progress is measured, one day at a time, by the activities of dental students, staff, faculty and patients. Shown above are 20 of the people among the thousands who contribute to the success of this outstanding institution. TOP **ROW**, left to right: Fariborz Nasseri, 2nd-year dental student; Nicole Scott, patient; Helen Sempira, 4th-year dental student; and Brett DiSalle, lst-year dental student. SECOND ROW: Dr. Charles Meriweather, part-time assistant professor, operative dentistry; Mark Dirlam, graphic artist, dental illustrations; Laura Fletes, 3rd-year dental student; and Mary Rehmel, lecturer, dental hygiene. THIRD ROW: Stephanie Patrick, dental assisting student; Dr. Kenneth Kaneshiro, associate professor, periodontics; Dr. Christopher Potee, Istyear oral and maxillofacial surgery resident; and Sharon Querry, 2nd-year dental hygiene student. FOURTH ROW: Joseph January, patient; Rhonda Lee, clerk/secretary, service and supply center; Dr. Thomas Razmus, assistant professor, dental diagnostic sciences; and Sharon Stinson, cash control clerk, cash operations. BOTTOM ROW: Mark Fitzgerald, technical services assistant, library; Jose "Jessie" Sangalang, laboratory technician, prosthodontics; Alane Bensinger, dental hygienist, faculty dental practice, Riley Dental Clinic; and Dr. Rose Marie Jones, assistant professor, prosthodontics.

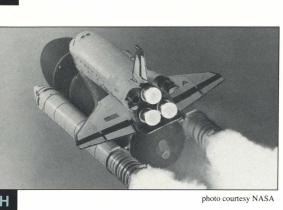
Cover photos by Susan Crum. Annual report photos by Mike Halloran and Susan Crum.

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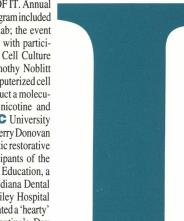


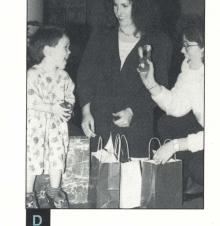


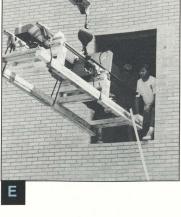


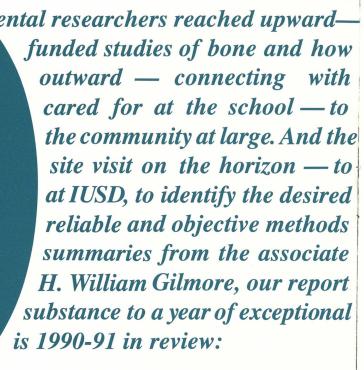


A GETTING THE HANG OF IT. Annual "Dental Day" recruitment program included hands-on experience in the lab; the event filled two large lecture halls with participants and their families. B Cell Culture Laboratory technologist Timothy Noblitt uses two newly acquired computerized cell counting instruments to conduct a molecular study of the effects of nicotine and cotinine upon bone growth. C University of Southern California's Dr. Terry Donovan presented a program on esthetic restorative dentistry to some 200 participants of the new Academy of Continuing Education, a cooperative venture of the Indiana Dental Association and IUSD. D Riley Hospital patient Jonathan Kreiss generated a 'hearty' smile when he saw the Valentine's Day goodies offered by dental hygiene students Shana Dull (center) and Tommi Davis. The "Hearty Smiles" gift distribution project was coordinated by the Student American Dental Hygienists' Association (SADHA). ■ A 1,700-hundred pound Material Testing Machine costing a quarter of a million dollars was hoisted through a makeshift "doorway" on the school's second floor since it was too big for existing entranceways. It's a key instrument for IUPUI's new Biomechanics and Biomaterials Research Center, the first facility of its kind in the country. F Fusako Penner, dental laboratory technician in prosthodontics, voted IUSD Outstanding Staff Member by the Class of '91. G During a regional meeting of the Electron Microscope Society of the



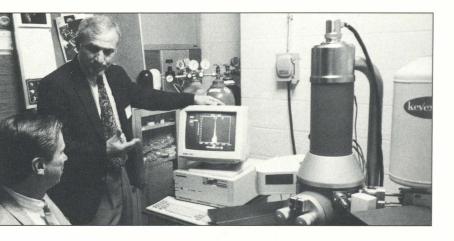






ental researchers reached upward— precisely 184 miles above Earth—to advance their NASA funded studies of bone and how it is affected by weightlessness. Students of dentistry reached outward — connecting with patients at many sites off campus in addition to those cared for at the school — to comprehend the important role of the dental professional in the community at large. And the dental faculty reached inward—with the ADA accreditation site visit on the horizon — to take a long, close look at the teaching and learning process at IUSD, to identify the desired educational outcomes of that process, and to determine reliable and objective methods of assessing the efforts of our students. Opening with summaries from the associate and assistant deans and ending with remarks from Dean H. William Gilmore, our report highlights the people and the programs that gave shape and substance to a year of exceptional achievement at the IU School of Dentistry. Herewith, then,

Indiana University School of Dentistry



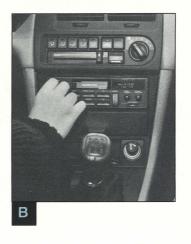


#### **The Editors**



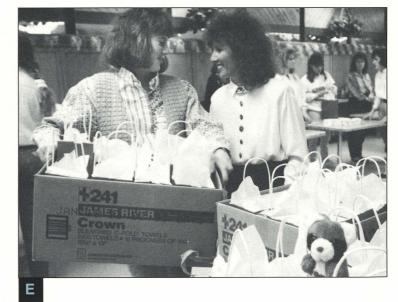
Ohio River Valley, Dr. Nicholas Barbi, president of Peak Instruments, conducted demonstrations of IU's new Wavelength Dispersive X-ray and Elemental Dispersive X-ray. The system identifies elements in research specimens. The meeting was coordinated by Dr. Jean Schoknecht, supervisor of the IUSD Scanning Electron Microscope Facility. H Among the research cargo aboard NASA's Space Shuttle Columbia, which lifted gracefully into space on June 5, were rodent studies conducted by Dr. Eugene Roberts and other bone researchers in the IU orthodontic department. What does the reference book Current Clinical Dental Terminology shelved in the dental school's library now have in common with a can of Progresso Soup shelved in the grocery store? Both carry a computerized barcode revealing a wealth of information about the item. This "pen," when moved across the barcode, instantly produces for librarians a computer screen full of facts about the book. The task of barcoding every piece of material in the dental library began in August 1990; in June 1991 the circulation module of IU's automated system was implemented. Patrons now borrow materials by checking them out with personal computerized library cards. J George Mansfield and five other members of the Class of '94 received NIH Short-term Research Training Grants. George conducted an in vitro Ames test to evaluate the genotoxicity of glutaraldehyde.











A Students from Matsumoto Dental College, IUSD's friendship school in Japan, spent a few days in July observing dentistry, IU-style. Here they and College officials meet in Dean Gilmore's office. They were the first Matsumoto students to visit IUSD. Also that summer seven IU students in the Class of '92 earned extramural graduation credit during three weeks of observation at Matsumoto. B Health tips on dentally related topics in the form of brief radio messages were available to millions of Hoosiers throughout the year by way of HealthScan, a project of University Relations and External Affairs. C Dr. Eugene Roberts, chair of orthodontics and longtime NASA researcher, described IU's role in NASA's life sciences research mission during a pre-flight briefing of Space Shuttle Columbia's launch held for the public on the IUPUI campus. D Dental student Brad Sammons (white coat) led IU-Bloomington students on a tour during dental SEEK day, a recruitment program of the IU Office of Career and Placement Support Services. The highlight was a one-on-one session teaming each college student with a clinical instructor for a close-up view of faculty/student/patient interaction. E With an assembly line of dental hygiene students behind them, student and SADHA president Katie Quinn (left) and Prof. Gail Williamson pitched in to fill 250 bags with donated gifts for Riley patients on Valentine's Day. The event led to a grant

HALA Z. HENDERSON, associate dean student affairs: The 1991 graduating class of 59 individuals compares with class sizes in the 1940s, but the number of applicants continues to increase with each year, both at IUSD and on the national scene.

The IUSD Admissions Committee reviewed 398 candidates for admittance in the 1990-91 academic year. This figure is a 14% increase over the number of candidates in the 1989-90 applicant pool, which is considerably higher than the 2.5% increase in total applicants for all schools nationwide. There were 127 women and 271 men, compared with 124 women and 224 men in 1989-90. There were slightly fewer Indiana residents applying during 1990-91 (94 compared with 102 the year before), but a substantial jump in the number of non-residents (304 non-residents compared with 246 in 1989-90).

The Admissions Committee offered 79 residents and 86 non-residents a position in the class of 1994. Of these, 68 residents representing 27 Indiana counties and 12 non-residents representing Hawaii (5), Illinois (2), Maryland (1), Minnesota (1), Puerto Rico (1), Texas (1) and Turkey (1) enrolled as first-year dental students. The class is composed of 50 men and 30 women, with female students representing approximately 38% of the class. By comparison, 10 years ago nine percent of the incoming class of 130 students were women. Although the total number of dental students enrolled in the United States has decreased in the last decade, the number of women entering the dental profession has risen dramatically.

Four advanced standing students with dental degrees from foreign countries were also enrolled in a special three-year program during 1990-91. These dentists were from Ecuador, Egypt, Mexico, and The Philippines.

Nationally, the total number of candidates for the Dental Admissions Test decreased annually from the 1975-76 academic year until 1988-89. However, a 6.7% increase in candidates occurred in 1989-90, and there are indications that a trend in this direction may be starting. For the October 1990 administration of the test there was a 14% increase in the number of examinees compared to the previous October test. These increases in numbers of persons sitting for the DATs offer an encouraging picture for the future and suggest that the large decline in number of applicants to dental school in recent years may be turning around.

IU's participation in the nationwide SELECT









photo courtesy Rick Baughr

recruitment program and the extremely well attended Dental Day, sponsored by the first-year dental class and the dental hygiene and dental assisting classes, continue to assist our recruitment program.

The efforts of an enthusiastic staff and energetic admission's director in the Office of Student Affairs have helped IU attract highly competitive and qualified individuals to IUSD's educational program. Nonresidents visiting or contacting the school are often eager to seek admission to IU when they hear about our curriculum, faculty, alumni, University, and city. The Office of Student Affairs acknowledges with appreciation the many applicants recommended to us by our alumni and other supporters.

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LAFORREST D. GARNER, associate dean for minority student services: The IUSD Summer Research Program for Talented Minorities and the Minority High School Student Research Apprentice Program were made possible with funding in the amount of \$20,000 from the Indianapolis Research Support Committee, an IUPUI funding organization. Teaming up with IU faculty mentors, the five high school juniors and

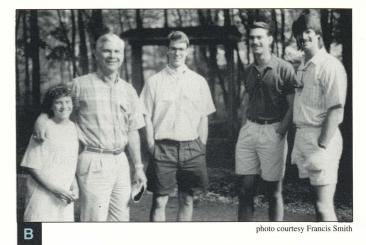
CLASS OF	1994	1993	1992	1991	1981
Applicants	398	348	397	346	696
Residents	94	102	111	87	256
Non-residents	304	246	286	259	440
Men	271	224	274	248	612
Women	127	124	123	98	84
Minorities	58	58	36	50	31
Matriculated	80	83	86	72	130
Students					
Residents	68	72	73	63	117
Non-residents	12	11	13	9	13
Men	50	52	54	52	119
Women	30	31	32	20	11
Minorities	4	3	4	3	1
Graduates				59	133*
Residents				53	118
Non-residents				6	15
Men				44	119
Women				15	14
Minorities				2	4

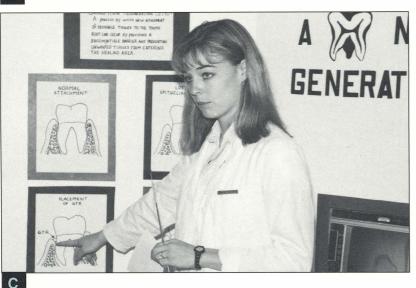
\*Total number includes advanced standing students joining class at later date

from the IU Center on Philanthropy to study philanthropic attitudes of dental hygiene students. **F** Dental student Scott Brar held the unwavering attention of two young participants during the student-produced Dental Day recruitment program. G Many groups and individuals toured the IUSD facilities during the year, including students from Shortridge Junior High School whose field trip was funded by a grant from the Foundation for Exceptional Children. Dr. Schoknecht introduced some of the teenagers to the intricate workings of the school's SEM. H Dr. and Mrs. Dennis Nishimine, of Fresno, California (here with Dean Gilmore) were honored during IUPUI's Spirit of Philanthropy Luncheon for establishing the Timothy J. O'Leary Periodontal Endowment. The endowment, named for IU's former chair of periodontics, supports graduate students in the department. Dr. Nishimine graduated from the program in 1978. Prof. Jolan Banoczy, of Semmelweis Medical University, Budapest, Hungary, was one of many guest lecturers at IUSD in 1990-91. She presented an update on dental research, education, and dental care services in her country. J Dental assistants (L-R) Holly McQuinn, Wendy Snow, Toni McDonald, and LeeAnn Lane were four of 40 grads receiving awards at IUSD's Honors Day program. Their award for a table clinic, "Special Care for Special Kids," was announced by Prof. Charles Palenik.







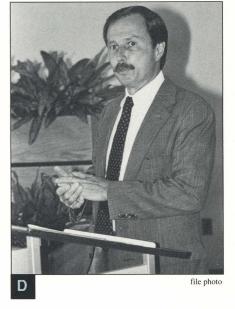


A IUPUI student Edith Jackson was congratulated by associate deans Dr. LaForrest Garner (center) and Dr. George Stookey during a luncheon honoring students involved in IUSD's summer research programs. A grant from the Indianapolis Research Support Committee funded four college and five high school researchers. B Children under the care of IU's Craniofacial Team are used to having their photo snapped by team members throughout years of treatment for their facial disorders. At an annual week-long retreat held at Bradford Woods, Francis Smith, a 16-year-old from Garrett, Indiana, born with Treacher Collins Syndrome, borrowed a camera and slipped behind the lens for a change. He snapped (L-R) camp visitor Erin Nelson; her father, Dr. Charles Nelson, oral and maxillofacial surgery chair and the team's assistant director; and orthodontic grad students Drs. Todd Hunt, William Sprayberry, and Christopher Bruch. C Dental hygiene student Jennifer Eikenberry was one of 64 students to enter various categories of competition on Table Clinic Day. D IU's high profile at the national session of OKU honor society in New Orleans included installation of Assoc. Dean Lawrence Goldblatt as Supreme Chapter president, and a keynote presentation by IUPUI Chancellor Gerald Bepko (in photo), who addressed the future of tenure and promotion for dental faculty from a university perspective. E Dr. Chris Miller, chair of oral microbiology, hosted a national infection control conference on

seniors and four college students joined research projects in various stages of development throughout the dental school and the Oral Health Research Institute. For their efforts, college-level participants earned a \$460 stipend and three college credits; high school students received a stipend of \$1,300. In partial fulfillment of both programs, the young researchers submitted papers describing their contributions to individual projects and presented their findings at a meeting of scholarship recipients and mentors.

Last year the National Institutes of Health awarded two additional Patricia Roberts Harris scholarships in the amount of \$16,000 each to the IU School of Dentistry, bringing the number of minority student recipients to six and the total award to \$96,000. The 1990-91 recipients were Tonya R. Stewart and Kathleen J. Beache, first year students; Margaret A. March and Laura G. Fletes, second year; and Helen N. Sempira and Jennifer L. Satterfield, third year.

As part of IU's commitment to the recruitment of minority students, visits were made to North Carolina Central University, Durham; Bethune-Cookman College, Dayton Beach, Florida; Indiana University at Bloomington; Purdue University at Calumet; and



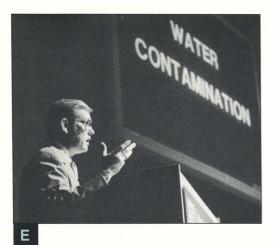
Oakwood College, Huntsville, Alabama.

In June I was invited to serve as a panelist for a week-long, federally funded program, "Black Dentistry in the 21st Century," sponsored by the NIH and held at the University of Michigan, Ann Arbor. Approximately 150 persons from all walks of professional life participated; results of activities associated with the meeting are being compiled for publication.

**DONALD R. THARP, associate dean for clinical affairs:** In last year's report it was mentioned that the school administration and faculty were considering the establishment of a "Capstone Clinic," a new clinic for fourth-year and dental auxiliary education students that would closely simulate the private practice environment.

I am pleased to report that the Capstone Clinic concept was implemented as a pilot program this past year and was quite successful. The clinic was supervised by an on-site director, Dr. Robert L. Lockhart, who is also an assistant professor of periodontics. Nine fourthyear dental students and four second-year dental hygiene students who had either completed or nearly completed their clinical requirements were selected to participate. The students were assigned their own operatories, had

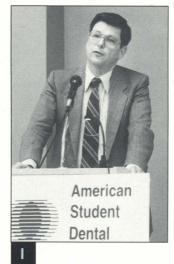
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their appointments scheduled by a full-time Capstone Clinic clerk, and treated several patients each day rather than the customary one patient per half day.

Although a number of logistical problems were encountered, overall positive evaluations from students, faculty and patients have encouraged us to advance the concept further. Therefore, during the 1991-92 school year, every fourth-year student will spend four weeks in the new "Comprehensive Care Clinic," treating several patients per day in their own operatories. The students will earn full clinic credit for procedures performed in this clinic, and faculty from all clinical disciplines will participate. The students will be able to provide all types of treatment without taking their patients from clinic to clinic. The program will be directed by Dr. Ronald K. Harris, professor of operative dentistry, and administered by the Department of Operative Dentistry. As with the Capstone pilot program, the new clinic will be carefully evaluated prior to the end of the 1991-92 year to see if it is fulfilling its goal of enhancing the educational program and better preparing our students for dental practice.

With more than 12,000 active patients, the School of Dentistry continues to be able to provide its students with an adequate number of broad-based clinical experiences. This is in contrast to many dental schools which have been forced to adjust their clinical program due to lack of patients. The only area in which a noticeable decrease in patient availability is occurring is complete dentures. This, of course, has been predicted for some time and is not unique to IU. As a result of the denture patient fall off, the denture requirement for our students is being decreased from 13 to 11 dentures, which is still much higher than most dental schools.

All-time records were set in both clinic visits and clinic income during the 1990-91 year. There were 73,056 total patient visits, of which 5, 091 were in dental hygiene, 15,876 in graduates clinics, and 52,089 in the various predoctoral clinics. This was a small increase over last year's record number of patient visits. Clinic income exceeded the 1989-90 total by approximately \$200,000, or 12%. The patient visit and clinic income increases are especially significant in light of the fact that there were only 59 fourth-year students instead of the usual 80. The statistics provided hard evidence that the students, faculty, and staff are working hard to provide patient treatment and to increase productivity.

The 1992 graduating class will be the first in which all students have successfully treated a limited orthodon-

the IUPUI campus and was elected national chair of the Office Sterilization and Asepsis Procedures (OSAP) Research Foundation. F Dr. Brady Hancock (left), chair of periodontics, and Dr. Robert Lockhart, director of student professional development, tossed around ideas with other members of the IUSD Faculty Council during a special pre-accreditation workshop held primarily to discuss outcomes assessment techniques for the dental school's educational programs. The faculty also identified departmental objectives to complement the school's overall mission. The accreditation site visit is in October 1992. G The Academy of General Dentistry was recognized at the IUPUI Spirit of Philanthropy Luncheon for offering outstanding continuing education programs to Indiana dentists over the years and for contributing funds from these courses to the IU dental school. Representing the Academy were, from left: Dr. Kenneth Garrett ('75), Dr. James Hall ('56), and Dr. Max Burke ('48). H The experimental 10-week Capstone Clinic, where students like Diane Carter-Heckley treated all of their patients in one clinic, led to creation of the Comprehensive Care Clinic for 1991-92. IU Prof. Morton Marcus, director of the School of Business' Indiana Business Research Center, addressed Indiana members of the American Student Dental Association during the annual conference.







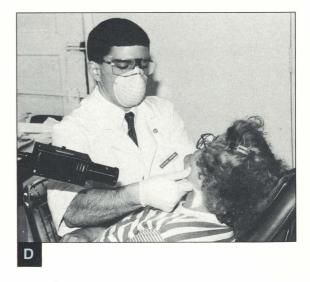
OUTREACH A Corina Middleton (left) and Robin Rajer fielded dental health questions from children at Fountain Square Girls Club, fulfilling requirements of Prof. Louise Judd's Community Dental Health course for second-year dental hygiene students. Other students coordinated events at the School for the Blind and at a women's shelter, for persons with hearing impairment, and for persons interested in smoking cessation and fluoride rinse programs. **B** Dental students Chris Gall and Trusha Patel and their classmates provided screenings to some 300 children at five day-care centers to assess the dental needs of preschool Indianapolis children. Working with principal investigator Dr. Mark Mallatt, the Class of 1992 aimed to enhance the children's awareness of their own dental health by offering educational programs on site. The year-long study was supported with funds from the class, the IUSD Community Outreach Program, and with donations from the Indiana State Board of Health. C Dental hygiene student Christy Tackett helped organize and implement a dental health program at Senior Citizens Center Inc. of Indianapolis. D Mike Behnen and other dental students earned intramural graduation credit for volunteering services at the Senior Citizens Center and other offcampus sites. E Dental hygiene student

tic case. This will satisfy our one remaining 1983 accreditation recommendation and greatly enhance our curriculum. Congratulations to Dr. William F. Hohlt, director of undergraduate orthodontics, who developed and implemented the program.

Continuing developments in the area of infection control have prompted us to evaluate our procedures and implement a new policy on clinic attire. Beginning with the 1991 fall semester, all students, faculty, and staff members will wear disposable clinic gowns while involved in patient treatment. This step is consistent with the overall game plan to keep Indiana University School of Dentistry in the forefront as an educational institution and in the development of concepts, skills and technology in the field of dentistry.

# LAWRENCE I. GOLDBLATT, associate dean for graduate and postgraduate education: During the

1990-91 academic year application packets were sent in response to 1,329 inquiries from prospective applicants regarding 1991-92 enrollment, 50 more than the previous year. Of these, 278 completed applications were returned, down 13 from the previous year. Thirty-nine



new students were accepted, including 15 international students.

Enrollment for the 1990-91 year totaled 120 students, 91 of whom were full-time on campus, 13 parttime on campus, and 16 off campus. Students represented 50 universities and 13 countries in addition to the United States, including Australia, Brazil, Canada, Colombia, England, India, Ireland, Japan, Mexico, Philippines, Scotland, Singapore, and Taiwan. Nineteen percent of the postdoctoral students were from outside the United States. In addition, 10 visiting scholars/ researchers from other countries spent varying periods of time with our faculty.

With the assistance of the IUSD Graduate Advisory Committee and of individuals both within our faculty and outside the school, progress has continued on our longrange plans. Important developments include:

• The new graduate dental program fee structure approved last year was instituted, thus strengthening the fiscal base of the program.

• Negotiations toward establishment of a combined oral and maxillofacial surgery certificate/MD degree program option progressed well.

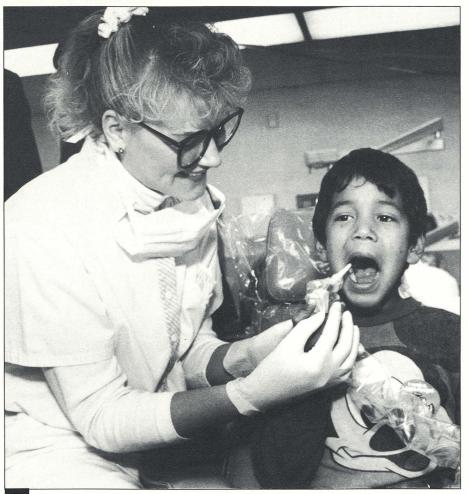




photo courtesy Rick Baughn

• The joint DDS/PhD program was updated and subsequently approved, clearing the way for the acceptance of gifted and dedicated students onto this very special career track.

• The combined-specialty program that enables postgraduate students to combine orthodontics with one of three other specialties (pediatric dentistry, periodontics, or prosthodontics) was approved last year and is now successfully under way at the school. Dr. John Heister (DDS '90) has completed the first year of a four-year program toward certification in orthodontics and pediatric dentistry. In the upcoming academic year Dr. Hwai-Nan Chang, a 1986 dental graduate of the National Defense Medical Center of Taipei, Taiwan, will begin working toward requirements for yet another innovative IU training program that combines certification in orthodontics with a PhD degree in dental science or physiology and biophysics.

• Updated eligibility criteria and appointment procedures for the Graduate Dental Faculty were adopted, reflecting contemporary concepts of graduate education in dentistry.

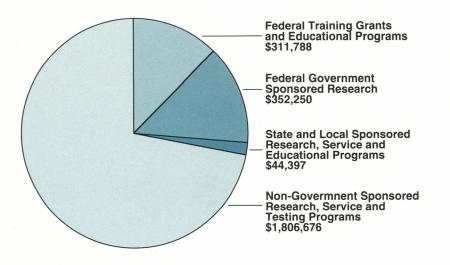
• The well-subscribed visiting scholar/researcher

program helped to expand the graduate student recruitment effort and generated interest in international collaboration and research.

G

The office of Graduate and Postgraduate Education is committed to continual review, improvement and enhancement of all programs in an effort to offer the very finest and most relevant programs to our students. In addition to maintaining the highest quality in all our existing programs, two of our priorities for the coming year are recruiting top-quality students for our various Ph.D. programs and pursuing external sources of financial support for these and our other graduate students; and identifying and creating more core educational offerings together with the mechanisms necessary for students to avail themselves of these offerings. Sheila Miller and a youngster from the Gorman unit of the Boys and Girls Clubs of Indianapolis participated in the dental school's Sealant Program, made possible with a grant of \$27,500 from the Indianapolis Foundation. The school is at the half-way mark of this two-year program, designed to enable 700 city children to have protective sealants placed on their teeth. **F** Dental hygiene student Cherisse Moore and five classmates offered dental health education and information about nutrition to employees of Goodwill Industries during an annual Health Fair. Dental screenings were also available, and each participant was given a followup referral for needed care. G Dental hygiene student Joan Wirth checked Queen Sellers' blood pressure at the Senior Citizens Center.

### **IUSD EXTERNAL RESEARCH FUNDING**



Total External Awards University and Other Funds for Research Total Funds for Research \$2,515,111 395,270 \$2,910,381

TOTAL \$2,910,381

Illustration I

### IUSD RESEARCH FUNDING (By Department/Division)

0.1%	Library
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- 0.1% | Prosthodontics
- 0.1% | Dental Diagnostic Sciences
- 0.1% | Endodontics
- 0.2% Development
- 0.6% Dental Auxiliary Education
- 0.8% Dental Materials
- 0.9% Dediatric Dentistry
- 1.0% Oral Microbiology
- 1.7% Oral Pathology
- 1.7% Administration
- 2.6% Oral Facial Genetics
- 4.0% Minority Student Affairs
- 4.1% Advanced Education in General Dentistry
- 8.1% Orthodontics and Bone Research
- 11.2% Biomechanics and Biomaterials Research Center

**Oral Health Research Institute** 

Illustration II

62.7%

### GEORGE K. STOOKEY, associate dean for

**research:** Research programs at IUSD continued to demonstrate appreciable growth and expansion in spite of funding restrictions attributable to the economic recession. Illustration I summarizes the total extramural funding generated for research and training during the 1990-91 fiscal year as well as research funds generated from within the University and other non-IUSD sources. While extramural funding (\$2,515,111) reflected a decrease of 12.5% from the previous year, total research funding for IUSD was \$2,910,381 which represented an increase of 1.2% over that for 1989-90.

Illustration II presents the distribution of total research funding by departments. The number of departments/divisions generating extramural (non-IUSD) funds during 1990-91 increased by seven; they were dental assisting and dental hygiene, development office, oral pathology, pediatric dentistry, dental diagnostic sciences, prosthodontics, and the library.

Strong efforts were made to obtain increased extramural research support in future years. During the year a total of 80 grant applications were submitted representing total funding requests of almost 15 million dollars.

Fiscal 1990-91 was the first year of our five-year plan to expand research programs at IUSD. Among the goals achieved during the first year were: a) completing major renovation of the dental materials laboratories; b) renovating the Animal Research Facility, resulting in a 42% expansion of available space; c) initiating construction of a Biomechanics Research Laboratory; d) acquiring state-of-the-art instrumentation, including an MTS Bionix Biomechanics Testing Machine, Elemental Dispersive and Wavelength Dispersive Analytical Systems, Scintillation Detector, Coulter Counter/ Channelyzer, and an Instron Data Acquisition System; e) holding a national conference on Advances in Electronic Imaging in preparation for developing an Oral and Maxillofacial Imaging Research Facility; and f) appointing five new faculty members whose major emphasis is research (Drs. Thomas Katona and Jie Chen, orthodontics; Dr. Christopher Hughes, pediatric dentistry; Dr. Richard Gregory, oral microbiology; and Dr. Yoshiki Oshida, dental materials).

Numerous IUSD faculty and staff are firmly committed to the development of innovative state-of-theart research programs. These efforts will most certainly further enhance the national and international reputation of IUSD for excellence in research. In March the Indiana University Center on Philanthropy awarded the development director a one-year research grant to study philanthropic attitudes of dental hygiene students. "Sometimes we get so wrapped up in our school requirements that all we can think about is ourselves," said dental hygiene student Katie Quinn. "With the Hearty Smiles project we all pulled together to do something for someone else."

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**DANNY R. DEAN, assistant dean and director of development:** Thanks to the continued support of the dental alumni, annual giving was up 58% over the previous fiscal year and we have welcomed an additional 108 donors. Our alumni and friends have generously supported a variety of new programs and scholarships.

A special priority for the development office has been to increase student scholarships. In just two years, the funds for scholarships awarded to our students have doubled. Providing financial assistance to students at the dental school will continue to be a priority.

In January, a committee was formed to direct a fund drive for the Biomechanics Research Laboratory, a component of IUPUI's new Biomechanics and Biomaterials Research Center. The task of this committee was to raise \$165,000. (The University and School of Dentistry have committed the remaining funds for this half-million-dollar project.) By the end of June, \$140,000 had been raised through alumni gifts and pledges. We are confident that the additional \$25,000 will be contributed by December, which would allow us to complete our campaign in less than one year. A special thanks goes to many members of the orthodontic alumni who have generously given to this project.

Another important fund-drive committee was established by Dr. Dennis Nishimine, a Fresno, California periodontist and 1978 graduate of IU's master's degree program in periodontics. As a tribute to Dr. Timothy J. O'Leary, former chairman of periodontics at IU, Dr. Nishimine worked with a committee to assist the Indiana University Foundation in creating the Timothy J. O'Leary Periodontal Endowment in August 1990. Interest generated from the endowment will be used to support graduate students in periodontics while they pursue their studies here. Contributions are regularly coming in from former students and other friends of the periodontic program, and the fund drive committee hopes to reach its goal of \$100,000 within the next year. IU faculty, students, staff, and alumni were deeply saddened by Dr. O'Leary's death on August 16, 1991 (*see announcement on page 15—eds.*). He will be remembered as one of Indiana University's finest and most dedicated teachers.

In February, the development office focused its efforts on bringing the philanthropic experience to the student level. Our idea was that by exposing students to all stages of a philanthropic event, they will be more likely to engage in such activity in the future. On Valentine's Day 30-some members of the Student American Dental Hygienists' Association (SADHA) participated in "Hearty Smiles," the first gift distributing project held at Riley Hospital by students of dentistry. With nearly \$3,000 in gifts donated primarily by the Leon Hecht Company, Indianapolis, the students spent the night before the holiday assembling red and white gift bags stuffed full of sundry items ranging from sunglasses and miniature teddy bears to school supplies and dental products.

The next morning the students visited Riley's patient wards, distributing a total of 250 bags to children. Katie Quinn, a second-year dental hygiene student and SADHA president, summed up her own feelings about participating: "Sometimes we get so wrapped up in our school requirements that all we can think about is ourselves," she said. "With the Hearty Smiles project we all pulled together to do something for someone else."

"I think the visit to Riley helped familiarize students with everything that's involved in planning a project such

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as this," said Katie's classmate, Susan Chestnut. "Once students have graduated and are out on their own, they shouldn't be afraid to participate in other projects."

In March the Indiana University Center on Philanthropy awarded the development director a oneyear research grant to study philanthropic attitudes of dental hygiene students. The grant, which was made possible by Lilly Endowment, Inc., and other donors, will be used to determine if participation in events such as Hearty Smiles increases students' personal interest and involvement in similar activities.

In the spring Gerald L. Bepko, IU vice president and chancellor (Indianapolis), announced a campus-wide plan to establish five endowed chairs and 10 professorships over the next five years. The School of Dentistry agreed to work toward the establishment of one endowed chair and two professorships to show its commitment to this project. Since the meeting with Chancellor Bepko the dental school has been in negotiations with a donor to establish one of these professorships in the Department of Preventive and Community Dentistry. Also, Mr. Don McKenzie, General Manager of G.C. International Corporation, is serving as chairman of a fund-drive committee to establish a Dental Materials Professorship in honor of Dr. Ralph W. Phillips, an IU research professor emeritus who remained an internationally renowned authority in materials science until his death in May.

A class challenge among the reunion classes (to be honored at the 1991 Annual Fall Dental Conference) has been implemented for the first time as a means of supporting a special project for the School of Dentistry. Each contributor from the class that raises the most money or from the class that has the highest percentage of participation will receive a tuition-waived, IUSDsponsored continuing education course of his or her choosing. In working with the IU Alumni Association, we hope that the challenge will not only benefit the dental school but will also lend additional excitement to the Fall Dental Conference.

In April Chancellor Bepko hosted the third annual Spirit of Philanthropy Luncheon to honor donors who have supported schools on the IUPUI campus. The School of Dentistry recognized Dr. Nishimine for his work on the O'Leary Endowment, and the Indiana Academy of General Dentistry for providing a diverse selection of continuing education programs to Indiana dentists over the years and for contributing funds from these courses to the dental school. Representing the Academy at the luncheon were AGD President-elect Dr. Kenneth D. Garrett (DDS '75), Lafayette; Dr. James J. Hall (DDS '56), Indianapolis; and Dr. Max C. Burke (DDS '48), Carmel.

On behalf of Dean H. William Gilmore, the faculty, staff and students, I would like to thank all of our donors who have made our progress possible. A list of our contributors begins on page 28. The IUSD Office of Development will continue to encourage, support and assist our students by helping to provide the quality education they deserve.

# LAWRENCE I. GOLDBLATT, associate dean for academic affairs:

#### PROMOTIONS

The IU Trustees approved the promotion of **Bradley B. Beiswanger** to professor of preventive and community dentistry, and of **Charles J. Palenik** to professor of oral microbiology. Both appointments were effective July 1, 1991.

#### RETIREMENTS

Two noted faculty members retired during the past fiscal year—Charles E. Hutton, professor and chair of oral and maxillofacial surgery, whose retirement in December 1990 was reported in the spring 1991 issue of the *Alumni Bulletin*; and **Glen O. Sagraves**, Indiana University's longtime director of curriculum development for dentistry and the School of Dentistry's first assistant dean for clinical affairs. He retired with the rank of professor emeritus of dental diagnostic sciences on June 30, 1991, after serving the school for more than 30 years.

Dr. Sagraves earned his DDS degree from IU in 1958. He also holds a bachelor's degree (1950) from Indiana State University. He is a veteran of the U.S. Navy, having served as a seaman lst class in the Pacific Theater in the mid-'40s.

Appointed to the School of Dentistry faculty soon after graduation, Dr. Sagraves devoted the early years of his teaching career to the areas of oral diagnosis and prosthetics. He joined the full-time faculty as assistant professor of oral diagnosis and director of clinics in 1960; after a stint on the part-time pediatric dentistry faculty from 1963-65, he returned full time to oral diagnosis and the directorship.

As newly appointed director of curriculum development in 1972, Dr. Sagraves assumed the arduous responsibility of coordinating the dental school's effort to keep abreast of tremendous changes in the dental profession by designing a curriculum that would continually adapt to meet those changes. During his



Glen O. Sagraves

tenure new concepts in dental education were introduced such as the CORE program, multi-track system, family practice program, and intramural/extramural requirements.

Dr. Sagraves also accepted the enormous task of coordinating the American Dental Association's accreditation site visits to Indiana University School of Dentistry in 1976 and 1983, and overseeing preparation of all IU documents related to the accreditation process.

In 1984 he was appointed assistant dean for clinical affairs, and in 1988 he was one of 12 faculty members to be chosen to serve as a facilitator in the dental school's innovative counseling program matching students with mentors.

Dr. Sagraves' impressive record of achievement at IU includes a great variety of contributions to committees associated with the IUPUI and IUSD faculty councils. He received a recognition plaque for his work as director of clinics from the Class of 1961, and a Teacher of the Year award from the Class of 1966.

Dr. Sagraves is a former vice president of the Indianapolis District Dental Society and the Indiana unit of the American Society of Dentistry for Children; a past secretary-treasurer of Omicron Kappa Upsilon dental honor society; and past president of Psi Omega dental fraternity's alumni association.

#### **APPOINTMENTS**

**Charles L. Nelson**, associate professor of oral and maxillofacial surgery, was appointed chair of that department on March 1. Ten new full-time faculty members and a director of administrative and financial affairs joined the school last year, six of them shortly after the close of the fiscal year. The appointments of **Thomas R. Katona**, assistant professor of orthodontics, **Christopher V. Hughes**, assistant professor of pediatric dentistry and oral microbiology, and **Brian J. Sanders**, assistant professor of pediatric dentistry, were announced to the alumni previously.

In addition, we welcomed:

Karen M. Beard, lecturer, dental assisting. Ms.

Beard comes to IU from her most recent full-time position as a dental health educator, supervisor, and dental hygienist in the Marion County Health Department, Indianapolis. She had also been instructing parttime in the IU division of dental hygiene for two years. Ms. Beard has a certificate (1962) and an AS degree (1977) in dental hygiene from IU, as well as a BS (1986) in health occupations education. She is currently working on an IU master's degree in education. Her work as a dental hygienist in private practice includes 15 years in the office of Dr. Arthur S. Roberts (DDS '51), Shelbyville. She is also a former instructor in allied health administration for Aristotle College.

In 1989 Ms. Beard developed and implemented a geriatric staff in-service program for the Marion County Health Department. She is a past adviser to planning committees for the Fire Stop of Indianapolis Program and the Juvenile Awareness Program of Central Indiana. She is a member of Phi Delta Kappa professional fraternity in education and director of the Board of Christian Education in the Ascension Lutheran Church.

In IU's division of dental assisting Ms. Beard is coordinating the Clinical Science I course and the dental asepsis laboratory.

Jie Chen, jointly appointed assistant professor of mechanical engineering (School of Engineering and Technology) and assistant professor of orthodontics (School of Dentistry). Dr. Chen is a 1989 graduate of the PhD program in mechanical engineering and mechanics at Drexel University, Philadelphia. He also has two degrees earned in the People's Republic of China-a bachelor's in mechanical engineering and mechanics (1982) from Tianjin University and a master's in biomedical engineering (1984) from Shanghai Second Medical College. For the past two years he was a research postdoctoral fellow at Drexel, where he conducted grant-funded experimental and theoretical analysis of the mechanics of human joints for the NIH; some projects were in collaboration with researchers at Temple University. He taught courses in mechanical engineering to undergraduate students and supervised graduate students in their research work. Dr. Chen was also responsible for maintaining Drexel University's Biomechanics Laboratory.

In his position at IU Dr. Chen is helping to establish the Biomechanics Research Laboratory at the dental school; the laboratory will play a key role in IUPUI's new Biomechanics and Biomaterials Research Center. Dr. Chen's research projects with the dental school involve biomechanical studies in the areas of TMJ

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Karen M. Beard



Richard L. Gregory







James R. Hull

William A. Eichhold



Lynn K. Finkel

Yoshiki Oshida

modeling, dental implants, and bone modeling and remodeling.

Amy G. Douthitt, research associate, Oral Health Research Institute. Dr. Douthitt (not pictured) is a 1991 graduate of Baylor College of Dentistry, Dallas, Texas. She also holds a baccalaureate degree in psychology from the University of Texas at Austin, where she graduated with highest honors in 1987. While in dental school she was a student representative to the American Association of Dental Schools. She is a member of Phi Beta Kappa honor society and was this year's recipient of the Psi Omega dental fraternity's Fraternal Achievement Award.

Dr. Douthitt's many assignments at the Institute include that of clinical study coordinator.

William A. Eichhold, assistant scientist, Oral Health Research Institute. Dr. Eichhold, a former assistant professor at The Ohio State University, earned his DDS degree from the University of Detroit in 1969. He also holds a BS degree (1974) from Xavier University, Cincinnati, and a certificate (1979) in removable prosthodontics from The Ohio State University. Dr. Eichhold taught at Ohio State from 1984 to 1989, serving for three years as course director of several classes in restorative and prosthetic dentistry. He most recently was conducting private practices in Dayton and Columbus. Before attending graduate school he practiced family dentistry in the Cincinnati area.

Dr. Eichhold will serve primarily as a clinical examiner for the Institute.

Lynn K. Finkel, director of administrative and financial affairs. Mr. Finkel's appointment at the dental school is preceded by an 18-year career at the School of

Medicine, where he had served since 1984 as associate director of fiscal affairs in the Office of the Dean. After earning a Bachelor of Science degree in agricultural economics from Purdue University in 1969, Mr. Finkel was a buyer for Cummins Engine Company, Inc., in Columbus, Indiana, for four years. He is a former member of the board of directors of United Cerebral Palsy of Central Indiana. He currently is presiding clerk for the Friends World Committee for Consultation, Section of the Americas, Finance Committee, and treasurer of Friendship Club, Inc., a not-for-profit organization for before-and-after-school child care.

Mr. Finkel replaced James R. Levens, who resigned after 16 years with the dental school to supervise budgetary activities of the IU College of Arts and Sciences on the Bloomington campus.

Richard L. Gregory, associate professor, oral microbiology. Dr. Gregory had been serving as an associate professor in the Department of Oral Biology at Emory University School of Postgraduate Dentistry prior to his appointment at IU. He graduated cum laude in 1976 from baccalaureate programs in medical technology and chemistry at Eastern Illinois University, Charleston; and from MS (1979) and PhD (1982) degree programs in microbiology and immunology at Southern Illinois University, Carbondale. Dr. Gregory also graduated with honors from a training program at Decatur (Illinois) Memorial Hospital School of Medical Technology in 1976, and a two-year postgraduate training program in mucosal immunology from the University of Alabama at Birmingham in 1984. While studying at Alabama he was the recipient of several National Research Service Awards from the United States Public Health Service.

In addition to his faculty position at Emory, Dr. Gregory served for the past year as senior scientist of Emory's Dental Research Center. His key research interests have been studies of host-parasite relationships with emphasis on infectious diseases, mucosal immunity, and molecular biology of microbial pathogenesis. He was accepted into Sigma Xi, a scientific research society, in 1984, and is a charter member of the Society for Mucosal Immunology and the American Association of Oral Biologists. He has participated in various research conferences and symposia in the U.S., Belgium, Italy, England, Canada, Japan, and Mexico.

Since 1987 Dr. Gregory has been an *ad hoc* reviewer for the Oral Biology and Medicine Study -Section of the National Institutes of Health /National Institute of Dental Research. He also is a test item writer for the American College Testing Program's Medical College Admissions Test.

Dr. Gregory was a member of the research team that developed an effective oral capsular vaccine against dental caries containing killed *streptococcus mutans* cells. In addition to his primary role as a researcher at IU he will teach immunology to pre- and postdoctoral students.

James R. Hull, research associate, Oral Health Research Institute. Dr. Hull worked as a research assistant at the OHRI throughout his dental school training at Indiana University in the 1970s. He earned the DDS degree in 1977. Dr. Hull had previously studied at Ball State University, completing a Bachelor of Science degree in biology in 1972 and studying physiology at the master's level. He served as a hospital corpsman in the United States Navy and the Naval Reserve from 1967 to 1974. Since graduating from dental school he has been a self-employed family practitioner in the Indianapolis area.

Dr. Hull's primary responsibility at the Institute will be to conduct ongoing studies of fluoride uptake and remineralization using an *in situ* denture chip model. He has just completed a pilot study to develop methodology for assessing tooth whitening systems.

Yoshiki Oshida, associate professor, dental materials. Dr. Oshida is a former research associate professor in the Department of Mechanical and Aerospace Engineering of the L.C. Smith College of Engineering at Syracuse University, New York. He holds a baccalaureate degree (1965) in materials science from Waseda University, Toyko, Japan; and a master's degree (1967) in chemical engineering and materials science from Syracuse University.

During his 10-year affiliation with Syracuse University, Dr. Oshida taught in the departments of mechanical and aerospace engineering, and chemical engineering and materials science. Before that he was employed from 1971 to 1981 as a senior research engineer for Mitsubishi Heavy Industries, Yokohama (Japan) Technical Institute, where he managed the Corrosion Research Laboratory and the Materials Technology Division.

Dr. Oshida's chief research interests are in materials science and corrosion science. The recipient of five research grants in the past decade, Dr. Oshida recently completed a three-year fatigue evaluation of multilayered copper structures for the IBM Endicott Research Center. In the mid-'80s he was a co-investigator of a five-year project, "Effect of High Temperature Oxidation on Fatigue Crack Initiation in Ni-Based Superalloys," for the National Aeronautic and Space Administration's Lewis Research Center. Dr. Oshida holds five patents in the United States and 58 in Japan. The U.S. patents are for various techniques used with metallic materials. The author of numerous publications, he also has presented programs throughout the U.S. and in Canada, Japan, China, and Australia.

Last year Dr. Oshida was inducted as a fellow of the International Academy of Shape Memory Material for Medical Use. He is a past recipient of an annual academic paper award from the Japan Institute of Casting Irons. In 1974 the Federation Internationale Des Traducteurs, Paris, granted him a license as a technical translator of Japanese and English.

Dr. Oshida's primary research studies at IU will pertain to surface characterization of biomaterials currently in use and in development, oral biotribological analysis (i.e., study of friction and wear of oral facial joints), and superplasticity in the fabrication of dental appliances.

#### DEATHS

The School of Dentistry recently suffered the loss of two distinguished faculty members—**Ralph W. Phillips**, research professor emeritus of dental materials, whose death on May 17, 1991 was reported previously; and **Timothy J. O'Leary**, noted IU teacher and internationally recognized authority in the field of periodontics, who died August 16, 1991, in Indianapolis.

Dr. O'Leary joined the IU faculty in 1968 after more than 20 years of service in the Dental Corps of the U.S. Air Force. In 1966 he was appointed chief of the dental sciences division of the U.S. Air Force School of Aerospace Medicine, San Antonio, Texas. His contributions there included the development of periodontal screening examinations and research studies in such areas as tooth mobility and testing of foods intended for astronauts in space. He retired from the Air Force with the rank of colonel.

Dr. O'Leary chaired IU's Department of Periodontics from 1973 to 1986, retiring from the full-time faculty with the title of professor emeritus in 1988. His research interests at IU focused on different treatment areas, particularly the effects of nonsurgical periodontal therapy. In recent years he was at work on projects pertaining to the implant bone interface.

Under his guidance IU's graduate program in periodontics developed into one of the most comprehensive in the country, attracting scholars from throughout the world. Last year the Indiana University Foundation created the Timothy J. O'Leary Periodontal Endowment, which provides support to postdoctoral students in periodontics; it is funded primarily by contributions from



Timothy J. O'Leary

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alumni of the program. Dr. O'Leary remained with the IU dental school as a part-time consultant until his death. He also was engaged in research and writing projects and in his periodontic practice.

Dr. O'Leary was born and raised in Ann Arbor, Michigan. He received the DMD degree cum laude from Tufts University in 1946 and completed postgraduate training in periodontology from New York University in 1955. He was an honorary alumnus of Indiana University.

The author of numerous scientific articles, Dr. O'Leary also made hundreds of scientific and clinical presentations at meetings throughout the nation and elsewhere. He was editor of the *Journal of Periodontology* for 18 years.

Dr. O'Leary was a diplomate of the American Board of Periodontology. A widely respected expert in the field, he is the only person ever to have served concurrently as editor of the *Journal of Periodontology*, president of the American Academy of Periodontology, and chair of the American Board of Periodontology.

Dr. O'Leary also was a consultant to the National Institutes of Health, the Food and Drug Administration, the Department of Veteran Affairs, and the American Dental Association; a fellow of the American College of Dentists and the American Academy of Periodontology; and past president of the National Foundation for the Prevention of Oral Diseases and Theta Theta Chapter of Omicron Kappa Upsilon.

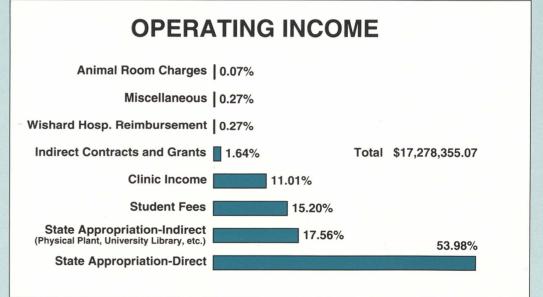
Among his many honors are the Air Force Commendation Medal and Legion of Merit, the William J. Gies Award for Periodontology, and the American Academy of Periodontology's Gold Medal and Presidential awards.

Services were held for Dr. O'Leary at St. Luke Catholic Church, of which he was a member. Interment

### INDIANA UNIVERSITY SCHOOL OF DENTISTRY BUDGET

July 1, 1990-June 30, 1991

Financial information provided is for IUSD-administered programs. Dental Auxiliary Education programs at South Bend and Fort Wayne are administered by their respective campuses; the DAE program at Gary receives partial funding through IUSD, as indicated.



Budget information contributed by Lynn K. Finkel, IUSD director of administrative and financial affairs was at Crown Hill Cemetery, Indianapolis. Dr. O'Leary is survived by his wife, Kathleen Ann; son, Timothy J.; mother, Kathleen; and three grandchildren.

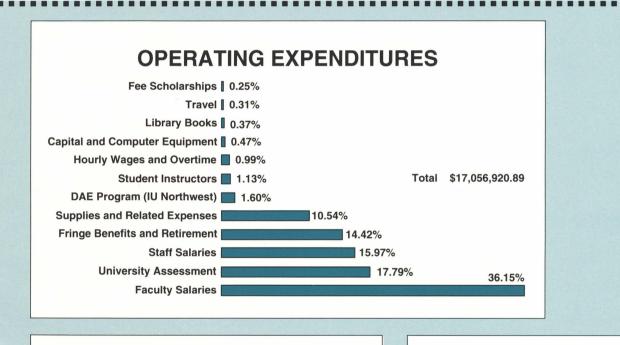
#### PLANS

Major projects in Academic Affairs for the 1991-92 fiscal year include:

• finalization and implementation of the new IUSD Faculty Development Program, based upon all of the groundwork laid during the previous year;

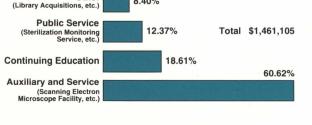
• completion of the development of instructor/course evaluation instruments which are objective, relevant, computer gradable, and suitable for statistical analysis (together with the requisite support system). Separate forms will be developed for lecture, clinical, and laboratory settings; and

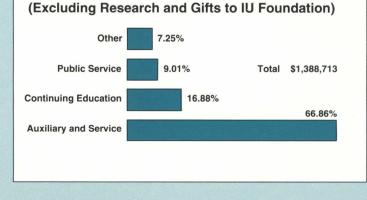
• preparation of the portion of the ADA Accreditation Self-Study dealing with faculty and staff.



graphs by Mark Dirlam

## MISCELLANEOUS INCOME (Excluding Research and Gifts to IU Foundation)





MISCELLANEOUS EXPENDITURES

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## Graduates of Postdoctoral Programs July 1, 1990—June 30, 1991

## 69th General Session International Association for Dental Research/ American Association for Dental Research

Acapulco, Mexico, April 17–21, 1991

#### ADVANCED EDUCATION IN GENERAL DENTISTRY (Certificates)

Armando Blardonis Karen K. Dollahon Robert K. Rooney

#### DENTAL MATERIALS (MSD)

David G. Charlton

In vitro evaluation of the use of adhesive resin liners to reduce microleakage and improve bond strength of amalgam restorations

#### **ENDODONTICS (MSD)**

Edmund L. Rapp Analysis of success and failure of apicoectomies

John H. Slavens Retention of posts—an assessment of cementing systems

#### **OPERATIVE DENTISTRY (MSD)**

Marianna D. Gaintantzopoulou Pulpal effects of light-activated glass ionomer lining cements—a histological study

**Oscar D. Vazquez Del Castillo** Microleakage of light-activated glass ionomer liners: an in vitro study

#### **ORTHODONTICS (MSD)**

#### **Rebecca** Anne Bolon

Prevalence of temporomandibular dysfunction in the class II division I untreated patient and the class II division I orthodontically treated patient with premolar extractions

**Mike Child** 

Early detection of dietary-induced periodontal bone loss and the effect of flurbiprofen administration in the Syrian hamster

**Todd Z. Wentz** *Tensile bond strength of light-activated glass ionomer for bonding metal and ceramic brackets* 

#### PEDIATRIC DENTISTRY (Certificates)

Nicholas J. Chelenza, Jr. Stephanie M. Litz Leslie K. Tanimura

**PERIODONTICS (MSD)** 

**Jeffrey A. Colligan** SEM comparison of effects of instrument sharpening upon root surfaces

**Kurt D. VanWinkle** Inflammatory response to treated human root surfaces

Abstracts of papers presented at the IADR/AADR meeting were published in the *Journal of Dental Research*, Volume 70 Special Issue, March 1991 (abstract number and *Journal* page number shown below for each entry). Listed by presenters.

**Bradley B. Beiswanger**, Professor, Preventive and Community Dentistry #458—0.12% Chlorhexidine rinse as an adjunct to scaling and root planing (with M.E. Mallatt, M.S. Mau, R.D. Jackson, C.F. Farah) p322

**David G. Charlton** (MSD '91) #2406—*Direct surface pH determinations of setting cements* (with B.K. Moore, M.L. Swartz) p567

**Jie Chen**, Assistant Professor, Orthodontics (Dentistry); Mechanical Engineering (Engineering and Technology)

#1579—Expression and distribution of bone sialoprotein (BSP) in mineralized tissues (with H. Shapiro, J. Wrana, Q. Zhang, C. McCulloch, S. Reimers, J. Heersche, J. Sodek) p463 Ann J. Dunipace, Assistant Scientist, Oral Health Research

#495—Development and inheritability of Fresistance in L929 cells (with Y. Li, T.W. Noblitt, A. Origel, K.R. Stookey, G.K. Stookey) p327

Lawrence P. Garetto, Assistant Professor, Orthodontics (Dentistry); Physiology and Biophysics (Medicine) #2506—Mechanical testing and histologic failure analysis of rabbit mandibular condyle (with J. Chen, T.R. Katona, W.E. Roberts) p579

Manuel E. Hernandez (MSD '91) #2184—Polymerization of RTV silicone using microwave energy (with C.J. Andres) p539

**John D. Hiester** (DDS '90) #510—*Development of a dental pressure algometer* (with K.E. Simmons) p329

Thomas R. Katona, Assistant Professor, Orthodontics (Dentistry); Mechanical Engineering (Engineering and Technology) #2288—*Finite element model of osteoblast differentiation in periodontal ligament* (with N.H. Paydar, W.E. Roberts, H.U. Akay, B. Guthrie) p552

## PREVENTIVE AND COMMUNITY DENTISTRY (PhD)

#### Abdullah M. Al Dosari

Chemopreventive action of benzylisothiocyanate and 13-CIS-retinoic acid on the genotoxic effect of benzo(a)pyrene

#### **PROSTHODONTICS** (Certificate)

David D. Anzel

#### **PROSTHODONTICS (MSD)**

#### Robert V. Elia

Quantitative and qualitative evaluation of the color of seven porcelains when fused to a palladiumsilver metal ceramic alloy

#### Manuel E. Hernandez

Polymerization of RTV silicone using microwave energy

#### Mark S. Lund

In vivo disintegration of luting cements

## Short-term Research Training Grants from the National Institutes of Health for Undergraduate Dental Students

(Results were presented at fall 1990 meetings of the Indiana Section of the American Association for Dental Research.)

All recipients are from the DDS Class of 1993:

#### Daniel A. Burns

Lipomas of the tongue

#### Katrina L. Huizing

Antimicrobial abilities of a gypsum (Type IV) stone containing a disinfectant

#### Marisa A. Ley

Evaluation of the antimutagenic potential of selenium, molybdenum (VI), germanium, and iron (II) against benzo(a)pyrene using the Ames salmonella mutagenicity test

#### **Carlo C. Lo** Reactions of rat connective tissue to freshly prepared glass ionomers and composite resins

**Kurt F. Martin** Facial description by cephalometry of individuals in multiplex CL (P) families

## Michael E. Reeves

Development of an in vitro fissure model using smooth surface enamel

## **R. Lamont MacNeil**, Assistant Professor, Periodontics

Periodontics

#570—Effects of basement membrane on dental sac cells in vitro (with P.G. Indelicato, H.F. Thomas), p336

Mark E. Mallatt, Associate Professor, Preventive and Community Dentistry #496—*Relative anticalculus effect of a triclosanpyrophosphate dentifrice* (with B.B. Beiswanger, M.S. Mau, M.A. Tuohy) p327

Charles J. Palenik, Professor, Oral Microbiology #1378—Effectiveness of steam autoclaving on the contents of sharps containers (with S.D. Riggen, L.J. Celis, C.H. Miller) p438

Kichuel K. Park, Associate Professor, Preventive and Community Dentistry

#752—Comparative effect of sorbitol and xylitol mints on plaque acidogenicity (with B.R. Schemehorn, J.W. Bolton, G.K. Stookey) p359

**Rosario H. Potter,** Professor, Oral Facial Genetics #2013—Arch size, asymmetry, and discrepancy in *MZ twin families*, p518

**W. Eugene Roberts,** Professor, Orthodontics (Dentistry); Physiology and Biophysics (Medicine) #1312—*Comparison of bone adaptation to loaded teeth and dental implants*, p430

**Bruce R. Schemehorn,** Research Associate, Oral Health Research

#1107—Effect of sucrose and sorbitol gums on plaque pH responses (with K.K. Park, J.W. Bolton, G.K. Stookey) p404

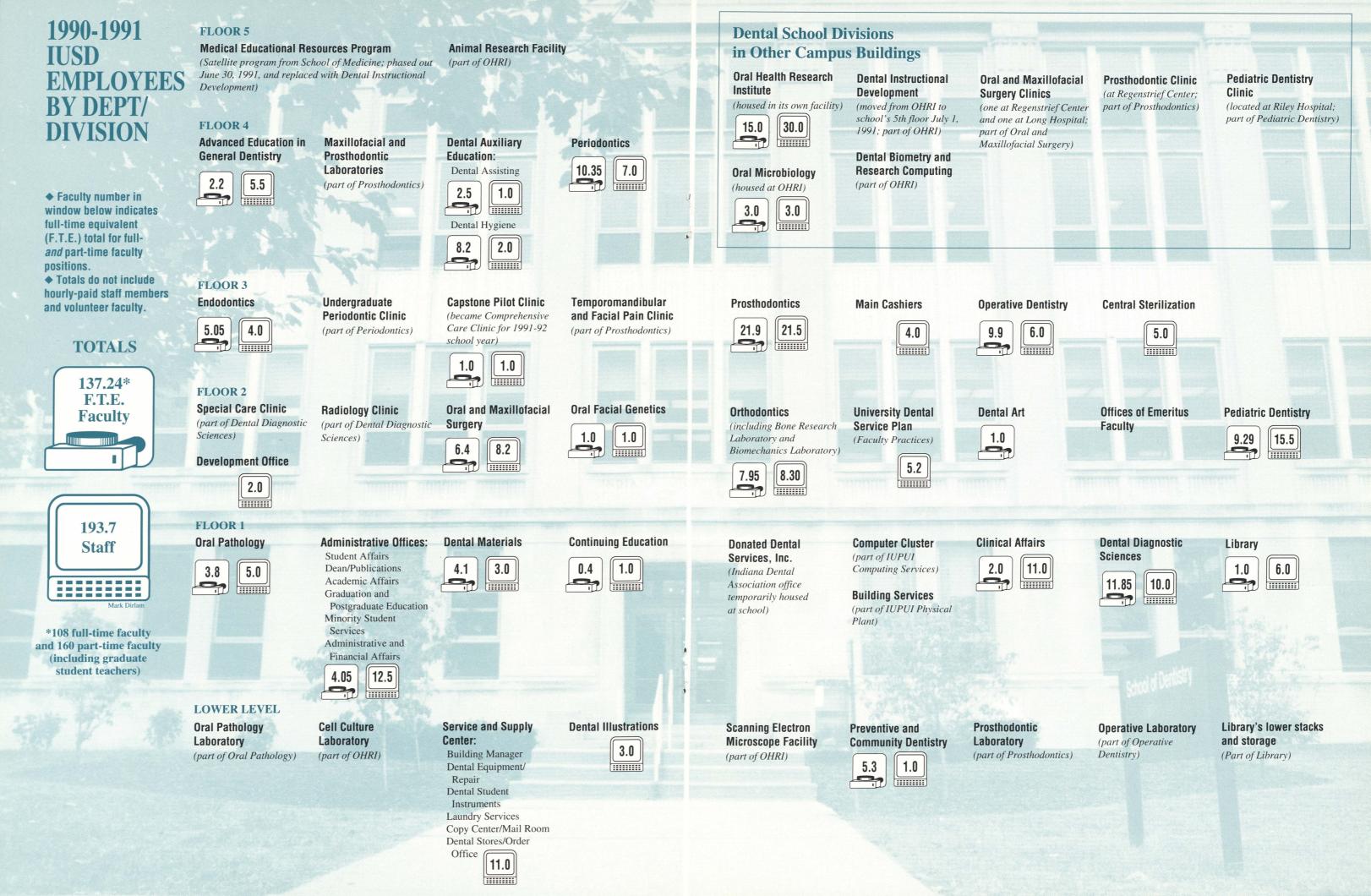
#### James C. Setcos (DDS '88)

#1064—Antimicrobial abilities of a disinfectant containing gypsum (Type IV) stone (with K.L. Huizing, C.J. Palenik, M.A. Sheldrake, C.H. Miller) p399 George P. Willis, Associate Professor, Operative Dentistry

#899—Pulpal effects of light-activated glass ionomer lining cements —a histological study (presented for principal researcher Marianna D. Gaintantzopoulou {MSD Operative Dentistry '90} with R.W. Phillips, M.R. Lund, A.H. Kafrawy) p378

#2622—Immunohistochemical staining of cytokeratin in oral epithelial dysplasia and carcinoma (presented for principal researcher Jayashree Mysore {Graduate student in Oral Pathology} with A.H. Kafrawy, C.E. Tomich) p593

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## IN BRIEF

# IU oral microbiologist leads national infection control conference.

A brochure publicized the three-day affair as the most comprehensive meeting on infection control in dentistry ever held—words that were backed up by the participation of national infection control experts from the Occupational Safety and Health Administration, Centers for Disease Control, U.S. Food and Drug Administration, and the American Dental Association.

The sixth annual conference of the Office Sterilization and Asepsis Procedures (OSAP) Research Foundation, held on the IUPUI campus in June, addressed growing concerns about infectious disease transmission in the dental office setting. A non-profit organization founded in 1984, OSAP has assisted in the development, implementation, and maintenance of aseptic technique



A distinguished panel of infection control experts fielded questions from some 150 persons during the national conference. From left: Charles Adkins, director, OSHA Health Standards Program; Dr. Barbara F. Gooch, dental officer, Center for Preventive Services of the CDC; Leonard Nessen, office of device evaluation of the USFDA; Dr. Charles E. Smith, director, dental division of the Indiana State Board of Health; Charles E. Cottrell, president, Cottrell, Ltd., and past chairman of OSAP; and Linda Wakeen, JD, associate general counsel of the ADA.

The IU dental school provided areas for demonstrations of clinical asepsis techniques presented by Kathy Bernard, of Hu-Friedy, Inc., and others.

Annamaria Phillips, of Cottrell Ltd., Englewood, Colorado, led a workshop on the use of surface disinfectants.



standards, and heightened awareness of and need for effective infection control procedures.

"There were updates from government agencies in every area," said Dr. Chris H. Miller, IU chair of oral microbiology and conference host. The meeting's lectures, demonstrations, workshops, and panel discussions attracted about 150 dental professionals, manufacturers, distributors, and university faculty from throughout the country. Presentations covered every topic pertinent to management of infection control in the dental office, including OSHA compliance issues, handpiece asepsis and maintenance, HIV-positive health-care professionals, changing patterns of infectious diseases, and cost considerations. "It's interesting to note that more people came from out of state," Dr. Miller added, "perhaps because Indiana has had a thorough information dissemination system on infection control in place for several years." Indiana's Public Law 123, passed in 1988, is one of the most comprehensive infection control laws in the country. "A lot of other states are looking at what Indiana is doing in the area of infection control to see how our system works," Dr. Miller said during a recent interview.

Other IU faculty members on the program were Dr. Charles E. Smith, director, dental division, Indiana State Board of Health; Dr. Jack E. Schaaf, head of Special Patient Care; and Charles J. Palenik, head of Human Health and Safety.

During the conference Dr. Miller was elected chair of OSAP for 1991-92. A charter member of OSAP, Dr. Miller has chaired the Foundation's research committee and is past editor of the OSAP Report. Dr. Miller serves as a consultant to the ADA's Council on Dental Therapeutics and co-chairs various groups within the Association that are setting today's standards for use of sterilizers in offices throughout the country. Since 1980 Dr. Miller and Professor Palenik have rendered a sterilization monitoring service to more than 2,200 dentists in Indiana and elsewhere.

## United States Air Force initiates fellowship program in IU's Department of Dental Materials.

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A special postgraduate fellowship training program in dental materials for U.S. Air Force instructors was created at the IU School of Dentistry in response to a request from officials at Wilford Hall Medical Center at Lackland Air Force Base in San Antonio, Texas. The 12month dental materials program, coordinated by department chair Dr. B. Keith Moore, is open to Air Force dentists with postdoctoral training in clinical disciplines who will be teaching dental materials in other Air Force training programs.

During the first year of this five-year pilot program at IU two Air Force dentists successfully completed fellowships. Dr. Charles Hermesch and Dr. David Murchison, who are both trained as restorative dentists, spent the 1990-91 academic year taking courses and conducting research projects. Dr. Hermesch's major research study while at Indiana involved looking at physical properties of glass ionomer cements after their exposure to air and/or water. The results of a study conducted by Dr. Murchison with Drs. Moore and David G. Charlton (MSD dental materials '91) titled "Carbamide Peroxide Bleaching: Effects on Enamel Surface Hardness and Bonding," has been accepted for publication in *Operative Dentistry*.

Plans to accept a third fellow for the 1991-92 school year were interrupted when the Air Force candidate was reassigned to Saudi Arabia during the Persian Gulf conflict. He will undertake the fellowship in August 1992.

After completing the fellowship at IU Dr. Hermesch joined the faculty in the restorative dentistry training program at Wilford Hall, and Dr. Murchison took a similar position at Kessler Air Force Base in Biloxi, Mississippi.

# Continuing Education commits to diversity of programming.

The IUSD Office of Continuing Education presented more than 40 dynamic courses in lecture, seminar, clinic, and workshop formats. Of special note was a limitedparticipation preceptorship program titled "Implants: The Science, Surgery and Prosthetic Demands for Dentists." Seven general dentists enrolled in this comprehensive course, which was taught by IU faculty members and nine visiting lecturers during 12 sessions for a total of 82 hours of training. More dentists wished to participate than could be accommodated.

In a unique move, Continuing Education united its efforts with the Department of Orthodontics to conduct a stimulating series of four lectures, the highlight being a two-day Jarabak Lecture for orthodontists and oral and maxillofacial surgeons. The well attended course, entitled "Surgical Orthodontic Perspectives for the '90s," was conducted by two outstanding authorities on orthognathic surgery—Dr. William R. Proffit, chair of orthodontics at the University of North Carolina; and Dr. Raymond P. White, Jr., an oral and maxillofacial surgeon and associate dean of the University of Carolina's School of Medicine. The annual Jarabak Lecture is named in memory of Louise A. Jarabak, wife of Dr. Joseph R. Jarabak (now deceased), who was a benefactor of the orthodontic department.

The Academy of Continuing Education, a collaborative effort of the Indiana Dental Association and the IU School of Dentistry to promote course participation, featured two well respected authorities on esthetic restorative dentistry. Both programs were well subscribed: about 150 members attended a course in Merrillville presented by Dr. Robert Nixon, of Los Angeles; and some 200 members turned out in Indianapolis for a course by Dr. Terry Donovan, chair of restorative dentistry and the section of biomaterials science at the University of Southern California.

## Oral and maxillofacial surgeon trains 21 students in light conscious intravenous sedation.

Dr. Wilfrid M. Keaton, anesthesia and pain control coordinator in the Department of Oral and Maxillofacial Surgery, created a formal training course in light conscious intravenous sedation for pre- and postdoctoral students. Dr. Keaton also teaches the course, which he developed with support from Dr. Cecil E. Brown, director of graduate studies in the Department of Endodontics.

The course, which will be given annually, includes 60 hours of didactic training followed by a comprehensive post-course examination. Students must also complete 10 clinical cases under appropriate supervision.

In its first year offered, 20 dentists who were enrolled in IU's postdoctoral programs in endodontics, periodontics, and advanced education in general dentistry successively completed the requirements to receive a permit in intravenous light conscious sedation in the state of Indiana. One predoctoral student satisfied the requirements for an intravenous premedication permit. Graduate students in endodontics and periodontics are able to satisfy board specialty requirements by taking the course. Participation at the predoctoral level is determined on a competitive basis, depending upon the students' performance in two of Dr. Keaton's credited courses in local anesthesia and in anxiety and pain control. The course to be given during the 1991-92 academic year will include eight predoctoral students as well as the usual mix of postgraduates.

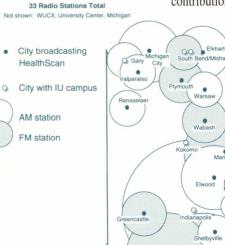
The course addresses the rationale for light conscious sedation, armamentaria, anatomical consider-

ations, techniques, complications and practical considerations in a dental setting. Advanced Cardiac Life Support has been added as a course requirement beginning with the 1991 academic year. The needs of every type of patient (pediatric, geriatric, medically compromised, and physically or mentally disabled) are discussed in depth so that various drug regimens can be fashioned for specific patient needs.

Thus far the Department of Oral and Maxillofacial Surgery has received favorable comments from course participants and others. The department is committed to expanding and continually updating course content to reflect changes in pain and anxiety control that affect modern dental practice.

## Dental updates hit the airwayes.

IU's one-minute radio health tips, known collectively as HealthScan and produced by University Relations and External Affairs on the Bloomington campus, were broadcast last year on 32 radio stations in Indiana and one station in Michigan. Eight IU schools and the National Institute for Fitness participate in the ongoing health awareness program. Scripts are written by undergraduate students in Bloomington from taped interviews with faculty and staff members on the IUPUI and Bloomington campuses. The dental school's contributions follow:



HealthScan Coverage Area

June, 1991

"Chewing Gum" by George K. Stookey, professor, preventive and community dentistry

"Dental 'Caps' " by Suteera T. Hovijitra, associate professor, prosthodontics

"Dental Radiographs" by Margot L. Van Dis, associate professor, dental diagnostic sciences

"Dental Recall" by Gail F. Williamson, associate professor, dental diagnostic sciences

"Dental Restorations" by B. Keith Moore, professor, dental materials

"Denture Care" by Steven P. Haug, assistant professor, prosthodontics

"Endodontics in the Aged" and "Traumatized Teeth" by Carl W. Newton, professor, endodontics

"Genetics in Dentistry" by *David Bixler*, professor, oral facial genetics

"How Vomiting Affects Your Teeth" by Jack E. Schaaf, associate professor, dental diagnostic sciences

"Intraoral Anti-snoring Device" by A. George Wagner, professor, prosthodontics

"Irrigation Devices," "Toothpicks," and "Topical Antibiotics for Oral Hygiene" by R. Monty MacNeil, assistant professor, periodontics

"Mouthwash and Oral Cancer," "Oral Health During Pregnancy," and "Oral Self-Examination" by Susan L. Zunt, associate professor, oral pathology

"Nursing Bottle Caries" by Hala Z. Henderson, professor, pediatric dentistry

### **Changes in Dental Library feature** best of the new (while savoring best of the old).

Continued development of the IO (Information Online) automated library system used by Indiana University took another big step at the dental school in April, when the Library began ordering books, journals, and other materials by means of the IO system rather than through an outmoded manual process previously used. The circulation component was introduced in June, with library staff sending patron identification cards to about 800 IUSD faculty, staff, and students. Computerized circulation (including automatic notification of overdue materials) makes it easy for the librarians to keep track of the collection and easy for patrons to check computer screens for the status of particular items. (The Library's card catalog has been computerized since January 1990.)

In addition to the new technology, an Indiana Heritage Research Grant awarded in the spring by the Indiana Humanities Council has supported the Library's efforts to organize and catalog its archival collection. This project, coordinated by principal investigator Sara Hook-Shelton, associate librarian and head of the School of Dentistry Library, promises to yield an interesting array of memorabilia from the early days of IUSD and the Indiana Dental College. Displays and publications are planned so that the treasures which are uncovered can be highlighted.

graph courtesy David Rust

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# Pediatric dentists celebrate a landmark 'birthday' party.

The Indiana University Pediatric Dentistry Alumni Association, in cooperation with IUSD's Department of Pediatric Dentistry, held its biennial meeting in Indianapolis June 20-22. The meeting highlighted the 20th anniversary celebration of the Association by honoring its 14 founding members during the program. The meeting was a big success from all perspectives, including attendance, which was the highest of any reunion meeting thus far. (Some 80 members—roughly a third of the alumni—traveled from all over the country to be a part of the festivities.) "It was great to see so many of our alums 'back home again in Indiana' " for the 20th reunion, reported founding member Dr. David Avery and chair of IU's Department of Pediatric Dentistry.

Presenting the Ralph E. McDonald Lectureship was Dr. Joe H. Camp, a 1968 graduate of IU's pediatric dentistry program who also is trained in endodontics. He specializes in endodontics in Charlotte, North Carolina. Dr. Camp's topic was current concepts in the manage-

### IUPUI breaks through a wall in the dental school to break ground in bone and muscle research.

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Researchers from the schools of dentistry, engineering and technology, medicine, and science are launching a number of collaborative investigations in the new IUPUI Biomechanics and Biomaterials Research Center, the first research facility of its kind in the country. Coordinated by Dr. George K. Stookey, IUSD associate dean for research and director of the Oral Health Research Institute, the team has as its primary goal identifying improved treatment procedures and materials for various types of musculoskeletal disorders such as arthritis, bone deformities, and TMJ problems. ment of traumatic injuries to the teeth and pulpal therapy in the child patient. Drs. Jeffrey A. Dean, Christopher V. Hughes, Carol G. McKown, and Brian J. Sanders—all members of the pediatric dentistry full-time faculty presented scientific mini-clinics.

One special session was held in the pediatric dentistry clinic during the alumni meeting so that the alumni could observe the Sealant Program in operation. Previous reports have described one of pediatric dentistry's outreach projects which provides several oral health care services, including fissure sealants, to children from low income families. A grant from the Indianapolis Foundation underwrites a significant share of the costs of these services, and the remaining costs are covered by the School of Dentistry. On the day of the alumni visit the clinic was voluntarily staffed by members of IUSD's student unit of the American Society of Dentistry for Children, headed by fourth-year student Jennifer L. Satterfield. During the first nine months of this two-year program, 287 children came to the clinic for diagnostic and preventive services; a total of 893 sealants were placed.

In the summer of 1991 one of the team's key research instruments, a Material Testing System (MTS) costing about a quarter of a million dollars, arrived from Minneapolis for installation in the Biomechanics Research Laboratory, which is one of the divisions of the Center housed at the dental school.

Because the 1,700-pound machine's internal components are laser aligned, the MTS could not be dismantled for shipment. And, because the unit is too big to fit through the dental school's doorways, a hole had to be punched in a second-story outside wall on the west side of the building to create a pathway. It took a crane and a crew of 10 men a little over an hour to lift the MTS to its permanent destination, an area of the building formerly used by Dental Art and Illustrations.

PHOTO LEFT. Founding members of the IU Pediatric Dentistry Alumni Association. from left (back row): Drs. Arthur I. Klein, Paul E. Starkey, W. Bailey Davis, Ralph E. McDonald, and Burton A. Horwitz; (front): Drs. B. Charles Kerkhove, Stanley C. Herman, and H. Raymond Klein. Other founding members are Drs. David R. Avery, Walter Ray Davis, Jr., Walter A. Doyle, Ronald A. Eichel, Donald E. Gardner, and Kenneth D. Snawder.

PHOTO RIGHT. Association officers, from left (back row): Dr. Carol G. McKown, board of directors member; Dr. John R. Mink, secretary/treasurer; Dr. Brian D. Lee, newly elected to board; and Dr. Phillip H. Miller, board member. Front row: Dr. Charles Poland III, board member; Dr. Paul O. Walker, president; and Dr. Ronald B. Mack, vice president and program chairman. The MTS will play a critical role in helping dentists and physicians understand the manner in which bone, ligaments, and joints respond to mechanical forces. Correcting dental and orthopedic deformities with implants and special devices will be important applications of this research. The Center's researchers will employ scientific technology commonly associated with engineering studies for the past 30 years but relatively new to dentistry and medicine.

The dental school's contributions to the Center will come primarily from the departments of orthodontics and dental materials and the OHRI cell culture laboratory. The dental school's key "hands-on" MTS operators will be Dr. Thomas Katona and Dr. Jie Chen, orthodontic faculty members with joint appointments in the IUPUI Department of Mechanical Engineering.

# IUSD broadens scope of its research by broadening capability of its 'scope.'

For a few days in May, the first-floor hallways of the dental school could have passed for the corridors of a museum of abstract art. Gigantic posters displaying blown-up designs of undetermined subject matter kept more than a few of us guessing.

The posters were part of a traveling display of the Electron Microscope Society of America, displayed during a meeting of the Electron Microscope Society of the Ohio River Valley. Dr. Jean D. Schoknecht, supervisor of the IUSD Scanning Electron Microscope Facility, served as coordinator and host of the two-day meeting, which attracted more than 50 society members representing EM users in many scientific fields. Bearing titles such as "Biological Applications of Scanning Tunneling and Atomic Force Microscopy" and "Artificial Intelligence Applications in Transmission Electron Microscopy," the presentations were made by several experts in electron microscopy, including Dr. Phil Vinson, of Procter & Gamble Co., who spoke about the microstructures of liquids.

State-of-the-art instruments were demonstrated, including a laser scanning confocal microscope. Another instrument—a combination Wavelength Dispersive X-ray (WDX) and Elemental Dispersive X-ray (EDX)—was purchased by IU to expand the dental school's research facility. The system identifies elements within a given specimen, indicates where they are located and how much of the elements is present. The WDX can detect trace amounts of fluorine, oxygen, calcium, sodium, magnesium, phosphorus, and potassium. The EDX portion of the system identifies elements with higher atomic numbers than sodium and includes image analysis.

The new system will work in tandem with the school's SEM—a 10-year-old Hitachi S-450—but the instruments will not be working side by side. Because of space limitations in the dental school's SEM facility, the WDX/EDX system has been attached to an analytical SEM housed in the Oral Health Research Institute.

The instrumentation has already been used to characterize amalgams, and it's also being used to characterize chemical changes in test samples of dentin and enamel.

# Dental Diagnostic Sciences sets the stage for Imaging Research Facility.

A national "think-tank" of experts in electronic imaging converged on the IUPUI campus in May, moving the dental school closer to its goal of establishing an oral and maxillofacial electronic imaging research facility in the Department of Dental Diagnostic Sciences. The facility is one of five major components of Associate Dean George K. Stookey's five-year research program for the IU School of Dentistry, begun in 1990. The goals of the department, chaired by Dr. Steven L. Bricker, are to:

1) establish a nationally recognized imaging research facility to conduct clinical trials of imaging devices;

2) develop a digital imaging system to capture images of dental caries, periodontal bone loss, and other maxillofacial disorders such as arthritic changes of the temporomandibular joint, for development and application of two- and three-dimensional reconstruction analysis;

 develop and test clinical optical imaging systems to detect and quantify disease changes occurring in root caries, periodontitis, oral mucosal lesions and oral cancer; and

4) develop and test imaging systems to detect and quantify surface and marginal wear of composite restorative materials.

Conference participants representing industry, educational institutions and governmental agencies included Dr. Brent Dove, from the University of Texas Health Sciences Center in San Antonio; Dr. Sol Nudelman, from the University of Connecticut Health Center; and Claude Goodman, from the National Institutes of Standards and Technology in Washington D.C. The group discussed advances in imaging and advised IU's dental faculty in regard to the feasibility of establishing a facility here. Recommendations were fully supportive of the facility.

Post-conference plans have shifted into high gear: an intra-oral digital imager has been ordered, departmental renovations are under review, and a search has begun for a faculty member to serve as facility director.

According to Dr. Bricker, the facility will also offer unique collaborative research opportunities for the radiology divisions of the schools of dentistry and medicine.

# School creates new division of Human Health and Safety.

At the end of the fiscal year, all faculty and staff members were required to attend an infection control/ hazardous waste materials update program as part of IUSD's ongoing commitment to standardize procedures and keep everyone in the system informed of changes as they happen. Complementing this effort is the newly established Human Health and Safety office, a division of the Department of Oral Microbiology. Headed by Professor Charles J. Palenik, who also chairs the IUSD Infection Control and Hazardous Materials Committee, the division is staffed by inspection control technician Jeff R. Wilson and Ora L. Wade, who prepares and distributes the surface covers used in the clinics.

The division will be permanently housed in a portion of the graduate operative dentistry clinic as soon as remodeling is completed. A centralized system for handpiece sterilization has already been initiated, and a standardized clinical asepsis protocol will be finalized during 1991 fall semester.

The most visible change in the school's infection control system, also targeted for fall semester, is the addition of disposable gowns to the protective wear worn by all clinicians during treatment and/or diagnosis of patients. Worn over street clothing, the gowns are fluid resistant and light weight; they are to be changed at the end of each clinic appointment, or immediately if they become soiled with body fluids.

## NASA launches space shuttle Columbia—IU's orthodontists lift next phase of research off the ground.

It was bumped from the schedule in the summer of 1990, scrubbed on May 22, 1991, and halted once again 10 days later.

But when NASA's space shuttle Columbia finally lifted off from Cape Canaveral, Florida, on June 5, 1991, under the command of Bryan D. O'Connor, Col., USMC, its performance was virtually flawless. Columbia soared 184 miles into space, orbiting Earth 146 times and journeying nearly four million miles before landing at Edwards Air Force Base nine days, two hours, and 14 minutes after take-off. Its biomedical research mission was aimed at helping scientists determine the effects of microgravity and long-term space travel upon seven systems of the human body.

The shuttle carried seven astronauts, 2,478 jellyfish, and 29 laboratory rats, constituting NASA's first space laboratory dedicated to life sciences (SLS-1). Among the research cargo were rodent studies being conducted by Dr. W. Eugene Roberts, chairman of the IU Department of Orthodontics; Dr. Lawrence P. Garetto, assistant professor of orthodontics and director of the bone research laboratory; and Dr. Kirt E. Simmons, assistant professor of orthodontics. The IU faculty worked with principal investigator Dr. Emily Holton, of the NASA-Ames Research Center, and Dr. Stephen Doty, of Cornell University's Hospital for Special Surgery in New York City. The team is studying the effects of weightlessness on the inhibition of bone formation. Previous studies have shown that both humans and animals tend to lose bone mass while in space.

"Gravity has a profound effect on the human body's ability to form bone and maintain skeletal strength," Dr. Roberts said. "Many diseases, deformities and other problems of dental and skeletal tissues are thought to be aberrations of how our bodies adapt to gravity. The only way we can study the absence of gravity is to fly in space. We believe our research will enhance long-term space flight capability and have important health benefits for the public." Problems associated with bone maintenance must be solved before NASA can move ahead with plans to send astronauts on a lengthy voyage to Mars.

Dr. Garetto represented the IU team at the Florida launch and also at the recovery site in California. Postflight preparation of the specimens began within hours of the landing. "Six primary investigators and a technical support staff of about 60 persons were all looking at

photo courtesy NASA

various physiological systems in the same group of rodents," said Dr. Garetto. "The cooperative effort among the group was remarkable." (IU was not involved with studies of the jellyfish, which were under observation to see how microgravity affects their development and function. Jellyfish are considered good research models because they offer researchers an opportunity to study whole organisms as they develop in space.)

Researchers participating in the SLS-I mission were from NASA centers, universities and colleges across the United States and from Canada, Australia, and Switzerland. Specimens pertaining to certain aspects of the musculoskeletal studies were shipped to IU's Bone Research Laboratory, where they are now being prepared for analysis by orthodontic staff members Patsy Dunn, Caroline Jennermann, Jeff Roberts, and Cheri Roberts. Preliminary results from the study are anticipated within the next year.

Four more flights associated with life sciences are on NASA's agenda for the near future. A flight tentatively on the books for September 1992 will carry an experiment by IU's researchers as part of that mission's secondary payload; and mission SLS-2, a follow-up to the most recent launch, is scheduled in 1993. "Judging from the intensive activity ahead, I think the next few years in space life sciences research will be tremendously exciting," said Dr. Garetto.

The preceding reports were compiled with assistance from Donald E. Arens, David R. Avery, Steven L. Bricker, Sara Hook-Shelton, Wilfrid M. Keaton, Chris H. Miller, and B. Keith Moore.

## **IU SCHOOL OF DENTISTRY DONORS**

The IUSD Development Office has attempted to provide an accurate roster of the names of individuals and organizations contributing to three important funds of the School. Any omissions or errors should be reported to Danny R. Dean, director of development, by writing to him at the school address or calling 317/274-3246.

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## In the Pages— At the Podium— On the Program:

A sample of publications and presentations by IUSD faculty, students, staff, and alumni

#### LEHMAN D. ADAMS, JR. Assistant Professor, Oral and Maxillofacial Surgery

Presentation "Impact of AIDS on Dentistry" Mississippi Medical and Surgical Society, component of the National Medical Association, Biloxi, April

#### CARL J. ANDRES Associate Professor, Prosthodontics

Report "Survey of Maxillofacial Prosthetic Materials" American Academy of Maxillofacial Prosthetics, and presentor "American Board of Prosthodontics Review Course" American College of Prosthodontists, Charleston, South Carolina, October

C.E. Course "Gingival Esthetics, Resin Bonded Prostheses: Comprehensive Review for Prosthodontists and Prosthodontic Residents" University of Michigan, Ann Arbor, November

#### GORDON R. ARBUCKLE Assistant Professor, Orthodontics

Lecture "Biomechanical Use of Implants" Edward H. Angle Society of Orthodontists, Sanibel Island, Florida, February

Presentation "Indiana Edgewise Mechanics" (with W. Hohlt) U.S. Army's Advanced Education Program in Orthodontics, Ft. Knox, Kentucky

#### DONALD E. ARENS Associate Professor, Endodontics

Chapter *Surgical Endodontics* in Pathways of the Pulp, edited by Stephen Cohen, Richard C. Burns; 5th ed., Mosby Year Book Inc., 1991

Lecture "Who's to Blame" American Dental Association, Boston, October

Lecture "Endodontic Pain Control" Hawaiian Dental Association, Honolulu, January

#### DAVID R. AVERY Professor, Pediatric Dentistry

Guest editor, theme issue on children's dentistry. Journal Indiana Dental Association (JIDA) 70(1): 1991; includes *Remember the children* (editorial)

C.E. Program "Adolescent Dentistry" (with D. Hennon) Academy of General Dentistry, Indianapolis, October

#### ROBERT J. BECK-COON (DDS '79, MSD Endodontics '82)

An in vivo study of the use of a nonresorbable ceramic hydroxyapatite as an alloplastic graft material in periapical surgery (with C. Newton; Abdel H. Kafrawy, IU professor, dental diagnostic sciences) Oral Surgery/Oral Medicine/Oral Pathology 71(4):483, 1991

#### SORAYA BEIRAGHI (MSD Preventive Dentistry '80, DDS '82, Pediatric Dentistry '83)

Presentation "Searching for a Major Gene for Cleft Lip and Palate" (with S. Dlouhy; D. Bixler, IU professor, oral facial genetics; P. Stansberry; T. Foroud; M. Hodes) American Academy of Pediatric Dentistry, San Antonio, May

#### BRADLEY B. BEISWANGER Professor, Preventive and Community Dentistry

Valutazione clinica dell'effetto cariostatico dei dentifrici che contengono fluoruro di sodio o monofluorofosfato di sodio (with R. Lehnhoff; M. Mallatt; Melissa S. Mau, assistant director, OHRI clinical research; G. Stookey) Prevenzione, Odentology Digest, Fall 1990; Italian translation of 1989 article appearing in J Dentistry Children (Clinical evaluation of the relative cariostatic effect of dentifrices containing sodium fluoride or sodium monofluorophosphate)

Lecture "Etiology and Pathogenicity of Dental Plaque" Mexican Dental Association, Mexico City, September

#### STEVEN L. BRICKER Professor, Dental Diagnostic Sciences

C.E. Programs "Radiation Biology" and "Panoramic Radiography" (with D. Miles, T. Razmus, G. Williamson) Dental Hygiene Program Directors of Indiana, Indianapolis, July

#### TIMOTHY J. CARLSON Associate Professor, Operative Dentistry

A comparison of glass-ionomer cements used to repair cast restorations (with E. Naguib, M. Cochran, M. Lund) Operative Dentistry 15:162, 1990

Lecture "Direct Gold from the Point of View of the Recent Graduate" American Academy of Gold Foil Operators, Boston, October

#### YU-GING CHANG (MSD Operative Dentistry '88)

*Color stability of composite resins* (with Marjorie L. Swartz, IU professor emeritus, dental materials; B.K. Moore; M. Cochran; M. Lund) Kaohsiung J Medical Sciences 6(10):538, 1990

#### ARDEN G. CHRISTEN Professor, Preventive and Community Dentistry

Guest editor, theme issue on addictions. JIDA 69(6): 1990. Includes Dental team members must join the "war" against the addictions (editorial); and What nicotine addiction and alcoholism teach us about other chemical dependencies (with J. Christen)

Pamphlet Smoking and Your Mouth: the Oral Health Team's View of What Smoking Does to the Oral Cavity Narcotics Education, Inc, Hagerstown, Maryland, 1991

Book *Primary Preventive Dentistry* (edited with N. Harris) Appleton and Lange Publishers, 3rd ed., Norwalk, Connecticut, 1991

Monograph The Impact of Tobacco Use and Cessation on Nonmalignant and Precancerous Oral and Dental Diseases and Conditions (with J. McDonald, J. Christen) Indiana University School of Dentistry, 1991

Monograph A Smoking Cessation Program for the Dental Office (with J. McDonald; J. Klein; J. Christen; Christianne J. Guba, IU director, Advanced Education in General Dentistry) 3rd ed., Indiana University, 1990

Lecture "Smoking Cessation Programs for the Dental Office" American Dental Association's 4th National Conference on Chemical Dependency, Chicago, July

Course "How to Help Your Patients Stop Using Tobacco: a National Cancer Institute Training Program for the Oral Health Team" (with R. Mecklenburg, R. Jones) Minnesota State Dental Convention, Minneapolis, April

#### JOAN A. CHRISTEN Research Associate, Preventive and Community Dentistry

Understanding addiction (with A. Christen) JIDA 69(6):16, 1990

MICHAEL A. COCHRAN Professor, Operative Dentistry

Seminar "Update on Operative Dentistry" Northwest Indiana Dental Society, Merrillville, October

Presentation "Recent Advances in Restorative Dentistry" National Naval Dental Center, Bethesda, Maryland, October

> SUSAN M. CRUM Director, Publications

Women dentists have pull. Indiana Alumni Magazine 53(2):36, 1990

#### JEFFREY A. DEAN Assistant Professor, Pediatric Dentistry

Table Clinic "Immediate Clinical Photography" Indiana Dental Association (IDA), Indianapolis, May

Lecture "Use of the Mandibular Lip Bumper in Early Malocclusion Management" American Academy of Pediatric Dentistry, San Antonio, May

#### TIMOTHY G. DONLEY (MSD Periodontics '90)

*Titanium endosseous implant—soft tissue interface: a literature review* (with William B. Gillette, IU professor, periodontics) J Periodontology 62(2):153, 1991

#### M. GORMAN DOYLE (MSD Prosthodontics '88)

The effect of tooth preparation design on the breaking strength of Dicor crowns: Part 3 (with C. Goodacre; Carlos A. Munoz-Viveros, IU associate professor, prosthodontics; C. Andres) International J Prosthodontics 3(4):327, 1990

#### ANN J. DUNIPACE Assistant Scientist, Oral Health Research Institute (OHRI)

Absence of sustained effects of acute fluoride exposure on cyclic AMP levels in the adult rat (with Wu Zhang, OHRI research technologist; G. Stookey; D. Allmann) Annals of Dentistry 50(1):19, 1991

#### BRETT C. FLYNN (MSD Orthodontics '89)

A comparative study of the temporomandibular symptoms following mandibular advancement by bilateral sagittal split osteotomies: rigid versus nonrigid fixation (with David T. Brown, IU assistant professor, prosthodontics; Thomas H. Lapp {DDS '68}; David A. Bussard {DDS '77, certificate oral and maxillofacial surgery '80}; W.E. Roberts) Oral Surgery/Oral Medicine/Oral Pathology 70(3):372, 1990

#### LAWRENCE P. GARETTO Assistant Professor, Orthodontics (Dentistry) and Physiology and Biophysics (Medicine)

Nuclear volume analysis of osteoblast histogenesis in periodontal ligament cells of Cosmos 1887 rats, Part III (with M. Gonsalves, W.E. Roberts). In Final Reports of the U.S. Experiments Flown on the Soviet Biosatellite Cosmos 1887. NASA Tech. Memorandum 102254, pgs 139-46, 1990

Chapter *The Inhibitor Protein of the Camp-Dependent Protein Kinase* (with D. Walsh, primary author; and K. Angelos; S. Van Patten; D. Glass). In Peptides and Protein Phosphorylation, edited by B.E. Kemp, CRC Press, Boco Raton, 1990

Poster Presentation "Nuclear Volume Morphometry of Osteoblast Precursor Cells in Periodontal Ligament of Cosmos 2044 Rats: Preliminary Report (with E. Morey-Holton, G. Durnova, W.E. Roberts) ASGSB (American Society for Gravitation and Space Biology) Bulletin 4:38, 1990; Louisville, November

#### H. WILLIAM GILMORE Professor, Operative Dentistry

C.E. Course "Current Concepts in General Dental Practice" University of Missouri at Kansas City Dental Alumni Association, Kansas City, March

#### LAWRENCE I. GOLDBLATT Professor, Oral Pathology

Paper "The roles of research, teaching and service in faculty development" University of Oklahoma College of Dentistry, Oklahoma City, January

Paper "Excellence in higher education as it relates to dentistry" Beta Gamma Chapter of Omicron Kappa Upsilon, University of Puerto Rico, San Juan, May

#### CHARLES J. GOODACRE Associate Professor, Prosthodontics

Gingival esthetics. J Prosthetic Dentistry 64(1):1, 1990

Predoctoral fixed prosthodontics education: review of the literature. J Prosthetic Dentistry 64(3):319, 1990

C.E. Course "All-Ceramic Restorations" (with Philip C. Rake, IU assistant professor, prosthodontics; C. Andres; D. Brown; S. Haug) Indiana Academy of General Dentistry, Indianapolis, October

#### STEVEN P. HAUG Assistant Professor, Prosthodontics

*Custom-made condylar inserts for repositioning casts in articulators* (with J. Allen, primary author) J Prosthetic Dentistry 64(1):111, 1990

#### HALA Z. HENDERSON Professor, Pediatric Dentistry

*Indiana infant-toddler dental care survey* (with J. Dean; Elizabeth Hatcher, IU special projects coordinator, pediatric dentistry) JIDA 70(1):8, 1991

Presentation "Head and Neck Indications of Child Abuse" 11th Annual Family Health Conference, Indianapolis, October

Table Clinic "Infant and Toddler Dental Care" (with E. Hatcher) IDA, Indianapolis, May

#### DAVID K. HENNON Professor, Pediatric Dentistry and Orthodontics

Facial flushing in children: a variant of the auriculo-temporal syndrome. JIDA 70(1):25, 1991

C.E. Lectures "Diagnosing and Treating Problems in the Developing Occlusion," "Hypnodontics," "Facial Flushing in Children," and "Orthopedic Management for Cleft Lip/Cleft Palate Infants" Autonomous University of Nuevo Leon, Monterrey, Mexico, February

Table Clinic "Indirect Technic for Light-cured Bonding of Orthodontic Brackets" IDA, Indianapolis, May

#### MAYNARD K. HINE Professor Emeritus, Periodontics

Columnist "Hine Sight" JIDA

*History is sometimes changed.* Today's FDA (Florida Dental Association) 3(6):2D, 1991 (reprinted from JIDA)

### NEW DIPLOMATES OF AMERICAN BOARDS

David T. Brown Prosthodontics

Steven P. Haug Prosthodontics

Rose Marie Jones Prosthodontics

> Dale A. Miles Oral Medicine

#### Thomas F.Razmus Oral and Maxillofacial Radiology

Don-John Summerlin Oral Pathology

#### WILLIAM F. HOHLT Assistant Professor, Orthodontics

Orthodontic education at Indiana University: a new philosophy of specialty and general practice (with W.E. Roberts) JIDA 69(5):19, 1990

Sterilization of orthodontic instruments and bands in cassettes (with C. Miller; John M. Neeb, second-year IU dental student; Margie A. Sheldrake, IU research associate, oral microbiology) Am J Orthodontics and Dentofacial Orthopedics 98(5):411, 1990

Presentation "Custom Banding of Fixed Bridges" Great Lakes Association of Orthodontics, Colorado Springs, September

#### SARA A. HOOK-SHELTON Associate Librarian

Searching Information Online (IO) effectively: tips and techniques. JIDA 69(5):26, 1991

Using XXXPERT for selecting journal subscriptions. BF Business and Finance Bulletin 86:12, 1991

Editor The (IUSD) Library Tipster News

BOOK REVIEWS:

7 reviews for *Science and Technology Annual Reference Review*, Oryx Press, 1991; 1 for *Special Libraries*, Fall 1990; and 1 for *Reference Quarterly*, Summer 1991

Workshop "Adventures in Research" (Developing Research Options) IU Bloomington, July

Workshop "Publishing Journal Articles" CIALSA (Central Indiana Area Library Services Authority), Indianapolis, September

#### ROSE MARIE JONES Assistant Professor, Prosthodontics

Microleakage and shear bond strength of resin and porcelain veneers bonded to cast alloys (with B.K. Moore, C. Goodacre, C. Munoz-Viveros) J Prosthetic Dentistry 65(2):221, 1991

Presentation "Dentin Exposure and Decay in Prepared Rest Seats" Academy of Denture Prosthetics, Wintergreen, Virginia, May

#### LOUISE M. JUDD Clinical Assistant Professor, Dental Hygiene

Lecture "Comprehensive Dental Care in the Community" (with S. Germain, C. McDonald) Indianapolis Alliance for Health Promotion, April

#### BARRY P. KATZ

#### Associate Professor, Medicine (Medicine) and Preventive and Community Dentistry (Dentistry)

Differences among mononuclear cell subpopulations in HIV seropositive or seronegative homosexual and heterosexual men as determined by four-color flow cytometry (with C. Schnizlein-Bick, primary author; and M. Magier, R. Jones, K. Fife, E. Walker) J Acquired Immune Deficiency Syndrome 3(8):747, 1990

A randomized trial to compare 7- and 21-day tetracycline regimens in the prevention or recurrence of infection with Chlamydia trachomatis (with V. Caine, B. Batteiger, R. Jones) Sexually Transmitted Diseases 18(1):36, 1991

*Interferon-γin endocervical secretions of women infected with Chlamydia trachomatis* (with J. Arno, primary author; and V. Ricker, B. Batteiger, V. Caine, R. Jones) J of Infectious Diseases 162(6):1385, 1990

## **SPECIAL APPOINTMENTS / ELECTIONS**

**Lehman D. Adams, Jr.**, consultant, AIDS Education, sponsored by Centers for Disease Control and National Medical Association

**Carl J. Andres, Hala Z. Henderson, and Charles L. Nelson**: consultants to American Dental Association Commission on Dental Accreditation

**Carl J. Andres,** examiner, American Board of Prosthodontics; and board of directors, Indianapolis District Dental Society

**Gordon R, Arbuckle,** consultant, U.S. Army's Advanced Education Program in Orthodontics

**Donald E. Arens,** chair, Professional Affairs Committee, American Association of Endodontists

**David R. Avery,** ADA Advisory Committee, Commission on Dental Accreditation

**Sara A. Hook-Shelton,** chair, IUPUI Academic Computing Advisory Committee; and appointed editor, *SLANT* newsletter, Indiana Chapter, Special Libraries Association

**William F. Hohlt,** consultant, U.S. Army's Advanced Education Program in Orthodontics

**Dale A. Miles,** chair, Section of Oral and Maxillofacial Radiology, American Association of Dental Schools

**Chris H. Miller,** ADA National Dental Board Test Construction Committee (Part II: Dental Public Health and Occupational Safety) **Donald H. Newell,** program chair, Midwest Society of Periodontology

**Carl W. Newton,** trustee, Research and Education Foundation, American Association of Endodontists; and chair, AAE Professional Education Committee

**Charles J. Palenik,** national board of directors, Association of Practitioners of Infection Control

**Kichuel K. Park,** visiting professorships, Yunsei and Seoul National universities, Korea

**Larry D. Ryan,** consultant, Emergency Dental Care Operation System, Goodwill Games, Seattle

**Kirt E. Simmons,** medical advisory board of the national MAGIC (Major Aspects of Growth in Children) Foundation

**Charles E. Smith**, National Advisory Panel for Public Health, PEW Health Commission

**George K. Stookey,** visiting professorship, Osaka University, Japan

**Don-John Summerlin,** board of directors, Marion County Cancer Society's Little Red Door

**Charles E. Tomich,** chair, ADA Advisory Committee for Advanced Education in Oral Pathology

Margot L. Van Dis, editorial board, Radiology Section of Oral Surgery, Oral Medicine, and Oral Pathology

**Susan L. Zunt,** chair, Structure Committee, (Indiana) University Faculty Council Oral corticosteroid therapy for patients with stable chronic obstructive pulmonary disease: a meta-analysis (with C. Callahan, primary author; and R. Dittus) Annals Internal Medicine 114(3):216, 1991

Relationship between arthroscopic evidence of cartilage damage and radiographic evidence of joint space narrowing in early osteoarthritis of the knee (with R. Fife, primary author; and K. Brandt, E. Braunstein, K.D. Shelbourne, L. Kalasinski, S. Ryan) Arthritis and Rheumatism 34(4):377, 1991

The presence of cartilage matrix glycoprotein in serum as determined by immunolocation analysis is not a sensitive indicator of "early" osteoarthritis of the knee (with R. Fife, primary author; and K. Brandt, E. Braunstein, S. Myers, J. Ehlich, K.D. Shelbourne, L. Kalasinski) J Laboratory and Clinical Medicine 117(4):332, 1991

#### WILFRID M. KEATON Associate Professor, Oral and Maxillofacial Surgery

C.E. Course "Local Anesthesia and Nitrous Oxide/Oxygen Sedation-Pain Control Workshop" IU School of Dentistry, March

#### MICHAEL E. KELLER Assistant Professor, Endodontics

A clinical evaluation of the Endocater—an electronic apex locator (with Cecil E. Brown, IU associate professor, endodontics; C. Newton)

J Endodontics 17(6):271, 1991

#### JENNIFER A. KLEIN Assistant Professor, Dental Hygiene (South Bend)

C.E. Correspondence Course Manual Understanding Nicotine Addiction and Intervention Techniques for the Dental Professional (with A. Christen, J. Christen, J. McDonald, C. Guba) for American Dental Assistants Association, 1990

#### MARK J. KORTEBEIN (Certificate Oral and Maxillofacial Surgery '90)

Retrospective analysis of 135 secondary alveolar cleft grafts using iliac or calvarial bone (with Charles L. Nelson, IU associate professor, oral and maxillofacial surgery; A.M. Sadove) J Oral Maxillofacial Surgery 49(5):493, 1991

#### JOSEPH J. LEGAN Clinical Assistant Professor, Endodontics

The effect of a stannous fluoride cavity wash on post-operative thermal sensitivity (with R. Peterzen, primary author; and J. Shaner, K. Stoffers) General Dentistry 38(5):347, 1990

Decompression of radicular cystic lesions: a simplified clinical technique (with G. Snell, primary author; and M. Coover, K. Stoffers) General Dentistry 39(2):102, 1991

C.E. Course "Trauma" Tri-County Dental Society, Muncie, December

#### ROBERT L. LOCKHART Assistant Professor, Periodontics

C.E. Course "Hearing Yes: Improving Your Communication Effectiveness" American Academy of Periodontology, Dallas, October

C.E. Course "Increasing Dentist Satisfaction through Improved Communications" American Academy of Dental Esthetics, New Orleans, May

#### MELVIN R. LUND Professor, Operative Dentistry

C.E. Course "Operative Dentistry" (with T. Carlson) Facultod de Odontologia de la Universidad Autonoma del Estado de Mexico, Toluca, Mexico, November

#### MARK D. MAGURA (DDS '87, MSD Endodontics '90)

Human saliva coronal microleakage in obturate root canals: an in vitro study (with A. Kafrawy, C. Brown, C. Newton) J Endodontics 17(7):324, 1991

#### MARK E. MALLATT Associate Professor, Preventive and Community Dentistry

Conducting oral examinations at a school for visually impaired children: methods and materials (with C. Palenik) RE:view 12:31, 1990

Table Clinic "Indiana's Water Fluoridation Programs (with D. Cain) IDA Indianapolis, May

#### DONNELL C. MARLIN Assistant Professor, Dental Diagnostic Sciences

Specimens for teaching forensic pathology, odontology, and anthropology: I. soft tissue (with D. Hawley, primary author; and D. Cook; D. Becsey; M. Clark; J. Pless; S. Miles Standish, professor emeritus, oral pathology and dental diagnostic sciences) Am J Forensic Medicine and Pathology 12(2):164, 1991

Specimens for teaching forensic pathology, odontology, and anthropology: II. teeth and bone (with D. Hawley, primary author; and D. Cook, D. Becsey, M. Clark, J. Pless, S.M. Standish) Am J Forensic Medicine and Pathology 12(2):170, 1991

Lecture "Bite Marks" Deputy Prosecutors Child Advocacy Center, Indianapolis, August

Lecture "Bite Marks and Child Abuse" Liaison Child Abuse Forum, Wishard Hospital, Indianapolis, January

#### JAMES L. MCDONALD, JR. Professor, Preventive and Community Dentistry

Contributor *The Health Benefits of Smoking Cessation. A Report of the Surgeon General, 1990.* U.S. Department of Health and Human Services, Public Health Service, Office on Smoking and Health, Rockville, Maryland

Overcoming tobacco and alcohol dependencies: effective treatment options (with J. Christen, A. Christen, J. Klein) JIDA 69(6):28, 1990

Presentations "Nicotine Addiction Treatment: An Overview" (with A. Christen) and "Nicotine Addiction" (with A. Christen, J. Klein) University of Utah School on Alcoholism and Other Drug Dependencies, Salt Lake City, June

Presentations "Overview of Smokeless Tobacco Education/Prevention Tapes and Programs" and "The Neurochemistry of Addiction to Nicotine" (with A. Christen) First International Conference on Smokeless Tobacco: Tobacco and Health," Columbus, Ohio, April

## FELLOWS

ACADEMY OF PROSTHODONTICS: Carl J. Andres (associate fellow)

AMERICAN COLLEGE OF DENTISTS: E. Brady Hancock Steven L. Bricker Michael A. Cochran

ACADEMY OF DENTAL MATERIALS: Kichuel K. Park

UNITED CEREBRAL PALSY RESEARCH AND EDUCATIONAL FOUNDATION, INC.: Julie A. Martinez (pediatric dentistry certificate '90)

#### CAROL G. MCKOWN Assistant Professor, Pediatric Dentistry

Oral management of patients with bleeding disorders. Part 1: medical considerations (with A. Shapiro, primary author) JIDA 70(1):28, 1991

Oral management of patients with bleeding disorders. Part 2: dental considerations (with A. Shapiro) JIDA 70(2):16, 1991

Lecture "Dental Management of Patients with Hemophilia" Indiana Society of Pediatric Dentistry, Indianapolis, April

Lecture "Oral Management of Patients with Bleeding Disorders" IU Pediatric Dentistry Alumni Association, Indianapolis, June

#### DALE A. MILES Associate Professor, Dental Diagnostic Sciences

Book Oral and Maxillofacial Radiology: Radiologic/Pathologic Correlations (with M. Van Dis, G. Kaugars, J. Lovas) W.B. Saunders Co., Philadelphia, 1991

Psoriatic involvement of the temporomandibular joint: literature review and report of two cases (with G. Kaugars) Oral Surgery/Oral Medicine/Oral Pathology 71(6):770, 1991

C.E. Program "Make the Most of Your Image: Panoramic Radiology" Ontario Dental Nurses and Assistants Association/Ontario Dental / Association, Toronto, Canada, May

#### CHRIS H. MILLER Professor, Oral Microbiology

Infection Control Columnist, RDH (Registered Dental Hygienist), Volumes 10-11, 1990-91: OSHA responds with changes (7); Assure quality patient care (8); Sterilization: the first choice (9); Chance for danger brings OSHA rules (10); Increases and decreases (11); Total office safety plan (12); Using effective aseptic procedures (1); Avoid infection control overkill (2); Routine gloving common practice (3); Reduce chance of exposure (4); Clothing choice still confusing (5); Total office safety plan (6).

OSHA infection control regulations for dentistry. PAACNOTES 2:199, 1990

Infection control groups keep profession informed. Dentist 68:23, 1990

Implementing an office infection control program. The Dental Assistant 59(6):11, 1990

Chairside surface asepsis. The Dental Assistant 59(4):5, 1990

Management of infectious waste. The Dental Asistant 60(2):7, 1991

Sterilization disciplined microbial control. Infection Control and Office Safety 35:339, 1991

Essentials of staff training: infection control and hazard communication. J Safe-Practice Management 1:12, 1991

Infection control. J California Dental Institute for Continuing Education 36:13, 1991

Chapters "Periodontal Microbiology," "Rickettsiae, Chlamydiae and Mycoplasmas," and "Enterobacteriaceae and Related Gram-Negative Bacteria" (in Essential Dental Microbiology, edited by N. Willett, R. White, S. Rosen) Appleton-Century-Crofts, New York, 1991

Chapter *Practical Barrier Techniques* (in Practical Infection Control in Dentistry, edited by James A. Cottone {MS Oral Diagnosis/Oral Medicine '77}, G. Gerezhalmy, J. Molinari) Lea and Febiger, 1991

Chapters "Microbial Taxonomy," "Isolation and Systematic Examination of Microorganisms," "The Oral Microbial Flora," and "*Microbial Ecology of the Oral Flora*" (in Oral Microbiology and Infectious Diseases, edited by G.S. Schuster) B.C. Decker, Inc., Philadelphia, 1990

Speaker "OSHA Infection Control Regulations for Dentistry," Symposium: The AIDS Challenge to Your Practice, Public Dental Service Society, Cincinnati, May

C.E. Course "Infection Control and Compliance in the Dental Office" Ohio State University, Columbus, February

#### B. KEITH MOORE Professor, Dental Materials

*Glass ionomers: their impact on restorative dentistry.* Japanese J Conservative Dentistry 33:1443, 1990

#### JOHN J. MORGAN Supervisor, Stores and Acquisitions

Editor, Life at IUPUI newsletter

#### JAYASHREE MYSORE (Oral Pathology Graduate Student)

Presentation "Preliminary Immunohistochemical Observations in Oral Submucous Fibrosis" (with L. Roth, A. Kafrawy, T. Vijayakumar, C. Tomich, S. Zunt, S. Johnson) First International Conference on Smokeless Tobacco, Columbus, Ohio, April

Presentation "Immunohistochemical Demonstration of p-21<sup>ras</sup> and cmyc Oncoproteins in Pleomorphic Ademonas" (with L. Roth, A. Kafrawy, C. Tomich, S. Zunt, S. Johnson) American Academy of Oral Pathology, Minneapolis, May

## W. PATRICK NAYLOR (MS Dental Materials '88)

Comparison of two tests to determine the castability of dental alloys (with B.K. Moore, R. Phillips, C. Goodacre, C. Munoz-Viveros) International J Prosthodontics 3(5):413, 1990

The effect of surface treatment on the Knoop hardness of Dicor (with C. Munoz, C. Goodacre, M. Swartz, B.K. Moore) International J Prosthodontics 4(2):147, 1991

#### DONALD H. NEWELL Assistant Professor, Periodontics

The role of the prosthodontist in restoring root-resected molars: a study of 70 molar root resections. J Prosthetic Dentistry 65(1):7, 1991

*Evaluation of postoperative Diflunisal for periodontal surgery pain* (with James S. Minutello, primary author; and W. Thrash, G. Terezhalmy) Am J Dentistry 4(1):33, 1991

C.E. Course "Has the Furcation Invasion Become More Easy to Treat?" American Academy of Periodontology, Dallas, Texas, October

Lecture "Role of the Restorative Dentist in Restoring Root-Resected Molars" American Academy of Restorative Dentistry, Chicago, February

#### CARL W. NEWTON Professor, Endodontics

Chapter *Geriatric Endodontics* in Pathways of the Pulp, edited by Stephen Cohen, Richard C. Burns; 5th ed., Mosby Year Book Inc., 1991

Program Chairman "Advanced Principles in Endodontic Surgery: Research and Endowment Foundation" American Association of Endodontists, Palm Springs, California, November

# LEADERS

Steven L. Bricker President Organization of Teachers of Oral Diagnosis

Michael A. Cochran President American Academy of Gold Foil Operators

Lawrence I. Goldblatt President Supreme Chapter of Omicron Kappa Upsilon dental honor society; and Chair American Dental Association's Joint Commission on National Dental Examinations

David K. Hennon President Theta Theta Chapter of OKU

William F. Hohlt President Metropolitan School District of Perry Township Board of Education

> David J. Howell President South Central Dental Component Society

Chris H. Miller Chair OSAP Research Foundation

Carl W. Newton Director District IV, American Association of Endodontists

Byron L. Olson President Indiana Section, American Association for Dental Research

Susan L. Zunt President University Faculty Club, Indianapolis Preparation Course for American Board of Endodontics "Review of Biologic and Clinical Aspects of Endodontology" University of Michigan School of Dentistry, Ann Arbor, March

#### TIMOTHY J. O'LEARY Professor Emeritus, Periodontics

Presentation "Splinting of Osteointegrated Fixtures to Teeth with Normal Periodontium" (with Roland W. Dykema, professor emeritus, prosthodontics; A. Kafrawy) International Congress of Tissue Integration in Oral, Orthopedic and Maxillofacial Construction, Rochester, Minnesota, September

#### BYRON L. OLSON Associate Professor, Preventive and Community Dentistry

Assessment of salivary cotinine levels in college students using smokeless tobacco (with G. Livingston; R. Potter; A. Christen; J. McDonald; Jeffrey W. Bolton, OHRI senior research technician) Biological Monitoring 1(1):53, 1991

Poster Presentation "Biological monitoring of nicotine and CO levels correlated to behavioral parameters in smokers" (with J. McDonald, A. Christen, C. Guba, P. Zitterbart) First International Conference on Smokeless Tobacco: Tobacco and Health, Columbus, Ohio, April

Presentation "Antimutagenic potential of iron and germanium against benzo (a) pyrene in Ames test" (with Marisa A. Ley, second-year IU dental student; J. McDonald; Y. Li; Timothy W. Noblitt, OHRI research technologist) American Chemical Society—Joint Central— Great Lakes Regional Meeting, Indianapolis, May

#### CHARLES J. PALENIK Professor, Oral Microbiology

*Eye protection: something for everyone* (with C. Miller) JIDA 69(4):15, 1990

*Guarding against HBV at the IU dental school.* IUSD Alumni Bulletin 4(4):28, 1990

Recommended immunizations for dental laboratory personnel (with C. Miller) Trends and Techniques in the Contemporary Dental Laboratory 7(9):43, 1990

Laboratory asepsis: disinfection of impression materials and microbially soiled prostheses (with C. Miller) QDT Yearbook 14:179, 1990/1991

Effectiveness of steam autoclaving on the contents of sharps containers (with M. Adams, C. Miller) Am J Dentistry 3(6):239, 1990

Haste makes waste (and so does the dental office). IUSD Alumni Bulletin 5(3):2, 1991

Protecting your eyes: it's the law (with C. Miller) Trends and Techniques in the Contemporary Dental Laboratory 8(5):69, 1991

Monographs (with C. Miller) Dental Asepsis Review, Volumes 11-12, 1990-91: Selection of protective eyewear Part II. recommendations (7); Infection control for dental radiology (8); Hazard communication program I (9); Hazard communication program III (11); Hazard communication program IV (12); Disposal of sharps containers (1); Infection control training program (2); Indiana law requires instrument sterilization and spore testing of sterilizers (3); Laboratory asepsis: an opportunity for cooperation (4); OSHA regulations concerning chemical use in laboratories (5); AIDS in women (6).

C.E. Course "Meeting Current Federal Regulations Concerning Infection Control and Hazardous Materials Management" Florida Dental Laboratory Association, Greenleif, Florida, April C.E. Course "Getting Your Ducks in Line: Waddling Toward Compliance with Federal Regulations" National Association of Dental Laboratory Technologists, New Orleans, June

#### RAJAPAS PANICHUTTRA (MSD Prosthodontics '90)

Hydrophilic poly (vinyl siloxane) impression materials: dimensional accuracy, wettability and effect on gypsum hardness (with R. Jones, C. Goodacre, C. Munoz-Viveros, B.K. Moore) International J Prosthodontics 4(3):240, 1991

#### KICHUEL K. PARK Associate Professor, Preventive and Community Dentistry

Chapters *Caries Activity* Tests (with N. Harris) and *Periodontal Disease Risk Assessment and Evaluation* (with A. Christen) in the Primary Preventive Dentistry edited by N. Harris and A. Christen (see listing A. Christen)

Effect of sorbitol gum chewing on plaque pH response after ingesting snacks containing predominantly sucrose or starch (with B. Schemehorn, J. Bolton, G. Stookey) Am J Dentistry 3(5):185, 1990

The impact of chewing sugarless gum on the acidogenicity of fast-food meals (with B. Schemehorn, J. Bolton, G. Stookey) Am J Dentistry 3(6):231, 1990

Columnist, Journal of Korean Dentistry, Volumes 28-29, 1990-91: Through the effective approach to dental health personnel planning (1); Qualification and role of dental hygienist in the United States of America (2); Possible transmission of AIDS through dental practitioner (3); Advances of dental sciences through the collaborations of industries and dental profession (4); Research plans for 10 years (5); Dentistry towards new age through unity and cooperation (1); Dental amalgam filling can not be the source of mercury poison (2); Acer and Bergalis (3); Counseling roles of dentists (4); American dentistry today (5); Current issues and future perspectives of cariology (6).

Instead of drilling and filling, prevent it through awareness {I, II, III} J Dental Clinics {10(9):72, 10(10):60, 10(11):73} 1990

Current status and future perspectives of oral diseases, prevention programs of Health Service Organization in the U.S.A. In Proceedings of the Korean Academy of Dental Health, 1991

Keynote Paper "Behavioral approaches for dental health education" Korean Dental Health Association, First International Symposium on the Use of Oral Hygiene Care Products, Seoul, September

Keynote Paper "Current status and future perspectives of oral disease prevention programs" The Korean Academy of Dental Health and Korea Science Foundation, Ministry of Human Health Services, Seoul, June

#### RAJ-RAJENDRA A. PATEL Research Associate, Oral-Facial Genetics

Clouston syndrome: a rare autosomal dominant trait with palmoplantar hyperkeratosis and alopecia (with D. Bixler; A. Norins) Am J Human Genetics 47(3):49, 1990

Pfeiffer syndrome and/or acrocephalosyndactyly variant (with D. Bixler) Am J Human Genetics 47(3):70, 1990

Lecture "Dysmorphology Report: Oculoauriculovertebral Spectrum" 2nd Annual Tri-state Craniofacial Conference, Indianapolis, September

Poster Presentation "Clouston Syndrome" American Society of Human Genetics, Cincinnati, October

#### **RALPH W. PHILLIPS Research Professor Emeritus, Dental Materials**

Report of the committee on scientific investigation of the American Academy of Restorative Dentistry (with M. Jendresen, J. Klooster, C. McNeil, J. Preston, R. Schallhorn) J Prosthetic Dentistry 64(1):74, 1990

Textbook Skinner's Science of Dental Materials, 9th ed., W.B. Saunders Co., Philadelphia, 1991

#### JAY C. PLATT

#### (DDS '86, Certificate General Practice Residency '87, Certificate **Oral and Maxillofacial Surgery '90)**

Fine-needle aspiration biopsy: an analysis of 89 head and neck cases (with D. Davidson, C. Nelson, E. Weisberger) J Oral Maxillofacial Surgery 48:702, 1990

Competitive Paper Presentation "Use of fine needle aspiration biopsy in oral and maxillofacial surgery" (with D. Davidson; C. Nelson; John J. Hockema {DDS '88, oral and maxillofacial surgery resident}) American Association of Oral and Maxillofacial Surgeons, New Orleans, September

Competitive Paper Presentation "Rigid fixation vs wire osteosynthesis: retrospective study of 231 mandibular fractures" (with C. Nelson; Larry L. Graham, IU director, oral and maxillfacial surgery programs, Wishard Memorial Hospital and Regenstrief Center; Jeffrey S. McBride {DDS '87, oral and maxillofacial resident}) American Association of Oral and Maxillofacial Surgeons, New Orleans, September

#### **ROSARIO H. POTTER Professor, Oral Facial Genetics**

Twin half-sibs: a research design for genetic epidemiology of common dental disorders. J Dental Research 69(8):1527, 1990

#### **EDMUND L. RAPP** Assistant Professor, Endodontics

Paper "Analysis of success and failure of apicoectomies" Ohio Association of Endodontists, Columbus, May

#### THOMAS F. RAZMUS Assistant Professor, Dental Diagnostic Sciences

C.E. Course "Radiographic Concepts and Technique Review" to VA Medical Center personnel, Danville, Illinois, June

C.E. Course "Radiology for Dental Personnel" IUSD, May

#### W. EUGENE ROBERTS Professor, Orthodontics (Dentistry) and Physiology and Biophysics (Medicine)

Rigid endosseous implant utilized as anchorage to protract molars and close an atrophic extraction site (with K. Marshall, P. Mozsary) The Angle Orthodontist 60(2):135, 1990

What are the risk factors of osteoporosis: assessing bone health (with L. Garetto, G. Arbuckle, K. Simmons, R. DeCastro) J American Dental Association (JADA) 122(2):59, 1991

Bone physiology of orthodontics: fundamental concepts for the 90's (with L. Garetto, K. Simmons) J Japan Orthodontic Society 50(2):11, 1991

Keynote Lecture "Bone Physiology of Orthodontics: Fundamental Concepts for the 90's" Japan Orthodontic Society, Nagano, October

Paper "Physiologic basis of endosseous implants" American Association of Oral and Maxillofacial Surgeons/American Association of Orthodontists Clinical Congress, Washington, DC, February

#### A. MICHAEL SADOVE Associate Professor, Surgery (Medicine) and Oral and Maxillofacial Surgery (Dentistry)

An evaluation of calvarial and iliac donor sites in alveolar cleft grafting (with C. Nelson, B. Eppley, B. Nguyen) Cleft Palate J 27(3):225, 1990

Improved outcome in Pierre Robin sequence: effect of multidisciplinary evaluation and management (with M. Bull, primary author; and D. Givan, D. Bixler, D. Hearn) Pediatrics 86(2):294, 1990

#### **BRIAN J. SANDERS** Assistant Professor, Pediatric Dentistry

Table Clinic "Management of the Self-Injurious Patient" American Association of Pediatric Dentistry, San Antonio, May

Mini-Clinic "Systemic Shunts and Antibiotic Prophylaxis" IU Pediatric Dentistry Alumni Association, Indianapolis, June

#### JACK E. SCHAAF Associate Professor, Dental Diagnostic Sciences

Lecture "Update on the Management of the HIV-Infected Dental Patient" Office Sterilization and Asepsis Procedures Research Foundation, Indianapolis, June

Lecture "Dental Care in the Age of HIV/AIDS" Genesee County District Dental Society, Flint, Michigan, June

#### **BRUCE R. SCHEMEHORN Research Associate, Oral Health Research**

Paper "New fluoride releasing elastomeric ligature ties" American Association of Orthodontists, Seattle, May

#### JEAN D. SCHOKNECHT Supervisor, Scanning Electron Microscopy Facility

Paper "Contributions of SEM and EDX to the taxonomy of Myxomycetes" (with H. Keller) VIII International Mycological Congress, Regensburg, Germany, August/September

#### JAMES C. SHANKS, JR. Professor Emeritus, Speech Pathology (Medicine) and **Orthodontics (Dentistry)**

Chapters "Group Therapy" and "Consequences of Total Laryngectomy in Daily Living Activities" (in Alaryngeal Speech Rehabilitation, edited by S. Salmon and K. Mount) by Clinicians for Clinicians Series, H. Winitz, editor; Pro-Ed, Inc., Austin, Texas, 1991

#### **KIRT E. SIMMONS**

#### Assistant Professor, Orthodontics (Dentistry) and Adjunct Assistant Professor, Pharmacology and Toxicology (Medicine)

Presentation "Physiological Principles of Endosseous Implantology" (videotape), Dondalar Production Group, Woodland Hills, California, October; also presented at American Academy of Implant Dentistry, New Orleans, October

Presentation "Dental Aspects of Growth Disorders" Fourth Annual Conference of the Pediatric Endocrinology Nursing Society, Phoenix, June

#### **CHARLES E. SMITH** Associate Professor, Preventive and Community Dentistry

C.E. Course "Indiana Law and Infectious Disease Control" Indianapolis District Dental Society, March

# HONORS

LEHMAN D. ADAMS, JR. Sagamore of the Wabash, given by Indiana Governor Evan Bayh; Key to the City of Indianapolis, presented by Mayor William H. Hudnut, III; Outstanding Award, from the national office of the NAACP

CARL J. ANDRES elected to Omicron Kappa Upsilon dental honor society

BRADLEY B. BEISWANGER Journalism Award, American Society of Dentistry for Children

DAVID BIXLER **Distinguished Faculty Award** for Research, IUSD Alumni Association

TIMOTHY J. CARLSON Clinician of the Year, American Academy of Gold Foil Operators

LAWRENCE P. GARETTO elected to IU School of Medicine's chapter of Sigma Xi national research society

SARA HOOK-SHELTON selected for membership to Phi Delta Phi honorary law society

LOUISE M. JUDD elected to Sigma Phi Alpha dental hygiene honor society

MYRON J. KASLE Dental Hygiene Program's Honorary Alumnus, IUSD Alumni Association

MELVIN R. LUND Award of Excellence, Academy of Operative Dentistry

**R. LAMONT MACNEIL Balint Orban Competition** Award for Research, American Academy of Periodontology

#### PAULINE R. SPENCER Assistant Professor, Dental Assisting

C.E. Course "Review of Dental Materials for the Dental Assistant" VA Hospital, Danville, Illinois, June

#### **GEORGE K. STOOKEY**

#### Professor, Preventive and Community Dentistry

Presentation "Additivity of Antimicrobial Agents and Crystal Growth Inhibitors for Calculus Prevention in an Animal Model" (with Janice Warrick, assistant director, OHRI Animal Research Facility) 37th ORCA (Organization for Caries Research) Congress, Ljubljana, Yugoslavia, July

Reactor Paper "Patient selection and appliance design in intraoral models" ADA Consensus Conference on Intraoral Models, Chicago, September

#### DON-JOHN SUMMERLIN Assistant Professor, Oral Pathology

*The effect of microwave processing on histochemical staining reactions* (with C. Danielson, primary author; and T. Bloch, G. Brown) J Histotechnology 13:181, 1991

Table Clinic "The Histologic Effects of Smokeless Tobacco and Alcohol on the Pouch Mucosa and Organs of the Syrian Hamster" (with A. Dunipace, R. Potter) First International Congress on Smokeless Tobacco, Columbus, Ohio, April

Clinical Case Presentation, American Academy of Oral Pathology's Clinical Pathology Conference, Minneapolis, May

#### CHARLES E. TOMICH Professor, Oral Pathology

C.E. Course "Current Concepts in Oral Pathology" Northeast Ohio Dental Hygienists Association, Cleveland, September

C.E. Course "Odontogenic Tumors: The Indiana Experience" American Academy of Oral Pathology, Minneapolis, May

#### AMY E. SONNEBORN TURNOCK (DDS '90)

Indications and contraindications for molar root resections: a report of two cases (with D. Newell) JIDA 69(5):10, 1990

#### MARGOT L. VAN DIS Associate Professor, Dental Diagnostic Sciences

What to do about dry mouth. JADA 122(1):100, 1991

Paper "Sensitometric and subjective comparisons of x-omat RP, L and B films" American Academy of Oral and Maxillofacial Radiology, Boston, October

Table Clinic "Radiologic Assessment for Implants" Indianapolis District Dental Society, January

#### KURT D. VAN WINKLE Assistant Professor, Periodontics

Presentation "The Inflammatory Response to Treated Human Root Surfaces (with E. Brady Hancock, IU professor, periodontics; A. Kafrawy) American Academy of Periodontology, Dallas, October

#### A. GEORGE WAGNER Professor, Prosthodontics

*Transitional immediate complete dentures* (with Matthew B. Monesmith {DDS '89}) General Dentistry 39(3):200, 1991

Table Clinic "Duplicate Dentures: Easy to Make, Many Uses" Chicago Dental Society Midwinter, Chicago, February

#### JAMES A. WEDDELL Associate Professor, Pediatric Dentistry

Table Clinic "Useful Tools for Pediatric Conscious Sedation" American Society of Dentistry for Children, Washington, DC, October

Lecture "Pharmacologic and Behavior Management of Children" Southeastern Indiana Dental Society, Scottsburg, January

#### BRUCE B. WILAND (DDS '87, MSD Periodontics '90)

Presentation "Effect of Polyacrylic Acid on the Root Surface" (with B. Hancock, A. Kafrawy) American Academy of Periodontology, Dallas, October

#### GAIL F. WILLIAMSON Associate Professor, Dental Diagnostic Sciences

C.E. Course "Radiographic Techniques for the Dental Assistant: Troubleshooting Errors in X-ray Techniques" (with M. Jones) IDA, Indianapolis, May

C.E. Course "Nitrous Oxide: Recognizing and Reducing Risks" Indiana Dental Hygienists' Association, Indianapolis, May

#### KAREN M. YODER Assistant Professor, Preventive and Community Dentistry (IUPUI), and Dental Auxiliary Education (Fort Wayne)

A ride in the country. IUSD Alumni Bulletin 5(2):28, 1991

Presentation "The Public Health Nurse: Advocate for Access to Dental Care for Low-Income Children" 5th Annual Indiana Public Health Days, Indianapolis, December

Poster Session "Using the Healthy Cities Model for Promotion of Oral Health" American Public Health Association, New York, October

#### PAUL A. ZITTERBART Assistant Professor, Dental Diagnostic Sciences

The association between cigarette smoking and the prevalence of dental caries in adult males (with L. Matranga, A. Christen, K. Park, R. Potter) General Dentistry 38(6):426, 1990

Lecture "Nursing Home Dental Care Programs" Nursing Home Administration Class, Indiana Vocational Technical College, Indianapolis, February

Table Clinic "Preventive Care for Older Adults" (with William Borman, IU assistant professor of dental diagnostic sciences; and Kevin Malley) IDA, Indianapolis, May

#### SUSAN L. ZUNT Associate Professor, Oral Pathology

Oral hairy leukoplakia (with C. Tomich) J Dermatologic Surgery and Oncology 16:812, 1990

C.E. Course "Oral Manifestations of Infectious Disease" Michigan Dental Association, Grand Rapids, April

C.E. Course "Diagnosis and Treatment of Oral Viral Infections" Memphis (Tennessee) Dental Society, Memphis, February

# HONORS

RAY K. MAESAKA Distinguished Faculty Award for Teaching, IUSD Alumni Association

FRANCIS E. McCORMICK OKU Life Member

TIMOTHY J. O'LEARY Presidential Award, American Academy of Periodontology

CHARLES J. PALENIK IUPUI Honors Program Summer Faculty Fellowship

KICHUEL K. PARK Outstanding Researcher in Preventive Dentistry, Korea Science Foundation

W. EUGENE ROBERTS Medal of the City of Rouen, France, for Scientific Achievement in Bone Physiology and Implantology

#### Awards Presented by IUSD Dental Class of 1991:

JEFFREY GORE ('91) Outstanding Service

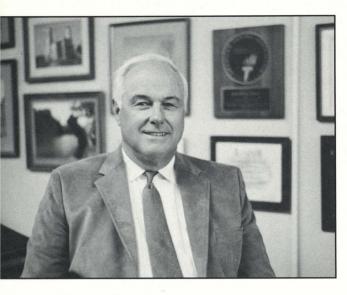
FUSAKO PENNER Outstanding Staff Member

CHARLES A. SADLER, JR. ('91) Outstanding Student

STUDENT AFFAIRS OFFICE Outstanding Division

> ROBERT TAYLOR Outstanding Part-time Faculty Member

DONALD R. THARP Outstanding Full-time Faculty Member



### From the Dean

The pages of this annual report document the success of the 1990-91 academic year at Indiana University School of Dentistry. Much of the credit for the school's progress made in the past year belongs to our innovative IUSD Planning Committee, a 27-member administrative group that has been studying a number of significant issues in dental education for the last three years.

This special edition of the *Alumni Bulletin* includes a record of hundreds of professional goals that were met by the dental faculty while they continued to pursue the school's primary goal of training students to become well qualified and skillful practitioners. They contributed more than 140 documents to the dental literature, including editorials, articles, textbooks, textbook chapters, and monographs. Hundreds of courses, lectures, and papers were presented nationally and overseas as well as within the city and state. A sample of achievements begins on page 32.

The IUSD Statement of Mission, adopted by the faculty this year and published in the Winter 1991 issue of the *Alumni Bulletin*, serves as the guide to the faculty in providing a comprehensive educational program to our students and a comprehensive treatment program to our patients; following the principles of the mission statement, we are working together to strengthen our role as a school within the Indiana University system.

Total student enrollment at the School of Dentistry in 1990-91 was 521, including 302 in dentistry, 75 in dental hygiene, 24 in dental assisting, and 120 in postdoctoral studies. We congratulate each of our graduates, including students of dental auxiliary education who trained on the South Bend, Northwest, and Fort Wayne campuses. As shown on the opposite page, graduates included 59 dentists, 102 dental hygienists, 53 dental assistants, and 12 dental laboratory technologists.

As we head into the 1991-92 academic year, we look forward to another exciting milestone: The top challenge in the following months will be finalizing preparations for the much-anticipated site visit of the American Dental Association's Commission on Accreditation, scheduled for October 26-30, 1992. All aspects of the programs in dentistry, dental auxiliary education, and postgraduate training will be thoroughly examined by a team representing the Commission. (The IUSD site visit preceding this one was held in 1983.) A list of faculty and staff who are leading the school's 1992 site visit preparation is included below.

The faculty and students will present reports and be interviewed during the visit in regard to the School of Dentistry's resources and programs. Most important to us are our plans for the next seven years to redesign the curricula and research programs and to assess student outcomes. The contemporary trend in accreditation evaluations is to place increased emphasis on the measurement of knowledge gained and skills developed by students during their years in training. Data currently being collected by the faculty on our student assessment methods will be of prime importance to the upcoming accreditation process and will help us to upgrade instruction methods in the future. The final accreditation document will be available to all interested parties.

The challenge facing administrators in higher education is how to equip students for survival and success in their fields of study. The need for strong undergraduate training, including an adaptability to new technology, is essential for candidates entering dental education. Dentists and auxiliaries are destined to see diagnostic testing and treatment of dental patients become more closely aligned with the medical services. Knowledge of infection control and immunology is fundamental to managing a dental office competently and understanding new kinds of treatments for oral diseases. The health care market is beginning to combine dental care services with medical group practices; changes will produce enormous demands on dental faculties to prepare students to function in a more competitive market. IU's School of Dentistry curriculum will need to address the new trends in health care economy, offering environmental experiences for dental and dental auxiliary students.

This annual report is offered to the alumni as an audit of the accomplishments made by faculty, students, and staff in preparing for the future of the Indiana University School of Dentistry. Your comments are welcome.

H. William Gilmore

#### AD HOC COMMITTEE ON ACCREDITATION

(members appointed by the IUSD Planning Committee)

H. William Gilmore, Chairman (Administration)
Carole A. Busch (Committee Secretary)
Lawrence I. Goldblatt (Faculty and Staff)
Hala Z. Henderson (Student Affairs and Admissions)
Donald R. Tharp (Patient Care and Clinic Management)
Byron L. Olson (Basic Sciences)
Carl W. Newton (Clinical Sciences)
Arden G. Christen (Behavioral Sciences)
George K. Stookey (Research)
Christianne J. Guba (Advanced Education in General Dentistry)
Sybil S. Niemann (Dental Auxiliary Education)
Lynn K. Finkel (Financial Resources and Facilities)

## **CLASSES OF 1991**

#### DOCTOR OF DENTAL SURGERY DEGREES

Grant S. Bailey Julie A. Boyd Diane J. Carter-Heckley Lisbeth A. Cloys Samuel L. Corey Jay E. Cowan Jeffrey J. Cyzon Jennifer Dumas Dahm Kimberly A. Danta Angela L. Barnett De Haven Valerie Haughtington Dohner Steven A. Douglas David K. Durell Brett A. Egelske David J. Ellefsen Scott R. Federspill Lisa Shideler Feit Mark H. Friedrich Noel G. Garcia Michael J. Gerstbauer Starla K. Goldman Jeffery L. Gore Maurice I. Healey James D. Heck David E. Isaacs John B. Keller Edna F. Kemp Rick L. Kline Terry R. Klise Sangyoung Lee Stacey Sung-Hee Lee Christopher S. Leonard Michael K. Maze Alexander M. Mishel Marc A. Murphy Jeffrey D. Nelson Vidas T. Noreika Dean H. Oller Anthony M. Puntillo Douglas L. Ramsey Scott A. Reef Robert L. Reifeis, Jr. Fanny E. Rovira Charles A. Sadler, Jr. Steven C. Salkeld G. Brad Sammons Chanbo Sim Jeffery A. Spilman Christopher R. Spoon Shabbir A. Syed Amy J. Viano Brian D. Wagoner Timothy S. Weeks Scot B. White Gregory J. Willhite Kelly E. Osman Willhite Sherri Lynn Bird Wilson Dr. Raymond C.K. Wong Randy C. Young

#### CERTIFICATES IN DENTAL ASSISTING

FORT WAYNE Sandra K. Fulton Jennifer J. Kirk Jodi E. Kocher Sara J. Liston Robin Medley Lemon Cathleen L. Meyer Yolanda Y. Phillips Holly L. Stevens Jennifer L. Sweeney Lisa M. Vigneaux

#### INDIANAPOLIS

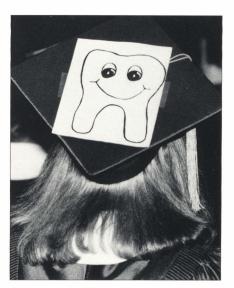
Leigh Renee Albersmeyer Angela L. Baker Amy Lynn Breese Meshell Marie Canada Elizabeth K. Chastain Kori Lea Curnutt Laura Kathleen Fanning Hollie Jean Flinta Sandra Gerth Dawn M. Hinkle Amy Kay Ingle Lee Ann Lane Lisa Lynnette Lloyd Toni Marie McDonald Holly Jo McOuinn Janet Sue Nobbe Amy Petraits Christina Dawn Shaw Wendy Sue Snow Carolyn J. Lewis Story Julia Kay Wilder Jeanette Marie Williams Lisa A. York

#### NORTHWEST

Dena R. Clark Hazel A. Devitt Monica R. Edwards Heather L. Holman Kecia J. Kosky Cynthia R. Mills Carol E. Olson Cara C. Phelan Laura R. Rowley Tricia J. Turner

#### SOUTH BEND

Cheryl Binkley Kelly Hammond Michelle Heckaman Karey Jacobs Lisa Jensen Tori Leonard Evelyn McCourt Sheri Schley Trina Villanueva Lori Vollrath



#### ASSOCIATE OF SCIENCE DEGREES IN DENTAL HYGIENE

#### FORT WAYNE

Norma Alberson Michelle Bowerman Jami Brown Lisa Cazallis Kristene Devine Cynthia Doehrman Dawn Ewing Tamara Figgins Jodi Fitzgerald Lisa Grotrian Jody Heinzelman Angela Keller Tina Koenig Susan Kaye Lawson Tamara Lickey Elizabeth Linn Lori McPheeters Amy Meyer Christina Requarth Michelle Scheurich Melinda Tvo Kristina Weber

#### INDIANAPOLIS

Lisa K. Adams Joelle M. Benoit Angela Y. Bronder Kristi M. Browning JoAnn Cardwell Susan K. Chestnut Jennifer A. Crane Cathy A. Deck Jennifer A. Eikenberry Theresa Evans Suzanne M. Fuehrer Tamara S. Gross

Virginia L. Hodgkin Donna L. Hutton Toula Kounelis Donna L. Krietenstein Kimberly L. Lawson Rhonda J. Long Amanda L. Mattingly Corina M. Middleton Kelly M. Miller Sheila M. Miller Cherisse D. Moore Diana A. Morse Delores (Nicole) Phillips Kathleen M. Quinn Robin L. Rajer Lynn E. Rodda Heather R. Roth Susan J. Roth Kellie A. Sargent Patricia A. Smith Sharon M. Sondgerath April E. Sutton Christine A. Tackett Nell M. Thompson Bonnie R. Williams Joan M. Wirth

#### NORTHWEST

Kathleen M. Bandura Stephanie K. Buncich Lorraine M. Burkholder Courtney M. Courtice Kimberly C. Fairchild Victoria L. Fancher Wendy A. Fozkos Dragana D. Jocic Kathleen A. Kilmurry Nanci A. Koedyker Angela A. Lafuze Marcella E. Landgrebe Julie A. MacDonald

Susan Sheets of Nappanee left no one wondering what division she was graduating with during commencement exercises at IU-South Bend—and all of her dental hygiene classmates topped their mortar boards with "Happy Tooth" drawings, too. Statewide, 102 graduates received the Associate of Science degree in dental hygiene. (Photo by David B. Witham, courtesy of the South Bend Tribune)

> Lori A. Nelson Angelica Oria April A. Ortt Ann M. Reed Jennifer Schmitt Aimee R. Skalba Tina M. Sulich Kathleen D. Wrigley

#### SOUTH BEND

Kimberly Bachmann Jill Baker Deborah Buell Julie Compton Gayle Cook Jennifer Dobosiewicz Julie Gabaree Karen Green Kristina Huff Beth Jachimiak Kari Johnson Cheri Livingston Cherie Nannfeldt Lisa Ousley Kelly Patrick Brenda Patterson Debra Rhodes Maureen Rinard Susan Sheets Pamela Stiver Paula Wentworth

#### ASSOCIATE OF SCIENCE DEGREES IN DENTAL LABORATORY TECHNOLOGY

#### FORT WAYNE

Heather Alter Kathi Antrim Steven Flatter Julie Gatton Melissa Hughes Kelly Maher Kaye Mellencamp Mohammad Sajid Lori Sinar Valeria Velevas Cari Wertz Tina Zern Indiana University-Purdue University at Indianapolis IU School of Dentistry-Indianapolis (Alumni Bulletin) 1121 West Michigan Street Indianapolis, Indiana 46202

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