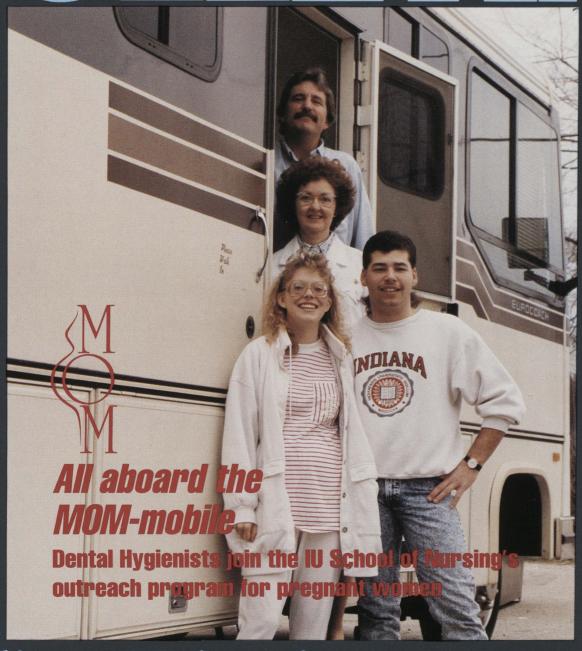
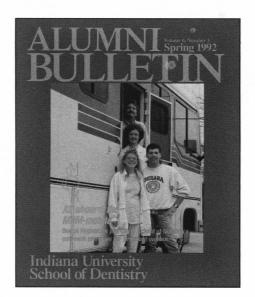
ALUMNI Spring 1992 BULLETIN



Indiana University School of Dentistry



On the Cover

HEALTH PROGRAM ON WHEELS.

Karrie M. Kottkamp and Jason Davis (foreground) join driver Ed Childress and dental hygienist Jaclyn Gray on the steps of the MOM-mobile, an IU School of Nursing mobile unit that for the past two years has transported a wellness program to pregnant women in neighborhoods throughout Marion County. In 1991 the MOM (Maternity Outreach and Mobilization) Project launched a pilot dental screening and referral program offered by volunteer dental hygienists. Jaclyn Gray is one of the program's coordinators. Karrie Kottkamp took advantage of the free dental screening when the MOM-mobile came to Fountain Square. For more about MOM-mobile activities, see an article by IU faculty member Karen Yoder on page 10. (Photo by Mike Halloran)

Indiana University School of Dentistry Alumni Bulletin

Volume 6, Number 3, Spring 1992

FEATURES

Firm in the Saddle

IU takes part in Nicoderm study

2

Message from 'MOM'

MOM-mobile makes room for dental hygienists

10

Responding to Tragedy

Forensic dentists identify crash victims in Evansville

14

Scholarships and Awards

Contributions make awards possible for 47 students **18**

Getting to the Heart of the Matter

Development director studies giving from the student view 32.

DEPARTMENTS

Notes from the Dean's Desk 1

> DAE Around Indiana 22

Postdoctoral Profiles 23

With the Classes... 24

Michigan Street Memos 29

The *Alumni Bulletin* is an Indiana University School of Dentistry publication directed to members of the IUSD alumni. There are four issues each year: Fall, Winter, Spring, and Summer. Material included herein does not necessarily represent the official position of the School. Editorial office address: Editor, *Alumni Bulletin*, Indiana University School of Dentistry, Room 104, 1121 West Michigan Street, Indianapolis, IN 46202; and telephone: 317/274-5405.

PUBLICATIONS STAFF: Editor: Jack E. Schaaf; Managing Editor: Susan M. Crum; Designer: Diane Alfonso, IUPUI Publications; Chief Photographer: Mike Halloran; Photographic Technician: Alana L. Barra; and Staff Illustrators: Mark A. Dirlam and Rolando A. DeCastro IUSD ALUMNI ASSOCIATION OFFICERS: President: Bruce D. Raibley (DDS '73); President-elect: John A. Rahe (DDS '63); Immediate Past President: Richard D. Ellsworth (DDS '73); Vice President: Vincent M. Guido (DDS '82); and Secretary/Treasurer: James A. Shupe, Sr. (DDS '62)



Publication member of the American Association of Dental Editors

Notes from the Dean's Desk

Curriculum Restructuring: A Priority of U.S. Dental Schools in the 1990s

The dramatic expansion of research and technology in the health fields today is responsible in part for the logiam in the curriculum occurring at most schools of dentistry. The faculties are challenged by the need to sort old information from the new and then decide how best to choose what is most relevant to include in the curriculum. The great wealth of new knowledge places a growing pressure upon the core educational program. Dental faculties must be increasingly more diligent in their efforts to avoid teaching "yesterday's" subjects. Research is paramount for enriching a school's overall educational program, but as educators we must be mindful that the greater the research production, the greater the need to reflect this body of knowledge in new course offerings taught by capable faculty. Innovative research opens new vistas of patient service—our key professional responsibility. To break up the logjam, objective methods are called for to guide the faculty in becoming effective managers of the curriculum.

It is recommended that dental education's future lies in strengthening the basic sciences. Courses in molecular biology, imaging, genetics, immunology, and new approaches to pharmacology will soon be required for accreditation. These courses will be added to class schedules already heavier than academic loads carried by medical students. The new science curriculum is certain to have an impact on the time that is now allotted for the clinical training of both dentists and dental auxiliaries.

would bring many repercussions, but it would also create numerous new facets to the role dental schools play on academic health center campuses.

The IU School of Dentistry faculty is making careful adjustments to sidestep a curriculum crisis. Adding new courses and identifying qualified faculty to teach them have been effective strategies in

Courses in molecular biology, imaging, genetics, immunology, and new approaches to pharmacology will soon be required for accreditation.

The American Association of Dental Schools has scheduled a forum on dental curriculum for its annual meeting in 1993. The plan is to devise a model curriculum based on discussions addressing six categories, and to make management recommendations to the U.S. dental schools. The issue of requiring a "fifth" year of dental education (i.e., the addition of one postgraduate year) is a concept that has been discussed off and on for several years, and it has resurfaced once again. Adding another year to the dental program

some divisions. The time is nearing, however, when a major overhaul of the dental and dental auxiliary curriculum is the logical conclusion if we are to maintain our reputation as a quality institution. The educational program must be up-to-date, adaptable, and reasonable in length for all students. Devising a new curriculum will require the expertise of all parties impacting dental health care in this state. The IUSD faculty is prepared to do what is necessary to institute curricular reforms.

H. William Gilmore

An invitation to the dental alumni:

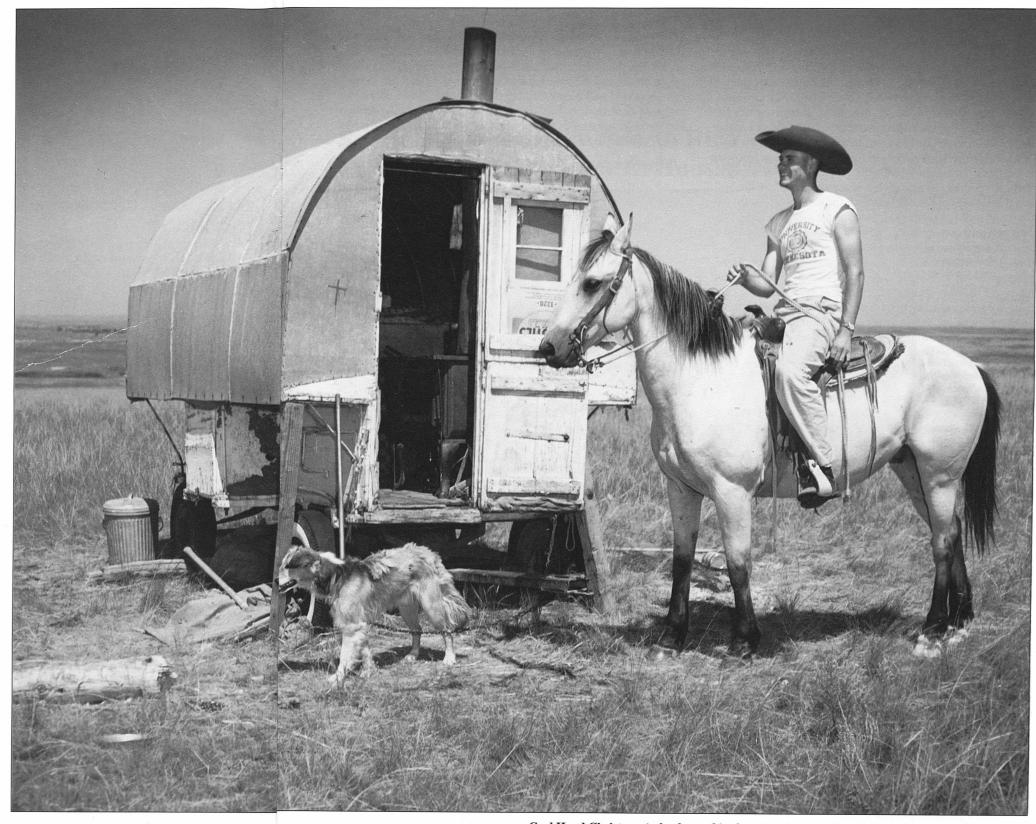
To begin the enormous process of restructuring the curriculum, the IU School of Dentistry calls upon one of its most valuable resources—the graduates of the school—for assistance. Your ideas and suggestions will serve collectively as an important "voice" in

the school's plan to reformulate the educational program. Please share your thoughts on curriculum changes with Dean Gilmore by writing to him care of Indiana University School of Dentistry, 1121 West Michigan Street, Indianapolis, IN 46202.

FIRM IN THE SADDLE

(on the Stop-Smoking Trail)

Le snuffed out the embers of his last Marlboro more than two decades ago, resolutely deciding to kick his smoking addiction out to permanent pasture. He succeeded, but Arden G. Christen's most important relationship with cigarettes was only just beginning. In the early '70s this former 'Marlboro man' hit a trail of a different sort, traveling around the country talking about cigarettes instead of smoking them. Now a well-known national authority on smoking cessation, Indiana University's head of the Department of Preventive and Community Dentistry recently served as one of the chief investigators (and head of the only dental research group) for a multicenter study of a transdermal nicotine system for smoking cessation. Results of that study, published in the December 1991 issue of the Journal of the American Medical Association, led to FDA approval of Nicoderm®, a cutaneous patch now being used as an aid to nicotine withdrawal therapy. Dr. Christen recently described to us the transdermal nicotine study and shared some of his other thoughts on smoking. The dental team, he says, is now in an ideal position to reach out to patients who wish to stop smoking. As ardent as ever, Arden Christen talks about a subject that has profoundly affected his own personal and professional growth.



Cool Hand Christen. Arden keeps this photo in a frame in his office to remind himself that he wore the Marlboro man's hat and boots as comfortably in his youth as he wears the professor's clinic jacket today. During summers between dental classes at the University of Minnesota in the '50s, Arden herded sheep on the Black Horse Ranch in northwestern South Dakota. He sat tall in the saddle—and passed the lonely hours by smoking. "I wasn't hooked yet," he says, "but this period of my life was when my addiction really got started."

The only dentists participating in the transdermal nicotine studies were the researchers on the Indiana University team. How did you get involved?

Nicotine withdrawal therapy uses nicotine in an absorbable form to help smokers quit smoking. We've been working with various forms of nicotine withdrawal since 1982. Our first area of interest was with a nicotine gum. Results of our first study of this gum, published in the Journal of the American Dental Association in 1984, led to market approval by the Food and Drug Administration for Nicorette® gum (nicotine polacrilex). In the mid-1980s the IU schools of dentistry and medicine conducted a five-year study supported by the National Institutes of Health in which Indianapolis area physicians and dentists were evaluated for their efforts in helping their patients quit smoking. We found that some 50 local dentists were very effective in helping their patients quit. That study led to others, and within the past two years the Alza Corporation of Palo Alto, California, asked us to be one of the nine sites to study its new experimental nicotine patch. I believe we were asked to participate because the people making these products realize that dentists have an important role to play in smoking cessation. As it turns out, they are absolutely correct in their assumption.

Describe the nicotine patch.

The patch we tested, which is now manufactured as Nicoderm[®], uses a cutaneous (transdermal) system to supply nicotine to the body in a steady, controlled dose throughout the day. Transdermal patches have only been on the market since early January of 1992. Placed somewhere on the upper torso or arms each morning and worn continuously for 24 hours, the patch keeps the smoker from having severe withdrawal symptoms. Withdrawal is one of the primary problems that keep heavy cigarette smokers smoking—they don't want to suffer withdrawal. A product like this gives smokers an opportunity to deal with the social and psychological aspects of smoking without also having to deal simultaneously with nicotine addiction. With this system smokers are weaned off cigarettes by means of a psychologically-oriented "6-2-2 Committed Quitter's Program." A behavioral component to these programs is absolutely essential. Smoking cessation products are adjuncts, not cure-alls; people must deal with all aspects of their smoking addiction.

It's very important for smokers to set their own quit date. Once they establish the date, we immediately start them on the patch. Initially, smokers use a fresh patch daily for six weeks, which releases 21 milligrams of nicotine a day. This is followed for two weeks with patches releasing 14 mgs of nicotine, and finished with two weeks on patches releasing 7 mgs of nicotine. After 10 weeks, they are completely taken off the patch. The entire process slowly weans the individual off of nicotine.

Can heavy smokers use the patch?

Most certainly. However, before I put smokers on the patch, I try to get them to cut down to about one pack of cigarettes a day. Ordinarily, going from two packs a day to the patch doesn't supply enough nicotine to keep the brain happy. So we cut smokers back initially through other methods, such as two weeks of behavioral modification.

Who can prescribe the patch?

Physicians and dentists. Dentists should be aware that some pharmacists are still unaware that dentists can legally prescribe the transdermal patch or gum, so we recommend that dentists contact their pharmacist in advance to let them know they can and will be prescribing these agents. Since about 12% of prescriptions for Nicorette® are currently being written by dentists, we expect that patches will also be commonly prescribed by dentists in the near future.

Do patches stand up well under normal activity?

Yes. They are easy to place, they stay put, and are designed to withstand showering, bathing, swimming, and saunas.

Why must the patch be worn on the upper part of the body?

For ease of application and because it's necessary to place the patch on a non-hairy area of the skin. Most people wear it on various spots under or around their arms and on their sides and back. To avoid skin irritation the location must be changed each time a new patch is placed. The new patch is placed daily, usually upon arising in the morning. Used patches still have traces of nicotine in them, so they must be sealed and discarded in a careful manner and kept out of reach of children and pets. The instructions advise you to wash your hands after handling the patch.

What specifically was your role in the study?

I helped obtain and design the study and served as liaison between the manufacturer and IUSD. The actual clinical trials at the IU site were conducted by Dr. Brad Beiswanger, Melissa Mau, and Cheryl Walker, all of the Oral Health Research Institute. Approximately 100 individuals of the 935 people who participated nation-wide were studied at the IU site.* Half of the smokers wore a patch containing nicotine and half wore a placebo patch.

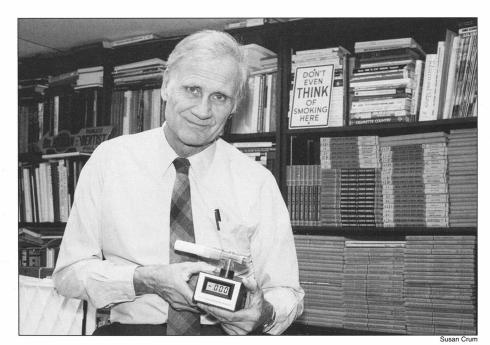
Was it difficult finding people to participate?

Not at all. Typically when we advertise in a newspaper for patients for a quit-smoking study, hundreds of people are screened. For several days we were swamped by requests from smokers wanting to be subjects in this study.

How were they screened?

We gave potential subjects psychological tests and analyzed their breath for carbon monoxide to find out what type of smokers they were. A good share of the people in this study we considered to be hard-core smokers—they had been smoking for a long time and really loved it, but they also had a genuine interest in quitting and indicated their willingness to cooperate. The study was double blind—the researchers had no way of knowing who received the real patch and who got the placebo. The two groups were similar in all categories

^{*}Other chief investigators were Dorothy Hatsukami, PhD, Psychiatry Department, University of Minnesota; Stephen Rennard, MD, Pulmonary and Critical Care Medicine Section, University of Nebraska; Edward Lichenstein, PhD, Oregon Research Institute; Scott Heatley, PhD, Pacific Medical Research Services, Redwood City, California; Lawrence Repsher, MD, Pulmonary Drug Evaluation Program, Wheat Ridge, Colorado; Stephen Fortmann, MD, Center for Research in Disease Prevention, Stanford University School of Medicine; John Hughes, MD, Department of Psychiatry, University of Vermont; and Elbert Glover, PhD, Tobacco Research Center, West Virginia University School of Medicine.



In his office at the dental school, Dr. Christen shows off one of the essential tools of smoking cessation researchers—a carbon monoxide breath analysis meter.

such as age, smoking status, addiction test scores, etc. The patients were healthy volunteers who had smoked one or more packs of cigarettes daily for at least one year. In addition to wearing patches all subjects participated in several mandatory sessions of smoking cessation counseling, which were conducted in small groups.

And the results?

What we were looking for was proof of the nicotine patch's efficacy and safety. The results were very heartening. Cessation rates during the last four weeks of two six-week trials were 61%, 48%, and 27% for the 21-mg nicotine group, 14mg nicotine group, and placebo group, respectively. At the end of the six-month study, which included 12 final weeks of off-drug follow-up, abstinence rates for the 21-mg nicotine group was 26% compared to 12% for the placebo group. All transdermal nicotine doses significantly decreased the severity of nicotine withdrawal symptoms. Cigarette use by patients who did not stop smoking was also significantly reduced. What's especially interesting to note is that even individuals in the placebo group showed marked improvement in their efforts to quit smoking, which demonstrates the importance and necessity of counseling and behavior modification strategies for any quit-smoking program.

Were there any side effects?

There were no serious systemic adverse effects reported. Mild skin irritation was reported by a few individuals, and 1.2% of the study participants turned out to be allergic to the patch. Some individuals reported having vivid dreams or mild difficulty sleeping at night because of the round-the-clock dose of nicotine coming into their bloodstream. Another group of researchers are now working on a 16-hour patch in order to alleviate sleep disorders. However, for most individuals, these problems were inconsequential.

How did you know if someone in the study had been smoking?

All studies on smoking cessation need to be corroborated

by biochemical markers. We tested the subjects' breath with a carbon monoxide breath analysis meter.

How many patches are on the market?

It looks as if there will eventually be four, but as of early February, 1992, there are only two—Nicoderm[®] and Habitrol[®], the latter a product of Ciba-Geigy Pharmaceuticals. Both are FDA-approved systems.

If smokers are dependent psychologically as well as physically on smoking, then the nicotine patch addresses only half the problem. What other therapies are necessary?

When people quit smoking, they actually have three problems to solve. The first is nicotine addiction. According to former U.S. Surgeon General J. Everett Koop and many other scientists, nicotine is by far the most addictive chemical substance in our culture. It's believed to be as addictive as cocaine or heroin, and as many as 50 to 60 million Americans use tobacco in smoked or smokeless forms. The second problem is socio-cultural in nature. If you're married to a smoker, if you work in a place where everybody smokes, or if you spend a lot of time in any environment where it's culturally acceptable to smoke, you have this problem to deal with. Finally, there is a strong psychological link—smoking serves a number of valuable psychological purposes. Written tests are used to determine in which areas an individual's greatest dependency lies.

Several paper and pencil tests are used to characterize a person's individual smoking addiction. There are several levels of smoking. Casual smokers are not highly addicted to nicotine or excessively "hooked" psychologically. Many of these smokers are now quitting. But hard-core smokers—those who consume 25 or more cigarettes a day—very likely are smoking more than ever. It is estimated that 12 to 15 million Americans fall into the hard-core category. We should not give up on these individuals because many of them really want to quit.

Two psychologists, James Prochaska and Carlos D.

Clemente, theorize that people go through six predictable stages when they quit smoking. About 60% of current smokers are thought to be in a *precontemplation* stage, which means they aren't even thinking of quitting and they don't want to hear about it from anyone else. These people take a "get out of my face" approach to any suggestions that they quit. About 30% of current smokers are in a *contemplation* phase. They're starting to think about quitting, although it's often a subconscious thought. About 10% of current smokers are believed to be in a phase of *readiness*. So, at any given time, 40% of smokers are thought to be either contemplating quitting or are actually getting ready to try. All they need is a little push and some encouragement, and that's where we come in.

In the action phase smokers actually quit, enduring what for many of them are the pain and misery that go with the process—anxiety, irritability, sleep disturbance, headaches, dizziness, impaired concentration, and in general "feeling bad." In the maintenance phase the smokers restructure their lives without cigarettes. A fairly large percentage of individuals return to smoking and enter a relapse phase. I prefer the term "recycling" for this phase, because in order to quit they must repeat the cycle of smoking cessation. It's very common for smokers to repeat the circle three to eight times before they are successful, but many of them do make it. That's why we encourage them to keep trying: quitting smoking is a relatively long process. Working out the major psychological losses of smoking can take anywhere from one to five years. Once you have an addiction, you always have an addiction. You never get over cigarette smoking; like alcoholism, you are always "in recovery."

Cutaneous patches have been used for years in different applications (e.g., nitroglycerine for angina, scopolamine for motion sickness, estradiol for menopause). When was the transdermal route first used to administer nicotine?

Transdermal systems have been used in Europe for about a decade, and the nicotine gum was in use for about 15 years before it became marketable in the U.S. in 1984. The FDA had a hard time accepting these products for quite a while, asking the reasonable question: Why would you prescribe a dangerous chemical to help a person quit using a dangerous chemical?

So, what is the benefit of administering nicotine to a patient who is addicted to it? How does this get the patient off the drug?

For all smokers, cigarette smoking is to some extent a nicotine-seeking behavior. If you try to wean smokers with products that don't contain nicotine, they aren't successful. Your brain recognizes nicotine and indeed, your body "demands" nicotine. The average smoker needs a dose of nicotine every 20-30 minutes during his or her waking hours. The objective behind withdrawal therapy is to separate nicotine withdrawal from the social and psychological aspects so that people can deal with them one at a time. If people go from two packs of cigarettes a day to nothing they are usually overwhelmed by symptoms of nicotine withdrawal while trying to face the social and psychological aspects of smoking cessation. The patch provides a therapeutic, short-term solution to the central nervous system's need for nicotine. In this manner, we try to break the actual smoking act itself (stimulus-response-reward)

because this is a very satisfying part of the cigarette smoking addiction.

What are the advantages of the patch over the gum?

Many people aren't able to chew very well, don't like to chew gum, or find gum chewing socially unacceptable. This gum is not as easy to chew as regular gum and if they have a poor state of dental repair, they could be unable to chew the product. The instructions must be followed to the letter in order for the slow-release formula to work properly. The patch is good for people who find compliance difficult—after they've placed the patch, they're done thinking about the program for the rest of the day.

The gum is better for people who are highly oral, those who like having something to do with their mouth. Also, the gum allows people to titrate their own levels of nicotine—chewing more gum increases the level of nicotine to your system. The patch gives a consistent amount of nicotine. Nobody yet knows how to use the patch and the gum together. There are some super hard-core smokers who could probably benefit from being on a patch with a gum supplement, but such a system has yet to be tested for efficacy.

Should every smoker start off with the 21 mg nicotine patch?

No. If a person has a heart problem, is a light smoker (say 10 cigarettes a day), or weighs 100 pounds or less, he or she should be started on the patch releasing 14 mgs of nicotine a day. And, of course, every prescribing dentist or physician and potential nicotine-patch patient should be well aware of the product's indications and contraindications, and all warnings and precautions associated with use of the product. This information is thoroughly outlined in the Nicoderm® booklet and prescribing instructions given to all persons enrolling in the program.

Can indoor/outdoor temperatures, which affect the pores of our skin, also affect the amount of nicotine absorbed by our skin?

Not with the patch we studied. Nicoderm® releases nicotine through a special membrane that controls the rate at which nicotine enters the bloodstream via the skin. A given amount of a carefully controlled level of nicotine comes through the patch into the skin. Temperature and type of skin have virtually no effect. Blood studies have shown that the patches release a remarkably even level of nicotine throughout the day—it's one of the patch's greatest benefits. While the smoker learns to deal with the psychological and sociological aspects of smoking cessation, the brain gets enough nicotine to keep it happy, but yet it's a reduced amount so the brain is gradually re-educated to accept nicotine at lower and lower levels.

Who are the best candidates for the patch?

Smokers who are heavily addicted to nicotine as well as highly dependent socially and psychologically. People who have to have a cigarette within the first 30 minutes of getting up in the morning are good candidates. So are people who have great difficulty not smoking when they are in church or other places where smoking isn't allowed. I heard recently of a guy who missed his daughter's wedding ceremony because he had to go smoke a cigarette. He'd be a good candidate!

So, too, are long-term smokers who started at 10 or 12 years of age. Still, people have to want to quit to be successful.

And the poorest candidates?

I'd say casual smokers. Many of these individuals are able to quit cold turkey. They tend to be light smokers. They aren't smoking because they are heavily addicted to nicotine. However, they still have to have the desire to quit if they want to be successful at it.

Can pipe and cigar smokers and users of smokeless tobacco be helped with the nicotine patch system?

The transdermal system should be applicable for other types of tobacco use, although in our study we tested cigarette smokers only. The mechanisms of nicotine absorption are different among the various uses of tobacco, but once the nicotine gets to your brain, the basic addiction is the same. We think it might be an especially good system for the smokeless tobacco users because many of these individuals use the product three hours a day or more. The patch would give them a steady level of nicotine throughout the day.

Which smokers have the toughest fight ahead of them in terms of quitting?

It is particularly difficult for people to quit if they are smoking to reduce stress. It appears from some studies that men and women have different smoking patterns, and that they generally smoke for different reasons women, to reduce stress; and men, to relax. (Of course, there are always exceptions.) A lot of people can quit for a few weeks, but most people cave in and come back within the first four months. I think those four months are the smoker's mourning period for the loss of a love object, and the loss of a highly ritualized, repetitive behavior. Smoking is not just a chemical addiction—it's also a process addiction. The act itself is very satisfying. Many people like to watch the smoke and handle their cigarettes. Smoking is composed of at least 25 sub-acts, all of which are comforting. You open your pack a certain way. You inhale a certain way. You flick your cigarette lighter a certain way. It's complex—and therefore a fascinating, and hard to extinguish behavior.

Quitting is especially tough on people who have incorporated smoking behaviors into everything they do. A number of divorces have been attributed to one partner's quitting smoking when the other didn't. Pressures are great when relationships enter the picture. It's not unusual for smokers to learn that the people around them don't want them to quit. For example, if you smoke with your buddies at break time and suddenly you decide to quit, an unspoken bond is broken.

For some, smoking serves a kind of "skunk" function—they smoke to keep other people away. Many long-term smokers like to smoke alone. It allows them to be introspective. It may sound strange to say it, but in certain ways nicotine does a lot of valuable things for a person. That's why we never tell people that smoking has been a total waste of their time.

SMOKING CESSATION: IUSD at Work on Many Levels

National Cancer Institute. Dr. Christen is a smoking cessation consultant to the NCI and part of a national team that trains oral health professionals to institute smoking cessation programs in their dental practices. Members typically travel in pairs to course sites designated by the NCI. Programs are paid for by the NCI. Dr. Christen co-wrote an NCI manual for the oral health team entitled How to Help Your Patients Stop Using Tobacco; copies are available upon request by writing to the National Cancer Institute, Office of Cancer Communications, Building 31, Room 10A24, Bethesda, MD 20892. Dr. Christen was named to the NCI's National Tobacco-Free Steering Committee, which is composed of dentists representing major dental groups throughout the country (Dr. Christen represents the American Dental Association). Meeting once or twice a year in Washington, D.C., members currently are coordinating a smoking cessation effort at federal and state levels and are also working with the World Health Organization. "Tobacco use is a global problem," says Dr. Christen. "There are an estimated 3 million tobacco-related deaths in the world every year."

American Dental Association. Dr. Christen serves as a consultant for smoking cessation and tobacco education and control.

American Association of Dental Schools. Dr. Christen and Dr. James L. McDonald, Jr. belong to the Committee for Chemical Dependency. The group's curricular guidelines on chemical dependency are due shortly for distribution to all U.S. dental schools.

Indiana University Medical Center. In the spring of 1992, an IU nicotine dependence center is scheduled to open under direction of Dr. Christen. The center is a cooperative effort of the dental school and the medical school's departments of cardiology and respiratory therapy. Patients will be seen on an out-patient basis in a second-floor clinic of the dental school. Patients will be physician-, dentist-, or self-referred. An in-patient component of the program, to be housed at University Hospital, is still in the planning stage. Although the center will welcome any tobacco users who wish to enroll in a cessation program, its primary goal will be to treat hard-core smokers for whom quitting is critical to survival, such as patients who have undergone a lung or heart transplant or suffered a heart attack. Dr. Christianne J. Guba, director of the dental school's Advanced Education in General Dentistry program, has been named Outpatient Coordinator.

The Alza Corporation manufactures Nicoderm® for Marion Merrell Dow Inc., Kansas City. Dr. Christen is a consultant to Marion Merrell Dow, Inc.

How long should a smoker stay on the patch?

As I said earlier, the program aims to wean smokers from nicotine in 10 weeks, but generally we're satisfied if we can get people off the product within six months. Some smokers have needed to remain on the nicotine gum for up to a year.

How long does it take to rid the body of nicotine?

Most of the nicotine leaves your system within a week! Symptoms you feel after that are probably psychological. People who use the "cold turkey" method of quitting smoking commonly have severe symptoms the first four days. As a result, many people who quit in this manner cave in on the third or fourth day because the nicotine hasn't yet completely left their system.

How much does the patch cost?

It varies, but generally is similar to what it costs to smoke two packs a day if you buy cigarettes out of a machine—about three or four dollars per 24-hour patch.

How many dentists continue to smoke?

Only 8-11% of dentists in the U.S., and the same percentages hold true for dental hygienists.

Why should the dental team be knowledgeable about nicotine patches?

Tobacco is a dental problem. Both smoked and smokeless tobacco affects the mouth, the oral cavity, and the head and neck area in a dramatic way. The effects of tobacco use on gingival tissue are so striking we now believe that in some manner smoking "causes" periodontal disease. Together with my colleagues Dr. James L. McDonald, Jr. and Joan A. Christen, I recently completed a two-year review of 800 articles, which were boiled down into a review of the current literature on the impact of tobacco on nonmalignant and precancerous oral and dental diseases and conditions. This published teaching monograph, which is available to anyone upon request, is currently being widely distributed by the National Cancer Institute (NCI) and the Centers for Disease Control in their smoking cessation training for dentists. The NCI has just ordered 8,000 copies to be sent to dentists throughout the country.

We are trying to make the point that when dentists help their patients quit smoking, they are treating a dental condition. That is the NCI's premise—smoking is a dental and medical problem. As health care providers, we are interested in both oral and systemic health. Dr. Koop pointed out a number of years ago that there's no reason why dentists shouldn't be right in the middle of this effort. The number of premature deaths every day in the U.S. from cigarette smoking is estimated at nearly 1,200—the equivalent of two fully loaded 747s crashing and no one walking away. That's more than 400,000 excessive deaths every year related to a serious health problem.

Dentists can easily bring their patients who smoke into a preventive program without taking an exorbitant amount of time out of their practice. We advise dentists to take advantage of what we call "teachable" moments—2 to 4 minutes of time spent at chairside when they see a patient with tobacco-related leukoplakia, bad breath, stained teeth, or periodontal disease.

We recommend the four A's: ask every person whether he or she uses tobacco, smoked or smokeless; advise users to quit; assist them in quitting; and arrange for follow-up. Patients should be approached in a low-key manner. Studies we did here in Indianapolis showed that patients were receptive to the idea if the dentist approached them in a sensitive, caring manner. Frankly, I believe most patients now expect us—their health care providers—to raise the issue of smoking.

What age were you when you started smoking, and why did you start?

I started experimenting in my late teens and eventually smoked regularly for about 10 years. Like most people, it began out of peer pressure—an "out behind the barn" experience. As a young collegiate, I smoked a pipe because I thought it looked sophisticated. Then during my dental school days I worked on a ranch in South Dakota where all the ranch-hands smoked. I even learned to roll my own—I thought of myself as an independent, in-control, square-jawed Marlboro man! I bought the whole image!

What kind of smoker were you?

I was a pack-a-day "secret" smoker after I became a family man. I would come home from work as a young dentist and my wife would say, "You smell smokey." I'd answer: "Yeah, I'm working in a real nest of smokers." A lot of people only smoke in the bathroom, and I did a lot of that. I never smoked around my family. My wife didn't even believe I smoked for a long time. My dad was a heavy smoker, although he quit for good several decades ago. I don't know why I was so secretive. The first surgeon general's report on smoking was published in 1964 (there have been 20 since). Until 1964, the written warnings weren't there.

How did you quit?

I quit the first time I tried—cold turkey. I didn't know of any other way. I hadn't even heard of a quit-smoking clinic. I started jogging, so that helped to get me off smoking. Eventually, the idea that I was a slave to something bothered me—a lot of people eventually leave smoking because they realize they have lost their freedom to a cigarette. That's the true definition of an addiction—a behavior one must compulsively practice. In this circumstance, some individuals believe they have no choice. The Seventh Day Adventists knew smoking was bad way back in 1959 when they started their Five-Day Quit-Smoking Program. A year after I quit smoking on my own I got my start in smoking cessation programs with the Adventists, even though I'm not a member of that church.

We've heard you say that you still sometimes have the desire to smoke. Why is that?

Because over the years smoking becomes such a highly repetitive act. If you smoke a pack a day, you're repeating a stimulus-response-reward act 73,000 times a year. You drive the behavior into your brain like a groove as deep as the Grand Canyon, and you never entirely get over it. It's not an overwhelming feeling anymore, but I don't think I ever look at a cup of coffee without also thinking about a cigarette. The Marlboro man on the billboard on the way back from the airport makes me think about a cigarette. For many people, talking on the telephone or driving in their automobile is the

"trigger." A lot of smoking is done to control your emotions and your mood. We smoke to reduce and control our undesirable emotional states. Nicotine reaches your brain within 7 to 10 seconds after you inhale. That means you can also reduce your stress within 7 to 10 seconds, and there's nothing else that works faster—not even an injection directly into the blood stream.

What in your opinion is the greatest single hurdle in quitting smoking?

Getting beyond denial. The noted psychologist John Bradshaw says that an addiction is like having a "hole in the middle of yourself." Depending upon our addiction, we use certain behaviors—smoking cigarettes, overeating, or drinking too much alcohol—to stuff that hole, and fill an emotional need. In essence, we medicate our emotions. You can't quit smoking it you can't admit to yourself that you have an addiction problem. That frequently means that a person must somehow "hit bottom" before he or she is ready to quit smoking.

But if we don't medicate our emotions, how are we supposed to deal with our stress?

You have to realize that smoking cessation is a long-term process. Early in recovery, each day is a struggle to restructure your life without cigarettes. When you do that, you begin to discover there are other, healthier ways to control your emotions and your stress—by exercising, eating a nutritional diet, getting a proper amount of rest, getting involved in an interesting hobby. As I said before, I found an outlet in jogging. It's ultimately up to you to find alternative and healthier ways to deal with emotions that you used to medicate with cigarettes.

You are a tireless crusader in the fight against cigarette smoking. Why?

I like to think of it this way: We've been given the opportunity to introduce to an entire profession the concept of employing smoking cessation programs in the dental office. Think of the lives that are being saved and the unnecessary suffering that is being prevented. According to Dr. Koop, smoking is the number one health problem in the U.S. It's hard to describe the satisfactions derived from this work, but I certainly feel it when someone walks up to me at the mall—and this has happened a number of times—and said, "Hi, Doc. You don't remember me, but five years ago I quit smoking, and you helped me do it." It's the individual, of course, who did the real quitting, but such instances make me feel as if this is the most important work that I'll do in my professional life.

A secondary satisfaction is the therapeutic effect this work has had on my own life. It has helped me to enhance my own life skills, and to expand my clinical horizons.

The trend toward a smoke-free environment has made great progress in recent years, but there doesn't seem to be much progress in preventing people from picking up this addiction in the first place. What more needs to be done?

I think Dr. Koop was right when he said the way to eventually lick cigarette smoking is to make this activity a socially unacceptable behavior. Admittedly, it's a slow process. However, you have to win small victories to gain larger ones. And these little victories are beginning to snowball. It's no longer

socially acceptable to smoke in most public places. Many smokers say they're quitting because it's just too much of a nuisance anymore. If you want a cigarette at the dental school now, you have to stand out on the loading dock to smoke it!

We mustn't forget, however, that tobacco companies are as robust as ever. Indiana is a tobacco state. We rank within the top 10 states in tobacco production, and Indiana's per capita consumption is also high. Advertisers are targeting women, girls, minorities, and people from lower socio-economic backgrounds A recent article in the *New York Times* indicated that cigarette smoking is rapidly becoming a "blue collar" disease. Before long it is predicted that more women will smoke than men. Some individuals are smoking more than ever.

One thing I can do personally is to help ensure that addictions are addressed in the dental school's curriculum. IU dental students now get about 10 hours of instruction on chemical addictions through the fourth-year Current Concepts program. About half of that time is spent discussing tobacco and what dentists can do for their patients in this arena. The students are given a 30-page monograph entitled A Smoking Cessation Program for the Dental Office, which was written by five members of the IUSD faculty.* Now in its third edition, the monograph is available to anyone upon request by writing to me.

Do you have anything else to add?

When speaking of side effects with the patch or the gum I think it's important to compare them to the alternative. When you inhale cigarette smoke, about 4,000 chemicals and gases come along for the ride into your body. When you chew the gum or wear the patch, you take in only nicotine—and reduced levels of it. Once you stop smoking, your lungs begin to clear out immediately.

The message to the current smoker is one of hope: Most of the effects of smoking are reversible. It's not easy to quit smoking but it is the right and intelligent thing to do. And it pays huge dividends in the long-run.

Who should dental professionals contact if they want to know more about nicotine withdrawal therapy?

I welcome questions about nicotine withdrawal therapy or any other topic pertaining to smoking cessation. Write to me care of the dental school's address or call 317/274-3859. I'd be glad to send a packet of materials to get dentists started in their own office smoking cessation program. Also, reprints o the JAMA article detailing the nicotine patch study are available from me upon request. \square

^{*}Dr. Christen and Dr. James L. McDonald, Jr., professor, Joan A. Christen, research associate, and Dr. Christianne J. Guba, assistant professor, all of the Department of Preventive and Community Dentistry; and Jennifer A. Klein, assistant professor of dental auxiliary education, division of dental hygiene, South Bend campus



Message from 'MOM'

Oral Health Is Basic to Wellness

By Karen M. Yoder*

Dental hygienists hitch a ride aboard the IU School of Nursing's MOM-mobile to bring a much-needed message about oral health to pregnant women in a downtown Indianapolis neighborhood.

s Indianapolis' reputation as an amateur sports mecca was skyrocketing in the mid '80s, its reputation as a healthful place for infants was plummeting.

In 1984, 1986 and 1987, a higher proportion of black infants died in Indianapolis than in any other major United States city. Lack of comprehensive prenatal care was cited as a major contributing factor. Less than one-third of all black women in the community were receiving adequate prenatal care.¹

In partial response to this crisis, the Maternity Outreach and Mobilization (MOM) Project was initiated through a broad-based community effort involving organizations from both private and public sectors. The idea was for health-care givers to reach out to low-income pregnant women by making the health-care services available to the women in their own neighborhoods.

The Charlene S. Lugar Birth Defects Grant Fund of the March of Dimes became the conduit for contributions used to purchase and equip a 35-foot-long mobile unit known as the MOM-mobile. It is operated by the Indiana University School

^{*}Yoder (ASDH '62, MSD '83) is consultant to the Dental Division of the Indiana State Department of Health; assistant professor of dental auxiliary education, Indiana University-Purdue University at Fort Wayne, and of preventive and community dentistry at the IU dental school; and coordinator, IUSD Community Outreach Team.

of Nursing. Local organizations, foundations and businesses generously donated more than \$170,000 to get the project—and the mobile unit—rolling. The vehicle was customized to include a reception area, a restroom and two examining rooms, one of which contains an \$80,000 ultrasound machine, a useful diagnostic tool for determining the best means of managing a pregnancy.

The MOM-mobile recently celebrated its second birthday. Since March 5, 1990, the mobile unit has visited 11 different neighborhood clinics and currently serves seven clinics on a regular basis.

MOM Is Thorough

In addition to ultrasound examinations, the MOM Project also provides low-income prenatal patients with two neighborhood care coordination teams. Each team consists of a public health nurse, social worker, and substance use counselor, as well as four community health workers who are women from the neighborhood trained by the MOM Project staff to provide education and social support. The team's duties include identifying cases, visiting patients' homes, assessing patients' specific needs, coordinating services, and offering education and counseling to all pregnant women who live in each of the neighborhoods.

Acting as an extension of the neighborhood clinics, the MOM-mobile makes ultrasound examinations conveniently available at each site every other week. Before this program began, these women, many with undependable transportation, had to travel to the IU Medical Center's Regenstrief Health Center for ultrasound examinations. Many simply failed to arrive for their appointments. Bringing ultrasound equipment into the neighborhoods has reduced the 60% failed appointment rate to 15%.²

The project is under the direction of Dr. Joanne B. Martin, IU assistant professor of nursing. The MOM-mobile is staffed by Cindy Shike, an ultrasonographer in IU's OB/GYN department, and Ed Childress, the MOM-mobile's driver. "Driver" may be Mr. Childress' job title, but it certainly is not a comprehensive description of his duties. He is also facilitator, welcomer, coordinator, record keeper, educator and MOM Project promoter.

Oral Screening Joins the Project

In July, 1991, the IU School of Dentistry's Community Outreach Program, in conjunction with the Indiana State Department of Health (formerly the Indiana State Board of Health), became a part of the MOM Project. Dr. Martin and Michael J. Finnerty, project coordinator, welcomed the offer to include oral screening. Since the Marion County Health Department (MCHD) provides dental services at several clinic sites, we decided to pilot the MOM-mobile dental project at Fountain Square, where there is no dental facility.

One of the exam rooms in the MOM-mobile now contains the supplies and educational material needed to conduct oral screenings and provide individualized oral health instructions. Our objectives for the oral health care program are similar to the goals of the ultrasound program: to make service easily accessible and to inspire the women to seek care and follow through on appointments, with the ultimate goal of improving their health.

ountain Square Clinic, on the near southside of town, is a busy site where prenatal services are offered on Thursdays. Approximately 90 patients are scheduled into the clinic daily; typically about 75 percent of these women keep their appointments, but the turnout for oral screenings is usually low-about 10 women daily. Clearly our work is cut out for us because a high percentage of lowincome pregnant women have seriously compromised oral health. Poor oral health is a contributing factor to poor pregnancy outcomes, but inspiring an already overburdened pregnant woman to seek yet another type of care is not an easy task. Unfortunately, many of the women who receive services at the prenatal clinic sites do not perceive oral health as a priority. Other more pressing needs occupy their minds. Consequently, even though the MCHD gives a dental appointment to each woman who registers at one of the clinics, many of the appointed are "no-shows."

Oral screenings at Fountain Square have been staffed primarily by dental hygiene faculty members from IU's dental school and Indiana State Department of Health. Jaclyn Gray (ASDH '57) joined the effort in 1992. When not on board the MOM-mobile, Jaclyn works as an insurance clerk in the Indianapolis medical office of her husband, Dr. Kenneth

In the photo series, a room at the back of the MOM-mobile serves as a dental screening "office" for Jacyln Gray (standing) and other dental hygienists who volunteer their services for the MOM Project. Mom-to-be Tammy Sutt took advantage of the mobile unit's dental services during a visit to the Fountain Square Clinic in March.



Gray. She practiced dental hygiene for several years in the offices of Dr. William J. Borman ('42) and the late Dr. John W. Geller ('32).

Jaclyn and I are the MOM Project's dental screening and referral coordinators. We schedule and train volunteer screeners, maintain communication with MOM Project administrators, follow up on referrals to MCHD Dental Clinics, and formulate short- and long-range goals.

"Even though I'm the 'new kid on block,' I already have a positive feeling about this program and am confident it will succeed," says Jacyln Gray. "There's definitely a great need for the services we are providing."

Other dental hygienists who have been key participants of this program are Carmine G. McDonald (ASDH '63, BSPH '64) and Suzanne S. Germain (ASDH '81), both of the Indiana State Department of Health and part-time dental hygiene instructors at IU; and Louise M. Judd, a University of Michigantrained dental hygienist who holds a full-time appointment as clinical assistant professor of dental hygiene at IU.

We begin our work day at the Fountain Square Clinic by encouraging participants to come out to the unit from the clinic for an oral screening. A variety of educational aids are used but we find that the most effective seems to be a hand mirror. (It is difficult to pretend a problem doesn't exist when it is visible in the mirror!) Children are welcome aboard the van with their mothers; they are also invited to have a screening as well as a free toothbrush.

Obviously, it would be a futile exercise to offer screenings and referrals to women for whom there is no access to restorative services. Indianapolis, however, is unique in the state of Indiana in having dental services available for children and low-income pregnant women at low or no cost. Wishard Hospital operates six dental clinics that offer low-cost dental services to women who qualify. The services cover the term of the pregnancy and one month post-delivery. The MCHD dental program is directed by a dental hygienist with professional consultation from a community dentist. Services are provided through five contractual dentists and other staff.

he typical woman who climbs aboard the MOM-mobile for an oral screening has not had a dental appointment for several years, does not wish to seek dental care, and is somewhat fearful of dentistry. Dental health varies greatly among these patients; we see everything from excellent oral hygiene to serious periodontal disease, moderate need for restorative work to rampant caries. A high percentage of the women are heavy smokers, so smoking cessation is a priority educational component. The role of the oral screener is to individualize information about oral health to fit the specific needs of each patient, and to motivate each woman to work toward attaining optimal oral health for the welfare of her baby as well as herself.

Frankly, women are often reluctant to step out of the clinic and into the mobile van. It usually takes some cajoling on our part.

"The dental project is certainly a verification that you don't get a lot of 'takers' just because the service you offer is free," says Jaclyn. "It's a common occurrence for a clinic patient to agree to a dental appointment and then say, 'I'll come out to

the van, but I have to go to the restroom first.' And that, of course, is the last we see of her.

"A lot of the women I've encountered are reluctant to come out to the van because they are experiencing feelings of shame and guilt as well as fear," Jaclyn continues. "They are well aware of the shape their mouth is in and they know when they've been neglecting their oral hygiene. What works best for me is to try to develop trusting relationships by spending a lot of time inside the clinic. I work at establishing a friendly atmosphere by talking with the women about all kinds of every-day matters. It's helpful if a woman has a child or children with her; she often will agree to come out to the van so at least the children can be screened. The mothers I've met are concerned about their children's teeth."

nce they realize they are being approached in a non-judgmental, caring manner, and once they understand the simplicity of the procedure itself, I have found that these soon-to-be mothers invariably seem relieved and then interested in understanding the role that oral health plays in their pregnancy.

Women needing follow-up are referred to one of Marion County's dental clinics if they have no third-party coverage, or to a Medicaid-provider dentist if they are eligible for comprehensive health services through that program. Screening records are forwarded to MCHD Dental Clinics so that they will be expecting calls from these women, will know the severity of their problems, and will be able to track the rate of follow-up pursued after the screening and educational session.

Is Oral Care in MOM's Future?

Although only one site was targeted for the pilot, our goal is to broaden the services to include all other Marion County prenatal clinics where no dental facility exists.

The position of oral screener is currently voluntary. It has been staffed by dental hygienists who, since July 1, 1991, can legally conduct oral screenings on adult patients in a public health setting. It is hoped that funding will become available to initiate a salaried position for a dental hygienist who would join the care coordination team as an oral health screener/educator.

Contributing to the MOM Project is but one example of how dental professionals can help cultivate an understanding among colleages in other health-care fields of the valuable role oral health plays in total wellness. By entering into the planning and implementation stages of health related projects, dental personnel can help assure that oral health services are regarded as essential to the wellness program. If dentistry doesn't ask the question—"What is the oral health component of this project?"—it's unlikely that anyone else will. A multisectorial approach to health promotion is in the best interest of the recipients of health care. Dentistry needs to be a dynamic, enthusiastic partner in proposed community health projects.

MOM would want it that way! \Box

REFERENCES

- 1) Martin, J.B.: MOM-mobile brings ultrasounds to moms. American Journal of Public Health $81(8):1073-1074,\ 1991.$
- 2) Personal communication with Michael J. Finnerty, MOM Project coordinator, March $12,\,1992$

50TH ANNUAL FALL DENTAL ALUMNI CONFERENCE ANNIVERSARY CELEBRATION

Indiana University School of Dentistry Alumni Association September 24-26, 1992 Bloomington, Indiana

Thursday, September 24th

8:00 am-5:00 pm "Huckelberry Memorial Golf Outing" - IU Golf Course 1:00 pm-5:00 pm Registration at IMU Conference Lounge

Friday, September 25th

7:30 am-8:30 am
8:00 am-5:00 pm
8:45 am-11:00 am
noon-2:00 pm
Registration - Conference Lounge, IMU
Board Meeting - Distinguished Alumni Room
Luncheon with Coach Mallory

Hoosier Room, Memorial Stadium;

Awards, Dixieland band
Afternoon Activities Bike Tour - Morgan-Monroe State Forest

Tennis Tournament Golf Tournament

6:00 pm Registration - Alumni Hall

6:00 pm-7:00 pm Reception - Host Bar, Alumni Hall

7:00 pm 50th Anniversary Celebration Buffet Dinner

Alumni Hall (casual dress)

8:30 pm Class reunion receptions - Union Building

Saturday, September 26th

7:00 am-9:00 am Table Clinics - IMU, Georgian Room

9:15 am-10:30 am

Breakfast Buffet Pre-game Brunch - Alumni Hall

11:00 am*

Board buses for football game - IMU

11:30 am* Pre-game Tailgate, co-sponsored by School of

Dentistry Alumni Association and the Varsity Club

Stadium Parking Lot

1:00 pm* Kickoff, Indiana vs. Missouri 20 minutes after game Board buses back to IMU/Hotels

*(tentative)

Mark your calendar!

For more information, call (317) 274-5060

Responding to Tragedy in Evansville, Indiana

By Susan Crum



Military personnel and firefighters look through the wreckage of the transport plane that crashed in Evansville in February, killing 16 persons. Other air disasters in Indiana's recent history include an Air Force jet that crashed into a Ramada Inn in Indianapolis, killing 10 persons (1987); a DC-3 charter plane that went down shortly after takeoff in Evansville, killing 29 (1977); the collision of an Allegheny Airlines jet and a small, student-piloted plane over rural Shelby County, killing 83 (1969); and the explosion and crash near Cannelton of a Northwest Airlines jetliner en route to Miami from Chicago, killing 63 (1960). Photo reprinted with permission of The Indianapolis Star. Staff photographer, Jeff Atteberry.

Well-prepared dental records lead to swift answers from forensic examiners after a military transport plane crashes into an Evansville restaurant, hurling a deadly fireball into the hotel next door. isaster strikes suddenly. It is a brutal thief, robbing human beings of life, and in some cases, their identity.

On Thursday, February 6, 1992, at 9:48 am, disaster came to the city of Evansville in the form of a plane that plunged from the sky. A Kentucky Air National Guard C130-B crashed into the rear section of a Jojos restaurant near the Evansville Regional Airport, propelling a fireball of burning jet fuel into a center section of the adjacent Drury Inn hotel. Persons inside the hotel included 11 employees of Plumbing and Industrial Supply of Evansville who were enrolled in the final portion of a three-day conference on quality control.

According to a report in the *Indianapolis Star*, the man who had been leading the plumbing and supply seminar shielded his face from the heat of the blast and managed to locate the

entrance of the conference room. With shirt ablaze, he fell to the floor and rolled down the fourth-floor hallway to extinguish the flames on his clothing. He escaped to safety by running onto a balcony on the outside of the building just moments before the hotel's fire doors automatically slammed shut behind him.

Although there were other remarkable stories of survival on that winter day in Evansville, February 6 will be remembered for its tragic loss of life. The crash killed all five crew members aboard the plane, a waitress and a dishwasher inside the restaurant, and nine of the supply firm's employees inside the hotel. All victims were burned beyond recognition. Nineteen other persons sustained injuries in the crash.

On that morning, Dr. Donnell C. Marlin (DDS '56), a full-time Indiana University assistant professor of dental diagnostic sciences, was teaching predoctoral dental students in Indianapolis, 175 miles north of the crash site. As one of four dentists in Indiana to hold certification in forensic odontology, Dr. Marlin is routinely called by county coroners and other officials to aid in the identification of bodies when circumstances of the death make visual recognition impossible.

By midday, Indianapolis radio stations were reporting widely varying details of the disaster. Dr. Marlin quietly went about the business of the school day, knowing that if his services were needed he'd hear from his colleague, Dr. Rodney F. Brown (DDS '52).

Dr. Brown, a dental practitioner on the West Side of Evansville, serves as deputy coroner and deputy sheriff for Vanderburgh County. He is also another of Indiana's board certified forensic dentists.*

"I was working in my dental office when I first heard the news broadcast," says Dr. Brown. "I immediately called the coroner to let him know I was available and would be standing by."

Dr. Brown notified Dr. Marlin of the accident in the afternoon, and followed up with a call to his home in the evening. "Rodney had also talked to Phil (O'Shaughnessy), who was available to come down from Fort Wayne," says Dr. Marlin. "But since I could get there faster, we decided that I'd go instead." Dr. Marlin invited Dr. Ted Barss, a second-year graduate student in dental diagnostic sciences, and Ted's wife, Dr. Jeanne Barss, a first-year graduate student in periodontics, to accompany him.

Dr. Marlin drove back to the dental school at 10 pm to pick up his clinical camera and the Barsses. When the Indianapolis dentists arrived in Evansville after 1 am on Friday, they met Dr. Brown at the Charles R. Althaus County Morgue, a newly built regional facility named for Vanderburgh County's coroner. Althaus and several officials from other health and service organizations also were there.

Collection of antemortem dental records by law enforcement agencies had commenced many hours earlier, and some of the records were already available to the team. Although speed in identification is essential for the sake of the families

Most dentists will never perform a dental identification on an unidentified body, but every dentist is a potential member of a forensic team.

involved, a forensic team's primary goal is to provide accurate information. Given the lateness of the hour, the dentists decided to rest up from the long car trip and re-group in the morning. Pace is important. "You don't want to over stress the people involved in making identifications," says Dr. Marlin. "Working around the clock isn't wise—it can breed errors."

After a short night in a nearby motel Dr. Marlin and the Barsses returned to the morgue, where Dr. Brown had already begun preparing postmortem records for the non-military casualties. Responsibility for identifying members of the air crew, who had been stationed with the 123rd Tactical Airlift Wing in Louisville, fell to an Air Force mortuary team and the Federal Bureau of Investigation.

he dental group was assisted by Dr. Gordon E. Kelly (DDS '64), chair of the division of allied health at the University of Southern Indiana, and several USI students, who made postmortem radiographs of the deceased. Dr. Marlin prepared two sets of Kodachrome slides of the remains—a set for his records and a set for Dr. Brown's. Reports of the findings were recorded on forms designed by the Armed Forces Institute of Pathology.

Three means of identifying victims are accepted in a court of law—visual recognition by next of kin, dental records, and finger- and/or footprints. Most civilians cannot be identified by prints because no antemortem fingerprints are on file. "Teeth are good for identification purposes, especially if fire has been involved," says Dr. Marlin, "because the lips, face, tongue and musculature all protect the teeth."

Military personnel are footprinted as well as fingerprinted when they enter the service, Dr. Marlin learned from Air Force representatives at the Evansville morgue. "In the event of fire, fingerprints may be destroyed, but military boots often

^{*}There are about 100 certified forensic odontologists in the nation today. Other Indiana dentists holding diplomate status in the American Board of Forensic Odontology are Drs. Phillip E. O'Shaughnessy (DDS '60), of Fort Wayne, and S. Miles Standish (DDS '45), of Indianapolis.

protect the feet," he says.

Positive identifications on all but one of the civilians were achieved by dental record comparisons; four of the national guardsmen were identified by finger- and footprint-comparisons undertaken by the FBI. At the request of the Air Force, Dr. Brown performed a comparison of antemortem and postmortem dental records on one of the military men, and the FBI did a print comparison on one of the civilians whose finger-prints were on file with the U.S. Navy.

A number of factors led to swift identification of most of the victims. All of the unidentified bodies were associated with known individuals presumed to be in the wreckage. All of the civilians had resided in the Evansville area, so records were quickly obtained from local dental offices for all but one person. And the dental records themselves passed the forensic team's scrutiny. "Good antemortem records are very helpful in the identification process," says Dr. Marlin. "The patient records we evaluated in Evansville contained good bitewing films that had been properly processed and mounted."

One of the limitations of antemortem dental records in general is that some dentists don't chart their patients' pre-existing dental work, Dr. Marlin explains. "We chart every detail we see on the antemortem x-rays in addition to those recorded by the dentist to produce records for comparison with postmortem materials."

Most of the identifications were completed by early Friday evening, so the Indianapolis group headed for home (Dr. Brown completed two additional examinations on Saturday). The dental findings on the deceased were submitted to the county coroner one by one, as each identification was made, so that he could release the information to the public as quickly as possible. A final report on all of the results was also given to the coroner.

he Evansville crash was the largest disaster Dr. Brown has handled as a forensic investigator; it required his full attention and—for nearly three days—most of his time. "Counting the hours I spent in practice on Thursday morning, I worked 19 1/2 hours before going home," says the 66-year-old practitioner. "I rested in my recliner for 2 1/2 hours, then returned to the morgue for 11 1/2 more." The long hours devoted to the task are given not so much for the dead, he says, as they are for the survivors.

Dr. Brown was pleased with the way the investigation was conducted. "I was impressed at how well all of the various investigative teams worked together," he says. "As for me, having Dr. Marlin and the Barsses there to assist was very helpful. Dr. Marlin is known for his meticulous approach to forensics I also appreciated the help I received from Kelley Knaebel, a full-time dental assistant in the Evansville office of Dr. Brent Grafe ('81); she has assisted me with forensic cases on several occasions."

In an interview with *The Evansville Courier* Dr. Brown said everyone involved in the identification process praised the city's new regional morgue. "Charles Althaus should be congratulated on his foresight to build a regional morgue," he said. "The Air Force said the only thing wrong with our morgue is that they couldn't put it on a flatbed truck and take it with them."

Valuable anatomic landmarks, says Dr. Marlin, are "anything that shows up on an x-ray, including sinuses and trabeculations in bone."

Although the Evansville dental team had included two of the state's four certified forensic experts, any licensed dentist or physician is legally qualified to perform dental identifications in Indiana. "There are about 25 dentists who belong to the Indiana Society of Forensic Odontology," says Dr. Brown. "Their contributions to forensics in this state have been of great value."

Dr. Brown made his unplanned entry into the world of dental forensics 15 years ago, after an airplane crash in his city claimed the lives of 29 persons, including the University of Evansville's basketball team. "At the time I had said publicly that the lack of fire in this crash was fortunate in terms of ease in identifying the bodies because fire victims usually must be identified by dental records. The coroner heard this, and asked me to speak on forensic dentistry to his staff. In the beginning I didn't know much more about the subject than that one statement, but I began to take courses. And then the coroner asked me to become deputy coroner."

Dr. Marlin's interest in anatomy and radiograph interpretation, as well as his association with longtime IU colleague and forensic expert Dr. S. Miles Standish, now retired, led him to pursue dentistry as it relates to the law. Dr. Marlin most frequently performs forensic dentistry on single victims of accidents or homicide in central Indiana; requests usually come from Dr. John E. Pless, director of forensic pathology for Indiana University Hospitals and deputy coroner for Marion County.

"Forensic dentistry is not difficult," Dr. Marlin says. "Doing dental chartings is quite simple compared to the other things dentists do. Forensic dentistry is enjoyable if you are observant, if you like solving puzzles, and if you like being thorough."

By thorough, Dr. Marlin means that forensic dentists must prepare comprehensive, accurate records that will hold up in court. With about a decade of experience now behind him, Dr. Marlin has been involved in more than 30 identification cases in Marion County in the past two years. When he is brought into a court case as an expert witness, Dr. Marlin likes to use dual slide projection to give the jury a simultaneous view of ante- and postmortem records. He finds that forensic work is best done by approaching every case as if it will have to be defended in a court room, no matter how matter-of-fact the case may appear on the surface. "Forensic dentists should do all of the identification procedures themselves," he explains. "My advice to anyone involved in this aspect of dentistry is: Don't delegate *any* of the tasks. Make every type of record you can think of, and keep a good account of everything you do."

ost dentists will never perform a dental identification on an unidentified body, but every dentist is a potential member of a forensic team. Any one of the hundreds or thousands of patient records a dentist holds in office files may one day wind up as an antemortem record in a court of law.

"When I was in practice I never thought of my patient records as being potentially important to an identification case," says Dr. Marlin, "and I don't imagine very many other dentists do, either. But we've always had fine cooperation from Indiana's dentists in submitting antemortem records, and their records have been adequate. Of course, we don't expect to get a perfectly exposed, perfectly mounted, complete set of full-mouth x-rays on every unidentified person. But we'll usually get a good set of bitewings and maybe a panorex. Forensic dentists can do a lot with these records."

Valuable anatomic landmarks, says Dr. Marlin, are "anything that shows up on an x-ray, including sinuses and trabeculations in bone. I once did a case based on the outline of frontal sinuses. And positive identifications have even been made from skull indentations caused by the middle cerebral artery."

At Evansville, Dr. Brown made one positive identification based on a single tooth.

At Evansville, Dr. Brown made one positive identification based on a single tooth. "This person had small-pit amalgams—when I was in school we called them 'snake eyes,' " he says. "There were three snake-eye occlusal amalgams in a row on the lower left first molar, and they matched up perfectly in a comparison of the ante- and postmortem records."

The 1985 Indiana law requiring new dentures to be marked with the patient's ID also aids forensic specialists.

Dr. Marlin says that thoroughness is the key to good-record

making in the dental office—if records are complete, forensic dentists can work around just about any other problem they encounter. "Handwriting can be a problem," he says, admitting that his own is sometimes less than ideal. "There are also a number of annotation systems out there—some dentists have developed their own special shorthand that sometimes requires translation. But everybody in Indiana has been cooperative, and to date we've never failed to do an identification because of poor antemortem records."

Dr. Marlin describes as "first rate" the assistance he has received over the years from pre- and postdoctoral students such as the Barsses. The Evansville crash was reminiscent of a similar disaster in October 1987, when an Air Force jet crashed into a Ramada Inn near the Indianapolis airport, killing 10 persons. "Within two hours of that crash I had a list of 30 student volunteers ready to help," recalls Dr. Marlin, who offers a predoctoral intramural course on forensic dentistry. (Dr. David E. All {'88}, then a fourth-year dental student and one of Dr. Marlin's assistants on the Ramada Inn case, wrote an award-winning essay about his experience which was later published in the *Alumni Bulletin*.) Dental students are especially valuable in such instances, says Dr. Marlin, because they take direction and follow instructions well.

When Dr. Brown made arrangements last fall to attend a series of national forensic meetings held in New Orleans in mid-February, he had planned on being a member of the audience, not a presenter on the program. But the Evansville air disaster was national news, and at the request of the American Society of Forensic Odontology, he and Dr. Marlin, who also traveled to New Orleans, hastily assembled a slide presentation from their own data and newspaper reports.

Just two weeks after the fiery crash, Dr. Brown stood before his forensic colleagues from around the country—an unsettling reminder that disaster strikes suddenly. He shared with them a first-hand account of how the city of Evansville responded to its tragedy, and how forensic team members worked with the community at large to preserve the identity of those who perished. \square

Article prepared from interviews with Drs. Donnell Marlin and Rodney Brown, and from reports published in *The Indianapolis Star* and *The Evansville Courier*.

Scholarships and Awards



1991-1992

PHOTOS BY MIKE HALLORAN





ROBERT J. ALBER MEMORIAL SCHOLARSHIPS to dental students (left) Shawn R. Long, 2nd yr; Douglas A. Jansen, 2nd yr; Thomas E. Lantz, 3rd yr; Lisa M. Lindsey, 2nd yr; Peter J. Brown, 4th yr; John J. Shank, 3rd yr; Angela R. Becker, 2nd yr; Steven C. Hollar, 3rd yr; and William R. Flora, 4th yr

The scholarships are awarded to residents or former residents of Noble, Elkhart, LaGrange, or Koscuisko counties. They are named for a graduate of the IUSD Class of 1947 who was a dentist in Ligonier. Dr. Alber died in 1970.



HARVEY G. LEVINSON MEMORIAL SCHOLARSHIP to dental students I. Corina McNicholl and Scott J. Findley, 2nd yr

The scholarship perpetuates the memory of a 1960 graduate of the IU dental school who died in 1986. Dr. Levinson had practiced in Sherman Oaks, California, with his uncle, Dr. Irving S. Newmark ('45) since 1961. Given in part for academic achievement, the award was established in 1987 by Dr. Newmark, of Tarzana, California, and Dr. Levinson's brother, Steven N. Levinson, of Studio City, California.

The annual awards to Indiana *University students of dentistry* and dental hygiene (IUPUI campus) are presented throughout the school year. They are made possible by contributions from several organizations and from individuals who have chosen to honor the memory of loved ones through the creation of scholarship funds. On behalf of this year's 47 recipients, the School of Dentistry expresses gratitude to everyone who has helped make these much-appreciated awards possible.



SIGMA PHI ALPHA SCHOLARSHIP to dental hygiene student Tommi L. Davis, 2nd yr

Scholarships for academic excellence are awarded by Theta Chapter of the national dental hygiene honor society.



JOHNSON PUBLIC HEALTH DENTISTRY SCHOLARSHIP to dental student Steven R. Schimmele, 4th yr

Mr. Schimmele has organized several on-site visits to elementary schools, where he and other volunteers have presented oral hygiene programs. He has also conducted oral cancer screenings as a volunteer at senior citizen centers.

Dr. Donald W. Johnson, a 1956 graduate of IUSD now residing in Carmel, created the scholarship in 1975 to honor his parents, Frank R. and Jessie B. Johnson.



A. REBEKAH FISK MEMORIAL SCHOLARSHIPS to dental hygiene students (left) Mary K. Pence, 2nd yr; Michelle A. Pfundstein, lst yr; Darlene B. Carter, 2nd yr; Inessa Ostrovsky, 1st yr; and Katherine R. Reid, 2nd yr

The scholarships are given for academic achievement and in memory of IU's first director of dental hygiene. Miss Fisk established the program in 1950 and served as its director until her retirement in 1970. She died in 1982.



CYRIL S. CARR DENTAL RESEARCH SCHOLARSHIP to dental student Katrina L. Huizing, 3rd yr

In 1990 Ms. Huizing was one of six IUSD students to receive a short-term training grant from the National Institutes of Health. Working under the guidance of faculty in oral microbiology, she investigated the antimicrobial abilities of a gypsum (Type IV) stone containing a disinfectant, and presented her results at a meeting of the Indiana Section of the American Association for Dental Research. She is currently working on a follow-up project, with results to be presented at an upcoming national AADR meeting.

The Cyril Carr scholarship is named for a 1916 graduate of the Indiana Dental College who was a lifelong resident of Indianapolis. He practiced dentistry for 50 years and died in 1975.



HOWARD K. AND SHIZUKO MAESAKA AWARD to dental students Lorre A. Campbell and Daniel A. Burns, 3rd yr

Presented for excellence in preclinical technique in prosthodontics, the award honors a 1926 IUSD graduate and his wife. Dr. Howard Maesaka died in 1975; Mrs. Maesaka resides in Oahu, Hawaii.

Participants in the presentation at the dental school last fall included (from left in photo) Dr. Philip C. Rake, IU assistant professor of prosthodontics; Ms. Campbell; Mr. Burns; and Dr. Ray K. Maesaka ('60), IU professor of prosthodontics and son of Howard and Shizuko Maesaka.

Another son of the Maesakas, Dr. Clifford T. Maesaka, graduated from IUSD in 1961; his son, Dr. Clifford T. Maesaka, Jr., received an IU dental degree in 1986.



INDIANA UNIVERSITY SCHOOL OF DENTISTRY ALUMNI ASSOCIATION SCHOLARSHIPS

to dental students (left) Darin B. Ashcraft, 4th yr; Michelle R. Tompkins and Ryan L. Ross, 2nd yr; Lorre A. Campbell, 3rd yr; Marybeth Brandt and Myriam E. Hudicourt, 4th yr; and Denise A. Flanagan, 2nd yr

These annual scholarships are based by tradition on academic excellence.



GUTHRIE PULLMAN CARR ACADEMIC ACHIEVEMENT AWARDS

to dental students Dean A. Stratman, 3rd yr, and Tonya R. Stewart, 2nd yr

The Guthrie Pullman Carr award honors the memory of a Lafayette dentist who was a 1915 graduate of the Indiana Dental College. Dr. Carr died in 1960. He was the father of IUSD graduates Dr. Guthrie E. Carr ('54) and Dr. W. Kelley Carr ('55, MSD '61), and the grandfather of Dr. Guthrie P. Carr ('87).



MICHAEL T. WILSON MEMORIAL SCHOLARSHIP to dental student Herbert A. Harris, 3rd yr

The scholarship is given in memory of Michael T. Wilson, Columbia City, who was a third-year dental student at the time of his death in 1983. The award was established by Michael's family and friends.



MILO V. SMITH DENTAL STUDENT SCHOLARSHIPS to (left row, back to front) John K. Loudermilk, Carole M. Grabill, Richard L. Beckermeyer, Dedi L. Shepherd, and Derek R. Fleitz, all lst yr.; (middle row, from back) Roderick P. Strickland, 2nd yr; John D. Macarell, Jr., lst yr; Todd R. Saalfrank, 2nd yr; and Dr. Charles A. Sadler, Jr., lst yr graduate student, orthodontics; (at right) Dr. Jan S. Labeda, 2nd yr. Not pictured is Stephen S. Hall, 2nd yr.

The scholarship is named for an 1896 graduate of the Indiana Dental College who was a dentist in Winchester. Dr. Smith died in 1943.



MARTHA LOUISE KUTKA MEMORIAL SCHOLARSHIP to dental student Marilyn I. Delgado, 2nd vr

The scholarship was established in 1981 by family and friends of Mrs. Kutka, mother of Portage dentist Dr. Laura Kutka Hannon, a 1980 graduate of IUSD. The award is presented to women in dental and medical school and is given in part for academic achievement.

OMICRON KAPPA UPSILON SCHOLARSHIPS/ LOANS FOR ACADEMIC EXCELLENCE

to dental students (seated, from left) Marisa A. Ley, 3rd yr (loan) and Myriam E. Hudicourt, 4th yr (loan and scholarship). Back row, from left: Timothy A. Pliske, 3rd yr, and Serkis C. Isikbay, 2nd yr (loans); Kathleen A. Smith, 2nd yr (scholarship); and Denise A. Flanagan, 2nd yr (loan). Not pictured is Susan E. Draheim, 4th yr (scholarship and loan).

The scholarships and loans are awarded by Theta Theta Chapter of the national dental honor society. To receive her scholarship, Ms. Smith maintained the highest grade-point-average in her class during her first year of dental studies. Scholarships went to Ms. Draheim and Ms. Hudicourt for earning the highest GPA (identical averages) in the Class of 1992 during the first three years of dental school. The interest-free loans are given by OKU to students who demonstrate outstanding scholarship.



DAE Around Indiana

North Central Dental Society Contributes \$4,745 to Fund

IU South Bend-North Central Dental Society Dental Assisting Grants were awarded in November 1991 to dental assisting students Angela Horst, of Bremen, and Pamela Molnar, of Elkhart.

The IUSB division of Dental Assisting wishes to thank the following members of the North Central Dental Society, who contributed a total of \$4,745 to the 1991-92 Dental Assisting Grant Fund:

Drs. Jay Asdell, Harry Bailie, Douglas Bateman, Larry Beachy, Ralph Berman, Bonni Boone, James Buzalski, Stanley Carr, Terry Cunningham, James Davis II, Gary Drury, Brian Eberhart, M. Gilbert Eberhart, Donald Findlay, Eugene Geyer, William Gitlin, Wesley Good, Michael Griffee, David Harris, Charles Hassel, William Kimbriel, Edward Lawton, John Lehman, Jr., Jerry Lentz, D. Robert Lindborg, Vance Lopp, C. Wesley Magnuson, Shant Markarian, Sam Miller, Edward Molenda, William Mull, Richard Myers, Edward Packard, John and Marjorie Reuthe, Robert Riddle, Wayne Risinger, Gregory Robbins, Thomas Rykovich, Paul Sergio, Douglas Stanley, John Szakaly, Harvey Weingarten, and Howard Wiesjahn, II.



Dr. William Record, president-elect of North Central Dental Society, presents scholarships to Pamela Molnar (left) and Angela Horst. The grants were established by the society in 1986 for qualified dental assisting students enrolled on the South Bend campus. Angela Horst is also a recipient of a scholarship from the Indiana Dental Assistants' Association.

Shant Markarian, Director Dental Auxiliary Education and Sue Keller, Acting Assisting Director Dental Assisting

IU School of Dentistry Continuing Education

Coming September 9, 1992

GORDON J. CHRISTENSEN presents

"RESTORATIVE DENTISTRY"



Dr. Christensen

Provo, Utah private practitioner and clinical researcher Dr. Gordon Christensen demonstrates faster and easier ways to line, seal, and build up tooth preparations. A video of intracoronal and crown tooth preparations will be shown and numerous experiments will be discussed to help participants determine the best liner to use, and whether dentin bonding agents are necessary or desirable. Bonded amalgam, glass ionomer and bonded composite as crown build-up materials will be compared.

Program also includes what's traditional and what's new in cements and cementation. The five major categories of cements are listed in order of decreasing popularity: glass ionomer; polycarboxylate; zinc phosphate; resin; and ZOE-EBA. Presentation compares film thickness of cements created by various proper and unacceptable mixing techniques. Metal

adhesives including Panavia, C&B Metabond and Infinity will be compared and demonstrated.

9 am-5 pm

University Place Conference Center (IUPUI Campus)

\$155 dentist or first attendee from office; \$80 dental auxiliary (includes luncheon); or \$140 dentist/\$65 dental auxiliary (without luncheon)

For more information about upcoming courses and registration write to Dr. Donald E. Arens, Director of Dental Continuing Education, 1121 W. Michigan St., Indianapolis, IN 46202; or call (317)274-7782.

Postdoctoral Profiles



Richard G. Cleary

Hometown: Carrick-on-Suir, Co. Tipperaray, Ireland; Dental degrees: B. Dent. Sc., Trinity College Dublin, 1982, and Fellowship of Dental Surgery, Edinburgh Royal College of Surgeons, Scotland, 1987; Postgraduate program at IU: prosthodontics (major), dental materials (minor); Thesis: A laboratory investigation of all-ceramic restorations fabricated on refractory die materials; Degree: MSD, March 1992; Plans: Private practice in Dublin, and teaching at Trinity College.



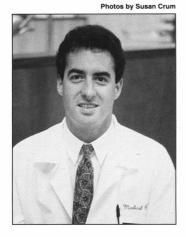
Guillermo Bernal Dulcey

Hometown: Bogota, Colombia; Dental degree: DDS, Colegio Odontologico Colombiano, 1986; Postgraduate program at IU: prosthodotics (major), dental materials (minor); Thesis: Accuracy of estimated water-powder ratios for dental stones; Degree: MSD, December 1991; Plans: Private practice and part-time teaching in Bogota.



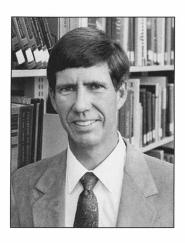
Lisa H.S. Hall

Hometown: Catlin, Illinois; Dental degree: DDS, Indiana University, 1988; Postgraduate program at IU: operative dentistry (major), dental materials (minor); Thesis: Effectiveness of etching cervical enamel in Class V composite resin restorations as related to marginal configuration and distance from the CEJ; Degree: MSD, February 1992; Plans: Part-time private practitioner and part-time assistant professor of operative dentistry at IUSD.



James Metz Humphrey

Hometown: Terre Haute; Dental degree: DDS, Indiana University, 1988; Postgraduate program at IU: periodontics (major), oral pathology (minor); Thesis: Connective tissue response to human root surfaces treated with transforming growth factor-Beta and implanted transcutaneously in the calvaria of rats; Degree: MSD, January 1992; Plans: Private practice in Terre Haute, sharing office with sister, Dr. Pat Clark (DDS '80), an endodontist.



Barclay Kirkland

Hometown: Tampa, Florida; Dental degree: DDS, Medical College of Virginia, 1970; Postgraduate program at IU: periodontics (major), oral pathology (minor); Thesis: Clinical evaluation of the vacuum tray; Degree: MSD, January 1992; Plans: Private periodontic practice in Bradenton, Florida. Plans to participate in dental missions. (Also plans to catch world-record snook at Boca Grande, Florida!)



Salwa P. Rizk

Hometown: Indianapolis; Dental degree: BDS, Cairo (Egypt) University, 1977; Postgraduate program at IU: preventive and community dentistry (major), oral microbiology (minor); Thesis: Oral health survey for school children ages 5 to 13 having limited access to dental services; Degree: MSD, January 1992; Plans: Work in Indianapolis.

Looking Back with William R. Fulton

Dr. William R. Fulton, of Indianapolis, turns 97 in May of this year. A 1923 graduate of the Indiana Dental College, he has now been retired from dentistry for almost as many years as he practiced. Dr. Fulton recently sat down with his nephew, Dr. Anton P. Sohn, andwith tape recorder running—shared his life and times.

Born in a one-room house in Camargo, Illinois, William spent most of his youth in Hindsboro, Illinois (his family briefly tried to re-settle in Malden, Missouri, but floods and his sister's near-death experience with swamp malaria sent the Fultons back to Illinois).

After high school graduation William worked a series of odd jobs around the country including one that required his riding on a train from Judith Gap, Montana, to Omaha, Nebraska, with 500 cattle in tow. "When the train made stops, some of the cattle were thrown off their feet," Dr. Fulton explained. "My job was to get them up."

His interest in medicine developed after he got a job driving two physicians around on their house calls. William went to France during World War I, serving as a hospital orderly with the

Army's 36th Medical Unit. Back in the States, William opted for dentistry's four-year program after deciding he could never scrape together enough money for six years of med school. A Hindsboro dentist steered him in the direction of Indianapolis.

What follows are a few "snippets" of Dr. Fulton's memories of dental school and dental practice as told by Dr. Fulton to Dr. Sohn, a 1961 graduate of IU's School of Medicine who chairs the department of pathology at the University of Nevada's School of Medicine in Reno. We are grateful to Dr. Sohn for allowing us to print excerpts from the oral history he has prepared on Dr. Fulton. We'll let Dr. Fulton take up the story from here:

You can count 25 or 30 members of my family in dentistry, pharmacy, nursing, and medical-related fields. I was the first one. I guess I started it.

I came over to Indianapolis to dental school in 1919. The school was located at North and Meridian, but it moved to Walnut and Pennsylvania in 1920. We were on the second and third floors of a building with a tire shop on the ground floor.

The dental college moved to facilities at Walnut and Pennsylvania in 1920; it was the college's fifth location since its beginnings in 1879, and its final move before being purchased by Indiana University (in 1925) and establishing permanent roots at 1121 West Michigan.





Dr. Fulton as he appeared in his graduation portrait, published in the Class of 1923's Ident yearbook

There were 100 in my freshman class, about all military men. Eighty percent of the class had served in World War I. We made a rough time for our teachers since we were all mature, rugged veter-

The YMCA had money left over after the war and made it available to veterans. I went down to the "Y" but couldn't get any help. A classmate married to a dentist—she put him through school—got money from the YMCA.

I lived in a small attic room on the third floor of a boarding house on North Meridian, and roomed with classmate Percy Chittick (of Sedalia). Rent was \$2.50 a week: I worked and ate in a restaurant.

Every dental course we took cost so much. It cost \$5 to go to each lecture. One was a darn fool not to go—that would be like walking into a store and paying \$5 for a shirt and then walking out and leaving it behind. I had to borrow \$150 from my sister to finish dental school.

My summer jobs during dental school included working out at the Prestolite Battery Factory, selling Hanover shoes, driving a team of horses, pulling a grader down to a building site on Keystone Avenue, and cultivating corn back in Illinois.

My dental school attendance record reads 99.7%. I didn't miss any days that I know of. In some classes the members of the three fraternities would answer for each other (during roll call). If you didn't belong to a fraternity you were known as a "Barb." I was a Barb.

Classmate Carl C. Busch was an undertaker in Champaign, Illinois, before he started dental school. There weren't any women in my class, but there were some in school, such as Violet Chinn, who went on to Linton, Indiana. Only two of my classmates didn't graduate—they quit.

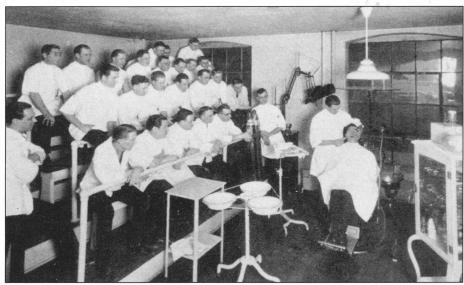
One teacher we had was Carl Lucas, an oral surgeon who did mostly impacted third molars. He covered the patient with a gown and many times he wore a mask. He was a very careful surgeon and one of the first to use rubber gloves. He had high-class clientele.

John F. Johnston and Jerry Timmons (longtime chair of IU's crown and bridge department and the school's acting dean 1938-40, respectively—eds.) were seniors when I was an underclassman.

Nobody stressed research to our class. There might have been instructors who were doing research, but we didn't know about it. The ADA magazine had some articles on research, but most were on the practical side of dentistry.

I was associate editor of the 1923 Ident (student yearbook) and treasurer of the P.G.C. and G.E. Hunt Society (named for the Indiana Dental College's first and second presidents).

After I graduated I went to the state house and wrote the Indiana license examination. Then I went to Chicago and took the Illinois board examination. Another fellow from Indiana was there, too, sitting in the seat next to me while I was making a gold bridge and crown in the laboratory. He had been out of school so long he didn't know how to



Indiana Dental College students observe a demonstration of oral surgery techniques in the early '20s.

make crowns or bridges. I showed him how, but I don't know if he got through it or not.

I paid \$2,000 for a dental practice in Irvington (an Indianapolis neighborhood), where I remained until I retired. The practice had belonged to Dr. Paul Miller. In the beginning rent was \$12 a month (my half for a building I shared with a physician) and \$50 at the end. I sold the practice for \$1,000 in 1960.

I could make a set of teeth from scratch—give me a sheet of gold and I could make a gold crown, or a gold bridge. To do something with my hands gives satisfaction. Today, dentists send everything to the laboratory. I wanted to do the work myself.

During the Depression my patient flow diminished, but I had enough to make a living, pay for my office, buy dental materials, and stay out of debt. I don't know how much I made, but I did all right. I put some patients on the tab that I knew would pay. The minister and others would send me patients who had no money and I wouldn't charge. Irvington was a fairly good community and I don't remember any businesses that went bankrupt.

I built a house in Irvington in 1924, and I still live there. My sister introduced me to Jantha Dove Hall, a widow, and we decided to get married. We dated quite a while before we married on January 1, 1925. She was the first woman I had ever dated. When we moved into our new house there was no

heat or water. I bought a second-hand kerosene stove to cook on. The man across the street had a faucet near the sidewalk where I got water.

Jantha died of cancer in 1955 (the couple's son, Bill, is an IU-trained physician—eds.). I lived by myself for 15 years. I knew my present wife, the former Martha Arold, for a couple of years before we got married. At 70 years of age, I thought I was too old to remarry. Now we've been married over 20 years.

One of my hobbies has been oil paintings. I've taken lessons from many artists. After I retired I did newsreels for two Indianapolis TV stations. My main hobby is genealogy. I do a little gardening, but not much. I have about five tomato plants.

My philosophy is to never knock anybody—I get tired of people saying they hate dentists. I never hated anybody.

Our ethics course in my senior year of dental school was mostly dental law, but dental schools should teach ethics and relationships with patients. Courtesy, gentleness, understanding and one's attitude are important. We should treat people right.

If I had to do it over again I would do exactly the same. I would go to dental school. I would tell any young person: If you want to go into dentistry, do it! Dentistry is an honored and respected profession. \square

AMERICAN COLLEGE INDUCTS FELLOWS

Five IU School of Dentistry graduates were among those inducted as fellows of the American College of Dentists during ceremonies held at the annual convocation in Seattle, Washington, in October, 1991. They are:

Eugene L. Dellinger (DDS '63, MSD '65) Fort Wayne

Frank R. Faunce (DDS '64) Peachtree City, Georgia

Mohssen Ghalichebaf (DDS '87) Morgantown, West Virginia

Mark E. Mallatt (DDS '75) Indianapolis

Bernard A. Newbauer (DDS '62) Marion

Dr. David J. Bales (MSD '72), Redmond, Washington, presided over the College's luncheon program as chair of the ACD's Washington Section. Dr. Edward L. Fritz (DDS '57) chairs the Indiana Section and Dr. Carlos L. Suarez (MSD '67) chairs the Puerto Rico Section.

Acknowledged in memorium by the College were Fellows Wilbur C. Boren (DDS '39), Princeton (deceased June 11, 1990); Elizabeth A. Graves (DDS '48), Indianapolis (deceased October 2, 1990); James W. Huckelberry (DDS '24), Indianapolis (deceased August 11, '91); Ralph W. Phillips, Indiana University's research professor emeritus of dental materials (deceased May 17, 1991); and Edward Young (DDS '39), LaPorte (deceased September 6, 1990).

Last Piece of the Puzzle

Thanks is extended to Dr. Richard "Buck" Buchanan ('51), Bedford, for dropping by to tell us who the handsome, but unidentified face belonged to in the Fall Dental Conference photo collage published in our Winter '92 issue. The youngster sitting on the fans bus was Travis Snow, grandson of Robert Snow, of Bedford. The Snows participated in the Fall Conference as guests of Dr. Buchanan.



Susan Crum

5 IUSD GRADS WELCOMED TO THE BOARD. When the winter board meeting of the Indiana University School of Dentistry Alumni Association convened at the Canterbury Hotel in Indianapolis on January 18, five new members took their places at the conference table to begin serving three-year board appointments, which were approved at the close of the IUSD Fall Dental Conference. The board welcomes (standing, from left) Dr. Robert D. Perry ('69), Crawfordsville; Dr. Mark F. Miller ('67), Kokomo; and Dr. John L. Wells ('66), Lafayette; (seated, from left) Dr. George R. Zundo ('80), Danville, Illinois; and Dr. James E. Hornaday ('75), Richmond.

1926

Dr. Harold Dimmich, West Lafayette, has informed us that he once wrote a cartoon about dentistry that was illustrated by famous cartoonist Jimmy Hatlo. Dr. Dimmich's cartoon appeared in Hatlo's "They'll Do It Every Time" syndicated cartoon strip, which ran in newspapers throughout the country on March 24, 1947.

Dr. Dimmich recently has had correspondence from two of his classmates—Dr. Earl Keiser, who wrote last December that he turns 97 on March 27, 1992; and the "longlost" Dr. Norman T. Enmeier, who celebrated his 89th birthday on December 15. (Dr. Enmeier wasn't really lost at all; he sent red-faced apologies to Dr. Dimmich for being "the world's greatest procrastinator" in sending word of his whereabouts.)

Dr. Keiser lives at El Nathan Home, Marble Hill, MO 63764, and Dr. Enmeier at 3721 S. Gary Pl., Tulsa OK 74105.

Dr. Dimmich also has been notified of the death of Dr. Charles A. Seal on January 6, 1992, two days before his 89th birthday. "Charlie was one of the more popular members of the class, and had attended all meetings and reunions in most recent years," says Dr. Dimmich. Dr. Seal had resided at 2309 Lafayette Avenue, Columbus, IN 47201; he is survived by his wife, Thelma.

1927

Dr. Delmar Faun, Colfax, has written to

report the death of classmates Dr. B.B. Rodefer, Niles, Michigan, on December 28, 1991, and Dr. Franklin B. Beck, Louisville, Kentucky, on December 31, 1991.

1929

Address: Dr. James E. Spahr, 737 S. Columbia Parkway, Columbia City, IN 46725

1935

Dr. Ralph E. Gieringer, #7B, 3430 Gulf Shore Blvd N, Naples, FL 33940, has thoughtfully provided address updates on three of his classmates:

Dr. Ralph H. Brown, 84 Beech Street, Doylestown, OH 44230

Dr. Robert M. Morton, 39248 U.S. Highway 19 North, Tarpon Springs, FL 34689

Dr. William E. Smith, 1607 Reeveston Road, Richmond, IN 47374 (summers) and Box 1124, Anna Maria, FL 34216 (winters)

1944

Dean Gilmore received a fine tribute to the late Dr. Henry J. Rankin from Sandra F. Berman, 1060 Rahway Road, Plainfield, NJ 07060. It reads in part:

Enclosed is a check that my husband Daniel and I wish to donate to the dental school at your university in memory of Dr. Rankin, who passed away on January 12, 1992....

We know of his pride and fondness for his Alma Mater....

He was 72 at his death. It would be difficult to find a finer and kinder individual; it was a pleasure to know him and to call him friend.

As he still maintained a practice, I am sure his many patients are devastated at his loss. He was a practitioner of the "old school" serving those in need of him, regardless of ability to pay, always available in an emergency, offering the finest care. He was the school dentist for the city of Linden, New Jersey for a goodly number of years, performing what he considered to be part of giving to the community and its children.

The gift in his memory which we are sending is unrestricted, but perhaps it could be used for a purpose that would enhance what Dr. Rankin believed in so sincerely....

1949

Dr. Lehman D. Adams Jr., Indianapolis oral and maxillofacial surgeon and part-time assistant professor of oral and maxillofacial surgery at IU, was recently named one of 11 "Living Legends" in the city for his role in civil rights and community affairs and for his reputation as an outstanding member of the dental profession. The gala event, held at the Omni Severin Hotel and reported in the *Indianapolis Star*, was co-sponsored by Living Legends in Black, founded by Linda Clemmons, and the Hoosier Minority Chamber of Commerce.

Clemmons, who is also president of the Hoosier Minority Chamber of Commerce, chose to honor these men for their accomplishments so that young black males in the city will have role models they can reach out to. Also among those honored were Joseph T. Taylor, a special assistant to the chancellor of IUPUI, and Landon Turner, a former IU basketball star who was left paralyzed by a car accident in 1981.

1950

Dr. Richard L. Orr, Indianapolis, died March 14, 1992. He had retired from his 33-year Indianapolis practice in 1983. Dr. Orr is survived by his brother, Lowell, and his sister, Betty Thacker.

1951

Dr. Frank O. Harper has written to inform us that he retired from his practice at 410 West Main Street in Plainfield. His new mailing address is 7 Wedding Lane, Plainfield, IN 46168. Dr. Harper's office has been taken over by Dr. Reed E. Johnson (DDS '88).

Dr. W. Scott Hargis, Indianapolis, died January 22, 1992. He had practiced for 30 years. Dr. Hargis was an Army Air Forces veteran of World War II. He was a member of Masonic Lodge, Scottish Rite, Murat Shrine, Sigma Chi and Sigma Delta Sigma

fraternities. He was also a graduate of Butler University.

Dr. Hargis is survived by his wife, Mary Lou; sons Timothy and Christopher; daughters Barbara Hargis and Deborah Bulloff; and two granddaughters

Dr. George A. Welch, a practitioner in Rockville for 41 years, died March 13, 1992.

A past president of the IU School of Dentistry Alumni Association, Dr. Welch was a recipient of the association's Distinguished Alumnus Award in 1987. Dr. Welch was also a former president of the Indiana State Board of Dental Examiners and Western Indiana Dental Society.

Dr. Welch was a World War II Army veteran; he belonged to the Memorial Presbyterian Church of Rockville. He was a member of the dental school's Century Club for 21 years.

Dr. Welch is survived by his wife, Frances; son Dr. David Welch; daughters Christine Lindsey, Nancy Witty, and Dr. Mary Ruth Staadt (DDS '85); and eight grandchildren.



Dr. George A. Welch accepting the dental school's Distinguished Alumnus Award in 1987

1952

A nice note from Dr. Ralph G. Schimmele, an IU professor emeritus of dental auxiliary education residing in Fort Wayne, which reads in part:

I just had to tell you what a fine job you did with the article on Tom Shoemaker ("An Act of Faith") in the last issue. Knowing Tom as a student and working with him was a treat that I seldom experienced with students. I thought all the students were fun, but Tom was exceptional. In my mind at least, I thought your article brought those qualities of Tom to the fore.

Soon my son Steven (DDS Class of '92) will

be graduating and I will lose my last contact with the school. The school and the University were very good to me and I thoroughly enjoyed my years with Dr. Hine and Dr. McDonald.

Address: Dr. William F. Cain, 9081 E. Onomonee Rd., Northport, MI 49670

1954

Address: Dr. Marion Ellis Warpenburg, PO Box 6, Owensville, IN 47665-0006

1956

Address: Dr. Juan E. Font, King's Court 52, Apt 7A, Condado-Santurce, PR 00911

1961

His color portrait graced the cover and his message of leadership graced page 3 of the January '92 issue of the *Bulletin*, a monthly publication of the Cincinnati Dental Society. Congratulations are extended to Dr. Ralph E. Wyand, who was recently installed as the society's president.

1963

Address: Dr. David C. Lind, 212 Winslow Rd., Bloomington IN 47401

1964

Address: Dr. Sumiya Hobo (MSD/Prosthodontics), International Dental Academy, 1-25-18 Shohtoh, Shibuya-Ku Tokyo 150, Japan

1973

Address: Sandra Jean Day Levee (ASDH), 152 Chinchuba Gardens, Mandeville, LA 70448

1974

Addresses: Shelley Redman Adam (ASDH), 6383 Middle Point Wetzel, Middle Point, OH 45863-9650

Betsy Rennels (ASDH), 197 Independence Rd., Greenfield, IN 46140-2787

1975

Address: Dr. Robley E. Evans, 3406 N. Meridian Rd., Bluffton, IN 46714

Dr. Donald R. Titus, Manilla, died January 19, 1992. He had practiced for 15 years in nearby Waldron, retiring in 1989 after injuring his hand in a farming accident. Most recently he had been farming in Shelby and Rush counties.

Dr. Titus is survived by his wife, Margaret; son Tony; and daughters Emily and Margaret.

1976

We've been tipped off by the alumni office in Bloomington that pediatric dentist Dr. D. Christopher Hamlin, Norfolk, Virginia, was



28 FROM '66 TOGETHER AGAIN IN '91. When the IUSD Fall Dental Conference brought its annual three-day festival of fun to Indy last September, the Class of '66 took advantage of the time and location to hold a not-so-little soiree of its own. The group had a great turn-out—about a third of the class—for the reunion, held at the Union Building on the IUPUI campus. Posing for a group shot with some of their special guests are (back row, from left) Jerry Follmar, Kenneth Nelson (guest), Ed Clausen, Frank Szot, Steve Beeker, Dick Martin, John Wells, Norman Krauss, Dale

Lentz ('67, guest), Don Lintzenich ('67, guest), Dave Avery, Lloyd Hagedorn, Emory Bryan, Ross Woodburn, Dave Eichenauer, Tom Dunn (in front of Dick Abdon), Marvin Wright (in front of Don Scroggins), Gene Johnson, Jim Hastings, Bob Edesess, Steve Fischer, Carl Blickendorf, Dave Jarrell, John Roshel, Carl Andres, and Hugh Osborne ('67, guest). Seated, from left: Larry Wadsworth ('68, guest), Ray Maesaka ('60, guest), Rush Bailey (guest), Bea Gordon (guest), Maynard Hine (guest), Ray Burris, Jim Herrick, Joe Scales, and Hugger "Skip" Smith.

installed as the first woman president of the Tidewater (Virginia) Dental Association during ceremonies held on August 7, 1991, in Chesapeake.

A 1978 graduate of IU's pediatric dentistry residency program, Dr. Hamlin has been practicing since 1980 and was board certified in 1988. She is married to IU graduate Thomas W. Hubbard, MD, whose specialty area is pediatrics. Dr. Hubbard is staff director at Kings Daughters Hospital, a teacher of medical law at the College of William and Mary, and a commissioner for the Governor of the State of Virginia.

Dr. Hamlin's address is 1806 Hampton Blvd., Norfolk, VA 23517. Thanks is extended to "proud dad" Jack I. Hamlin, a 1943 graduate of IU's School of Business residing in Arlington, Virginia, for sending this information to IU.

Dr. Christy Hamlin



We received a nice call from Celeste (Glassmeyer) Kleinhelter (ASDH), who reports that she married her husband Kurt on December 29, 1990. Their address is 7525 Sunnyside Road, Indianapolis, IN 46236.

Address: Dr. Tatemi Shimada (MSD/Prosthodontics), #502. 37-1, Shimoarata l-Chome, Kagoshima City (890) Japan

1978

Annual letter from the Boitet family says that Dayn's work in implants continues to go well. Dr. Boitet and colleagues traveled to Ireland to present several implant cases to a group of Irish and English dentists. He also participated in implant meetings in Boston; Coeur D'Alene, Idaho; and Vancouver, British Columbia. Work aside, Dayn built his "dream" bike this year—a 18.5 lb. carbon fiber racer, and rode in his third annual 150-mile charitable event for multiple sclerosis.

1979

Address: Dr. William F. Rose, 209 Lemonwood, Universal City, TX 78148

1982

Addresses: Dr. Kenneth R. Carlson, 787 Winter Ct., Carmel, IN 46032-5274

Dr. Brian J. Casciari, 9320 Carmel Mtn. Rd., Suite A, San Diego, CA 92129

1986

Dr. James R. Geist (MS/Oral Pathology and Radiology) has passed the certification examination leading to his attainment of Diplomate status in the American Board of Oral and Maxillofacial Radiology. Dr. Geist is a faculty member in the University of Detroit's Department of Stomatology.

1987

We have received word that Dr. Becky A. (Schwindaman) Szabo has opened a new dental office at Mishawaka Family Dentistry, 2424 E. 5th Street, Mishawaka, IN 46544.

1988

We've learned that Dr. Reed E. Johnson has opened a dental office at 410 West Main Street in Plainfield.

1990

Address: Dr. Joni L. Davis Kluth, 207 Lucky Lane, Pendleton, IN 46064

1991

Address: Dr. Jeffrey D. Nelson, R#3, Box 206AA, Owensville, IN 47665-9637

Michigan Street Memos

Special Message from Puerto Rico Finds Permanent Home in Hoosier Hallway



The Honorable Hector L. Acevedo. Mayor of San Juan, Puerto Rico (left), greets guests at a reception held to celebrate the formation of the Puerto Rico Chapter of the IUSD Alumni Association. With him are, from left, IUSD's Dean H. William Gilmore and IU graduates Dr. William Lockwood-Prado (MSD '65) and Dr. Augusto Elias-Boneta (MSD '75).



Dean Gilmore accepts the Ralph W. Phillips memorial plaque from IUSD alumnus Dr. Santiago Surillo (DDS '54). The plaque contains the names of 20 founding members of the alumni chapter; it is dedicated to Dr. Phillips "for his outstanding international contributions in dental materials science, and for his longstanding relationship with Puerto Rico."

The place was sunny San Juan. But during the five-day annual session of the Puerto Rico Dental Association in January, thoughts often drifted north—to chilly Indianapolis.

This was partly because six of the meeting's presenters were members of the Indiana University dental faculty, and mostly because many of the association's members—not to mention its president, Augusto R. Elias-Boneta—also happen to be dental grads of IU who fondly regard "Indy" as the home of their alma mater.

IUSD graduates living in Puerto Rico recently decided to take those fond feelings one step further. During the annual session 20 former IU students representing the predoctoral program and various postgraduate divisions formed the Puerto Rico Chapter of the IUSD Alumni Association.

Creation of the chapter was timed to coincide with Puerto Rico's 76th annual

meeting, led by President Elias-Boneta (MSD '75) and featuring presentations by current IUSD faculty.

Representing the IU faculty were Dr. Michael A. Cochran, chair of operative dentistry; Dr. E. Brady Hancock, chair of periodontics; Dr. W. Eugene Roberts, chair of orthodontics; Dr. Charles J. Goodacre, chair of prosthodontics; and Dr. Bradley B. Beiswanger, professor of preventive and clinical dentistry and associate director of clinical research at the Oral Health Research Institute.

Dr. George K. Stookey, IU associate dean for dental research, addressed the future of dentistry with a panel of experts from the U.S., Mexico, Venezuela, Colombia, Brasil, Cuba, Costa Rica, Dominican Republic, and Puerto Rico.

Complementing activities at the annual session was a lovely reception for the IUSD alumni group, which was held by San Juan's Mayor Hector L. Acevedo and sponsored by the city of San Juan.

During the reception, special memorial plaques were presented to Indiana University and the University of Puerto Rico.

The plaque for IU is a tribute to the late Dr. Ralph W. Phillips, IU's first head of dental materials who taught materials science to many of the Puerto Rico graduates. The plaque was accepted by Dr. H. William Gilmore, dean of the IU School of Dentistry.

The plaque for the University of Puerto Rico memorializes Dr. Rafael Nadal, a 1959 graduate of IU's master's program in dental materials and Puerto Rico's first chair of operative dentistry. Dr. Nadal was one of the first graduate students to work under the guidance of Dr. Phillips. His master's thesis was titled A clinical investigation of the strength requirements of amalgam and the influence of residual mercury upon amalgam restorations. This plaque was accepted by Dr. Francisco Hernandez-Quendo, dean of the University of Puerto Rico School of Dentistry.

Both Dr. Phillips and Dr. Nadal died in 1991.

The plaque honoring Dr. Phillips now hangs in the main corridor of the IU dental school by the entrance to the Department of Dental Materials, which Dr. Phillips chaired from the 1940s until 1988.

Upon returning to Indiana, Dean Gilmore voiced appreciation of the generous hospitality shown the visiting IUSD faculty members by the city of San Juan, and delight in the newest chapter of the dental school's alumni association. "We're honored and gratified that the dentists in Puerto Rico wish to recognize their alma mater by forming this club," he said. "One goal of their new organization is to help our graduates in Puerto Rico be effective leaders in their commitment to improve oral health care. It's a great tribute to have IU-trained professionals contributing to this important community effort."

According to Dr. Rafael I. Aponte (DDS '52), director of continuing education for the University of Puerto Rico School of Dentistry, plans are now under way to hold a follow-up research seminar at Indiana University in April of 1993.



FOUNDING MEMBERS PUERTO RICO CHAPTER IUSD ALUMNI ASSOCIATION

January 19, 1992

- Dr. Luis W. Diaz-Alvarez (DDS '57)
- Dra. Lizza M. Corretjer-Vicente (DDS '90)
- Dr. Ruben N. Delgado (DDS '55)
- Dr. Gino E. Veve-Pandolfi (Certificate/ Orthodontics '67)
- Dr. Eliseo Martinez-Gonzalez (MSD/ Pediatric Dentistry '69)
- Dra. Ines M. Acaron-Acosta (DDS '87)
- Dr. Jorge Fortuno-Buxo (MSD/ Orthodontics '71)
- Dr. Rafael Aponte-Gutierrez (DDS '52)
- Dr. Juan A. Agosto-Colon (Certificate/ Operative Dentistry '90)
- Dr. Carlos L. Suarez-Vazquez (MSD/ Operative Dentistry '67)
- Dra. Rita Herrero-Hanke (Preventive Dentistry Special Student 1967-68)
- Dra. Araceli Ortiz-Martinez (MSD/Oral Pathology '67)
- Dr. William Lockwood-Prado (MSD/ Dentistry '65)
- Dr. Augusto R. Elias-Boneta (MSD/ Dental Materials '75)
- Dr. Nestor J. Ramirez-Brugueras (DDS '56)
- Dr. Santiago Surillo-Pumarada (DDS '87)
- Dr. Santiago Surillo-Feliciano (DDS '54)
- Dr. Gilberto Hanke (MSD/Complete Denture '68)
- Dr. Renan Serracante-Gierbolini (Certificate/Orthodontics '78)
- Dr. Hector Davila-Alonso (MSD/ Prosthodontics '58)

The Phillips plaque now hangs in the entrance way to the IU Department of Dental Materials. Admiring the gift from Puerto Rico with Dean Gilmore are, from left, Dental Materials employees Dr. B. Keith Moore, acting chair; Dr. Yoshiki Oshida, associate professor; Hazel E. Clark, research associate; and Barbara D. Rhodes, senior research technologist.

Settling In at Southport

Recently retired secretary Joan Duvall looks forward to spending more time at home, but won't forget her 'roots' in endo.

On a Thursday in 1975, Joan M. Duvall interviewed for a position as secretary of endodontics at the IU dental school—and got it, despite having to ask what 'endodontics' was.

The following Friday, she arrived at the school to begin training with the departing secretary, Patty Platter, only to find that Patty was "moving to Florida" at 5 pm that day.

By Saturday, feeling slightly panicky and thoroughly untrained, Joan contemplated phoning her new boss, endodontic chair Dr. Sam Patterson, to tell him she couldn't keep the job because *she* was "leaving town."

But she didn't call, and she didn't head for the hills, either. Faster than you can say zinc oxide—eugenol cement, Joan decided to accept the challenge. She went back in on Monday to see just how far one short day of training would take her.

The journey lasted 17 years and 16 days. It ended with her retirement on February 29, 1992.

"For all I know, there may *still* be things I should have been doing in my job all these years that I never found out about," Joan told us with a laugh shortly before her career at the school ended. "It was 'stumble and fumble' for a long time, and I never dreamed back then that I'd stay long enough to retire. But it wound up being a job I really enjoyed."

(In the meantime, the University has been slow to pick up on Miss Platter's departure in 1975. Joan says the department continues to receive Patty's *Greensheet*, the campus newsletter.)

A native of Indianapolis, Joan studied English literature for two years as a student at Butler University. She worked part-time at Blue Cross Blue Shield while her daughters, Marcia and Jill, were growing up. Later she tried a stint as a "volunteer" in her husband's business. "The idea was for me to help out a few hours a week without pay,"

she recalls with a grin. "When 'helping out' turned into six days a week, I decided I might as well go to work full time some place where I could get paid, too."

Daughter Marcia, who was working in the IU Department of Respiratory Care at the time, recommended the IUPUI campus to her mom. Gaining employment in one of the smallest divisions at the dental school, Joan served as a secretarial pool of "one," with her desk sitting in the middle of the clinic. Not long afterward, the tiny third-floor department was expanded when a men's locker room and restroom were transformed into a suite of offices and conference room.

Like other members of the endodontic department, Joan deserves a badge of courage for her years as a regular passenger aboard a rumbling, lethargic dinosaur-like elevator affectionately known as 'The Endovator.' Few individuals outside of endo and operative dentistry are even aware of the elevator, now hidden away in a first-floor snack room, but in its heyday it serviced the entire school—patients and all—until the building's first addition was constructed in 1961. Renovations to the second floor eventually prevented the elevator from stopping there altogether, so modern-day endo employees are assured a non-stop, if sluggish commute directly to their department.

Employed for her first six years at the school with Dr. Patterson and the last 11 with current chair Dr. Carl W. Newton, Joan enjoyed working with both men and was especially pleased that manuscript typing for all faculty in the department offered occasions for her to apply her considerable knowledge of grammar, punctuation, and editing. "I felt those were my strong points, but I also enjoyed student recordkeeping," she said. "You get a sense of accomplishment with each year that passes, seeing students finishing their requirements and going on to excel."

Although she says she'll miss her associations with people she's known for years, Joan won't be sorry to say goodbye to the desk she's been sitting behind for 17 years, or to venturing forth



Joan M. Duvall

Susan Crum

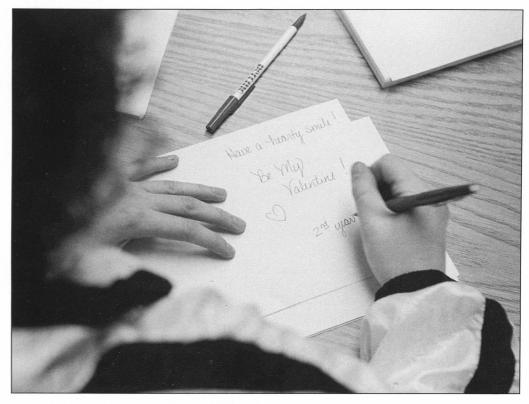
on nasty weather days to make the bumper-to-bumper trek to campus. "On those days I'll be throwing another log on the fire instead," she said. Having steered her department's clerical efforts during two previous ADA accreditation site visits in 1975 and 1983, she's delighted to be steering clear of all but the preliminaries of a third site visit looming up on the school's fall '92 calendar.

Retirement to Joan means having the time to cultivate her personal interests, which include her home ("I love fixing it up"); afternoon tennis games with her pals; three handsome grandsons, ages 14, 10, and 6; and three-day getaway weekends with her husband, who hasn't yet retired ("He's not ready, but that's OK. Dick has a lot of pride in his business—selling it would be like selling one of the kids"). She'd like to volunteer her services at one of the city's newest attractions, the Eiteljorg Museum of American Indian and Western Art, and hopes to undertake a five-year bible study fellowship.

Her philosophy for a happy retirement is short and to the point: "Know when you're ready," she said, "and once you've done it, pursue whatever interests you may have. Keep moving!"

Getting to the of the Matter







In Good Hands. Laura Miller (above) smiles with the assurance of someone who's got the job under control. She and other members of the second-year dental hygiene class assembled the Hearty Smile gift bags at the dental school the night before the event.



A youngster at Riley Hospital seems to like what she sees through her new pair of sunglasses, one of the items she found in her gift bag from the dental hygiene students.



Susan Hartfiel (left) and Karen Fouts help one tiny patient examine some of the goodies distributed on the patient wards.



Photos by Mike Halloran

IUSD Director of Development Danny R. Dean studies philanthropy from the student point of view.

Danny R. Dean believes that the best way to study an abstract idea is by evaluating it in concrete terms.

Ask him about philanthropy, and he's likely to mention house builders. "They know how to build good homes because someone else first taught them the proper way to do the job," he says. "I think we can learn something about philanthropy by looking at it in a similar manner. Should we expect graduates to support the school if they haven't first been taught about the importance and rewards of giving?"

Two years ago Mr. Dean decided that the best way to build a philanthropic program was by starting from the ground up. After developing an idea for an event that would teach the tenets of philanthropy to students, he searched for a small group of students at the dental school to participate in a pilot program. He found what he was looking for in the Student American Dental Hygienists' Association (SADHA), whose members readily agreed to sponsor Hearty Smiles, a Valentine's Day gift distribution event held in 1991 at James Whitcomb Riley Hospital for Children. With Mr. Dean's guidance the students undertook every phase of planning and conducting a charitable event, beginning with arranging for company donations and ending with a stroll through the wards of Riley Hospital, where the students visited with the patients and presented them with red and white bags containing dentally related items and small gifts.

When feedback from the students indicated they enjoyed the experience as much as the children, Mr. Dean followed up on a colleague's recommendation that he study the philanthropic attitudes of students by applying for a grant through the Indiana University Center on Philanthropy. The grant, awarded by the Center in May 1991, was made possible by Lilly Endowment, Inc., and other donors. Mr. Dean is using it to determine if participation in events such as Hearty Smiles increases students' personal interest and involvement in similar philanthropic activities.

Dr. Leonard G. Koerber, IUSD director and professor of instructional development and one of the school's statisticians, assisted Mr. Dean in creating written pre- and post-tests, which were administered to the dental hygiene class of 1992 by Dental Auxiliary Education faculty members. "All members of the class were pre-tested when they returned to school in the fall for the 1991-92 academic year," says Mr. Dean. "The objective of the pre-test was to determine personal attitudes about philanthropy. Responses were given anonymously."

The class then spent several weeks planning and coordinating another Hearty Smiles event at Riley Hospital, held on



Swift teddy bear "dunking" on Sharon Querry's part (left) keeps the assembly line moving at a clip during the gift-bag stuffing party.

Valentine's Day in 1992. "A few weeks after the event the students were tested again. No questions on either test were related to the Hearty Smiles events."

Data gathered from both tests are now being tabulated and compared by computer. Mr. Dean is expected to submit his findings to the Center by the end of June.

Mr. Dean, who has served as the dental school's director of development since 1986, is hopeful that results of the study will help better define development directors' responsibilities as *teachers* of philanthropy. He sees the Hearty Smiles event as tradition in the making. "I was impressed by the way SADHA President Tommi Davis supervised this year's event. All of the SADHA officers are very capable. The long-term goal is for me to gradually back out of the planning and implementing stages of Hearty Smiles. Eventually, SADHA will run its own program—and will do a good job of it, too."

Although test results are not yet finalized, Mr. Dean recently heard some news that in his view shows the project to be a success, no matter what the outcome of the study. "Tommi Davis has just been informed that SADHA has been selected to receive special recognition at the IUPUI Spirit of Philanthropy Awards Luncheon," he says. (The luncheon, which was held April 10, 1992, annually honors students for their volunteer services as well as designated alumni and other supporters of schools and programs on the IUPUI campus.)

Mr. Dean is clearly as delighted as he is proud of SADHA's accomplishments. His experiences with the dental hygiene classes over the past two years lead him to believe these students are philanthropists at heart. "Giving of one's time and energy is as important as money when it comes to supporting a cause or an organization. These students drew upon many personal resources to bring about those 'hearty smiles' on the faces of the children at Riley. I think it was a memorable day for many of us."

Indiana University-Purdue University at Indianapolis IU School of Dentistry-Indianapolis (ALUMNI BULLETIN)
1121 West Michigan Street
Indianapolis, Indiana 46202

Address Correction Requested

Nonprofit Organization
U.S. POSTAGE
PAID
Indianapolis, Indiana
Permit No. 4245