The PASS to Success
A world of opportunity.

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Dear Colleagues,

We’re reaching out, making contact, and sending a message around the world, that the University of Minnesota’s School of Dentistry is taking bold steps to make sure our students are prepared for whatever tomorrow has to offer. The Twin Cities, the state, and the Midwest aren’t the same as they used to be and they’re never going to be like they were again. The way we live, learn, have fun, work, and look are undergoing a metamorphosis that few could have predicted. This issue of Dentistry highlights how our school is responding to an ever-changing world. From new clinical initiatives to advances in education to amazing gains in research, we are well positioned to face the unprecedented challenges in our profession and to fulfill the obligations we have to our students, community, state, and country.

On these pages we share with you an update on the success of our accreditation site visit. People at all levels across the Academic Health Center and around the school continue to comment on how well we did. Some say with a sense of personal pride: “We knew yours was a good school and this proves it.” Others admonish: “We need to maintain the high standards we’ve set and be always ready for outsiders to review how we care for patients and educate students.” Regardless of who says what to whom, our once-in-every-seven-years site visit was a resounding success and something of which we can be pleased and proud.

Enjoy reading about our Program for Advanced Standing Students (PASS). You’ll learn how the first class of six internationally educated dentists is doing, and hear from people involved with the program about how they measure its success and what our other students think about it. I hope you’ll share my excitement when I discovered the many unexpected positives that have come from the program that will enrich our educational experiences and our profession.

Taking our cue from the University’s “Driven to Discover” campaign that informs about efforts to discover the next great cures, technological advances, and the best ways to educate students, we share just two stories of our own. You’ll learn about Dr. Bryan Michalowicz’s interprofessional study exploring the impact of maternal periodontal disease on birth outcomes. You’ll also read about Dr. Massimo Costalonga who studies mucosal immunity and its implications for treating periodontal disease and improving vaccine delivery systems. These researchers are just two of the many scientists in our school who are working to answer questions and find solutions to problems that will improve the lives of so many, here and around the world.

We also highlight the experiences of Dr. Mary Pariseau—a Triple Crown graduate of the U. Her timely story offers a unique perspective and approach to meeting the needs of patients, assuming leadership positions within the profession, and “making a difference.”

Sandwiched along with these articles are reports on all sorts of events and activities that I hope you’ll find of interest. Please read Dr. Jim Nickman’s letter. He’s been a dynamic president of the School of Dentistry Alumni Society this year. His letter sheds light on their activities and achievements and future plans. There’s also information about the noteworthy achievements of our staff and faculty, our 2007 alumni awardees, CDE programs, and news of your classmates and friends. And don’t forget to notice the pages and pages listing first-time and long-time supporters of the school—they too feel the excitement and want to be part of where the school is headed.

Finally, and on a more personal note, I encourage those of you who haven’t visited our Web site lately to “take a look.” You’ll find all kinds of information—student awards, faculty achievements, things that distinguish our school from others, ways we’re partnering with organizations in the community, and a host of other information. Because our Web site is updated weekly, there’s always a fresh story on the home page and a ton of other news scattered throughout the site. Be a regular visitor at www.dentistry.umn.edu. Make it part of your weekly routine, share what you’ve read and seen with others, and be an informed advocate. But most of all, regardless of what motivates you, do what you can to be part of our school’s new future and remember: ours has always been a great school, and our best days are ahead of us!

Sincerely,

Patrick M. Lloyd
Dean
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Dentistry is published twice a year for the alumni and friends of the University of Minnesota School of Dentistry.
We welcome suggestions and letters. Please send them to Dentistry magazine, School of Dentistry, University of
Minnesota, 15-138A Moos Tower, 515 Delaware Street SE, Minneapolis, MN 55455 or to kante008@umn.edu.
For more information about the School of Dentistry and its programs, refer to the Web site at www.dentistry.umn.edu.

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With Flying Colors
School of Dentistry Hosts Successful Accreditation Site Visit

The School of Dentistry hosted a successful visit by the ADA Commission on Dental Accreditation, October 31-November 2, 2006. A team of 19 visitors conducted a comprehensive three-day review of all aspects of the school’s educational and administrative programs, with a focus on measurements of outcomes assessment, clinical competencies, standards of care, and quality assurance.

The school received 20 commendations, including six for the pre-doctoral program (one each for financial management; infection control; the use of advanced technology in educational programming; senior leadership and faculty; faculty development and mentorship; and research), two for the dental hygiene program, and 12 for advanced study programs. The school also received one recommendation that requires follow-up, with documentation to be submitted by July.

“Our was an overwhelmingly positive accreditation experience,” says Dean Patrick Lloyd. While the scrutiny by the site-visit team was intense, the self-review the school undertook in preparation for that visit was even more rigorous. “The entire accreditation process made us a better school,” says Lloyd.

To Be Worthy of Public Confidence
In dental education, accreditation is the process of evaluation intended to monitor, strengthen and sustain the quality and integrity of an academic program, making it and the profession worthy of public confidence.

The process includes an external evaluation conducted by the ADA Council on Dental Accreditation (CODA) on a seven-year cycle. Each dental school is required to submit a comprehensive self-study report of each program to be evaluated.

The school’s self-study began in earnest in July, 2005, under direction of Associate Dean of Academic Affairs Judith Buchanan. A recent addition to the faculty, Buchanan held a similar position at the University of Pennsylvania which underwent its own successful accreditation in 2001. Even more helpful, she was an experienced ADA accreditation consultant with a half-dozen-or-so site visits to her credit and was a private accreditation consultant to some 17 dental schools within the past five years.

“The process of preparing for an accreditation site visit is no simple undertaking,” says Buchanan. “The depth and breadth of scrutiny and the number of people involved in a self-study can be overwhelming.” She began by organizing nine different teams of faculty, staff and students. “No course, lab, policy, benchmark, syllabus, publication, nook or cranny of this building was left unreviewed,” she says.

With input from faculty, staff and students, the self-study teams reviewed every aspect of educational programming and operations to determine their consistency with ADA standards and with the school’s own stated goals and objectives. Says Buchanan, “We continually asked, ‘Are we doing what we’re supposed to be doing? Are we doing what we say we are doing?’ We evaluated our own performance and fine-tuned areas we felt might need improvement. Then, we called in experts from other dental schools to give us a preliminary review.”

First to arrive was a colleague from Georgia who reviewed the school’s clinic operations. Next, the school hosted a mock site visit by a well experienced two-person team of senior dental school administrators from New Jersey and Illinois, including one dean and a senior associate dean who was also a former
Something to Smile About

Few things are as genuinely warming as a smile on the face of a child. And the confident smile of this “tween-ager” was infectious. Fourth-year dental student Jennifer Nguyen couldn’t help but delight in the response of her young patient as he saw his newly restored tooth, provided courtesy of the School of Dentistry and Give Kids a Smile Day.

There were, in fact, lots of smiles on the faces of the 204 children who, with their parents, braved below-zero weather and crowded School of Dentistry reception rooms and clinics to receive free dental care on Saturday, February 3.

The student-coordinated event also attracted some 245 student volunteers plus 30 faculty and staff. First- and second-year dental students helped in registration, served as patient escorts throughout all stops in the treatment process, and assisted third- and fourth-year dental students and pediatric dentistry residents who treated patients under faculty supervision. Dental hygiene students and faculty treated patients and provided oral health instruction. Afterward, students and residents met with parents and guardians to advise about services provided, discuss recommendations for follow-up on untreated needs, and share information about how to contact the school for continuous care. By day’s end, students provided just over $91,000-worth of free dental care over the course of the five-hour clinic.

Give Kids a Smile Day is the annual national event created to provide free dental care to low-income children and to highlight dental access challenges of uninsured and underinsured patients. Minnesota Dental Association President Richard Wiberg and President-elect Jaime Sledd stopped by to congratulate all participants on a most successful day.

A special congratulations to dental student co-coordinators Nicole Amundson and Alison Just, and to dental hygiene student co-coordinators Sarah Sting and Erin Sikkink, who planned this year’s event. It was a great day!

The Center of Attention

Looking more like a private dental office than a dental school clinic, the school’s Center for Contemporary Dentistry opened to rave reviews in October as more than 100 students and guests dedicated the new state-of-the-art teaching clinic.

Created in partnership with Patterson Dental Supply, the center features CAD/CAM technologies, digital radiography, an intraoral camera, the latest in infection control equipment and electronic patient records, plus dental chairs with both rear and side-delivery, touchpad controls and integrated accessories.

Students have a good reason to be enthusiastic. The new center is one of the most technologically advanced in the nation, and every senior student will spend two weeks training there. The clinic will also be available for use by participants enrolled in some of the school’s continuing dental education programs.
n February, when the daytime temperature was 10° Fahrenheit below zero, Minnesotans simply bundled up and plodded onward. But Obi Onuora couldn’t believe how cold it was. “I called my family in Nigeria to tell them about it,” he says. “I’d never seen anything like it before.” Fortunately, the temperature was the only thing that was cold about his reception in Minnesota. “My classmates are fantastic,” he says.

Onuora, a Nigerian-educated dentist from Benin in eastern Nigeria, is back in dental school as one of six students in the inaugural class of the School of Dentistry’s Program for Advanced Standing Students (PASS). Launched last spring, PASS is an educational program for graduates of dental schools outside the U.S. and Canada who seek to practice dentistry in the United States. The program accepts highly qualified internationally educated dentists who enter dental school as third-year students. Successful completion of the program in a little over two years leads to a doctor of dental surgery degree, allowing the graduate to seek a license to practice dentistry in any U.S. state.

Credential Quest

In the past, according to a study in the Journal of Dental Education (No. 11-12, 1994), “foreign trained dentists were eligible for licensure in many states upon fulfilling the state board criteria. Since the late 1970s, most states have changed their licensure criteria to require a degree from a dental school accredited by the [ADA’s] Commission on Dental Accreditation.” To meet this need, about 25 U.S. schools offer programs for graduates of international dental schools. Among these are New York University, University of Michigan, University of Pennsylvania, UCLA, University of the Pacific, University of Illinois, UCSF, University of Texas (San Antonio) and Tufts University. Many have much larger classes than those at the University of Minnesota. NYU’s program, for example, enrolls 110 students annually while Minnesota’s inaugural class had just six students and its second class will have 10 students. But according to UMN PASS Program Director Peter Berthold, “Minnesota’s program is sized appropriately for the state.”

“The presence of internationally educated dentists enhances the intercultural experiences of all dental students.”

— PETER BERTHOLD

According to Marshall Shragg, executive director of the Minnesota Board of Dentistry, the challenge to the board in meeting the legislative mandate was in determining if the applicant’s training was, in fact, equivalent. “We’re a licensing body, not an accrediting body,” explains Shragg. “We received hundreds of applications. But grading systems, entrance requirements, curriculum, dental materials, rules and regulations for dental practice and patient management, and other factors all varied from country to country and dental school to dental school.”

PASS students Gloria Lopez, Obi Onuora, Susan (Ebun) Isawumi, and Naina Mahale.
Since March 2001, 367 internationally educated and non-accredited dentists have applied to the board. Says Shragg, “About 200 were judged to have had equivalent education and approved to sit for the clinical examination.” Of those who passed the exam, the state licensed 179 and just over 80 currently practice in Minnesota. But Shragg says the process of credential review was slow. “I’m sure many of the other applicants are good dentists and we don’t want to keep people from being productive here,” he says, “but the board’s job is to protect the health of the public. Evaluating qualifications of internationally educated dentists who come from a variety of different schools with diverse clinical and didactic programs is difficult.”

In Spring, 2004, the Board of Dentistry approached the School of Dentistry for assistance. And the request couldn’t have come at a better time. According to Dean Patrick Lloyd, “Dr. Peter Berthold was in Minnesota on sabbatical from the University of Pennsylvania where he directed that school’s dental PASS program and its international exchange programs. He had 18 years of experience working with international dental schools and a successful track record of evaluating the personal and academic qualifications of those who were admitted to and successfully completed the PENN PASS program. He agreed to spend a year with us in a limited capacity, during which time he organized our PASS program while also fulfilling a prior consulting commitment with the World Health Organization. With Peter’s assistance we were able to respond to the Board of Dentistry and, in less than a year, create an opportunity for internationally educated dentists,” says Lloyd.

Berthold joined the faculty on a permanent basis in July, 2006, and now is in the process of enhancing the school’s existing exchange programs with dental schools in Germany, Denmark, Norway, and the Netherlands. In addition to his School of Dentistry appointment, the university is able to capitalize on Berthold’s international public health experience. He currently holds joint appointments in the dental school and in the School of Public Health. “It was a win-win for everyone,” says Lloyd.

The Board of Dentistry, especially, welcomes the PASS program. Says Shragg, “Graduates of the PASS program have the educational credentials the board looks for when reviewing applicants for licensure. It’s exciting and a wonderful opportunity to utilize international dentists’ training and education by allowing them to earn a U.S. degree.”

Changing Minnesota

There are many reasons to foster added training and licensing for these dentists. Top on the list is that Minnesota’s ethnic mix is changing. Between 2005 and 2015, the nonwhite population is projected to grow 35 percent, compared to 7 percent for the white population. The Hispanic population is expected to increase 47 percent. According to a recent report from the State Demographic Center at the Minnesota Department of Administration, immigrants will be the fastest growing part of the state’s labor force, while the number of native-born workers will shrink.

“One of the challenges for the profession is to reflect the diversity of the society that it seeks to serve,” says Berthold. “If you’re an immigrant, it’s reasonable to want a dentist who understands your cultural background and your views on health. Licensing international dentists who have completed an additional education program at an ADA-accredited dental school may help provide the personnel to deliver care to various ethnic groups and/or where access is a problem,” explains Berthold.

Cultural competency is also a goal embraced by the dental school. “The presence of internationally educated dentists enhances the intercultural experiences of all dental students,” says Berthold. “It better prepares them to treat patients in an increasingly diverse community and expands their understanding of the world.” It’s also consistent with the goals of the University which seeks to advance the public good by recruiting, challenging and graduating highly motivated lifelong learners, leaders and global citizens. “Our international study and exchange programs send students to experience the world,” says Berthold. “Other programs, such as the PASS program, bring the world to our students.”

There’s another reason to foster cultural competency. Says Lloyd, “Top universities are talent magnets. They attract academicians and researchers...
from around the world who will educate the next generation of knowledge workers and the health professionals who will care for all Minnesotans. Cultural competency skills are critical for everyday interactions on campus, in our dental practices, and as citizens of the global community.”

The American Dream
Launching a new life in this country is a daunting task, says Onuora. “It means leaving friends, family and the life you know.” As countless immigrants to this country have found, immediate success doesn’t meet them when they arrive. Nor are the streets paved with gold. Onuora, for example, worked as a dental assistant in New York City when he first arrived, but when that dentist sold his practice, Onuora was a stock clerk at Sears. “It was a radical switch,” he says.

“I knew it wouldn’t be easy leaving Nigeria. I wondered if I could really cut it. But I have a brother who is a physician in New York City and he went through the same thing.”

The reasons why current PASS participants have made the move are as diverse as the students themselves. For some, it’s ambition and the drive for self-improvement. Some want to live the American dream. For Onuora, “I’m trying to improve myself. America is where everything happens. In my country the profession is limited to extractions and fillings. I want to progress against stagnation.”

Other PASS students are in the U.S. because their spouse or family member was already living and working in this country. Naina Mahale practiced in India for two years after receiving her dental degree from the Nair Hospital College in Mumbai, formerly called Bombay, and came to the U.S. with her husband in 1998. He is a physician who entered a fellowship in kidney transplants at the Mayo Clinic and is now practicing in Fargo, N.D. “I always wanted to go back to dentistry and I know that patients will regard you most highly with a degree from here, but I waited to see if we would stay permanently in the U.S. before applying to a PASS program because it is so costly.” UMN PASS students pay an out-of-state tuition slightly above that of non-Minnesota residents, along with student fees.

Though she was accepted at other universities, she chose Minnesota for two reasons: She and her husband have a seven-year-old daughter and the University of Minnesota’s location allows them all to get together on weekends. “I also felt that Dr. Berthold has a lot of experience and we would be in good hands here.”

Getting In
The first class of PASS students consists of two from Nigeria, two from India, and one from Egypt and Colombia. This year, the school received 484 applications (from 50 different countries) for 10 openings in the second PASS class that will start May, 2007. Sixty-five students were interviewed; 10 have been accepted. They

“It was a rapid fire, no-breath-in-between approach, and they absorbed everything we threw at them. My experience with the first PASS class is that by the time they finished the summer program, they were well prepared to enter the clinical years of our dental program.”

— GARY COOK

hail from Romania, Egypt, India (3), Nigeria (2), Iran, Somalia and China. Eight are women and two are men, and one of the students is a U.S. citizen who was raised and educated abroad.

The application process is open and rigorous. Many students find out about the program through the School of Dentistry’s Web site, which is the sole way the school has promoted the program. The PASS program information at www.dentistry.umn.edu/programs_admissions/UMN_PASS.html has more “hits” than any other portion of the school’s Web site which, perhaps, attests to the interest and motivation of these dentists as they search for PASS-type programs.

Applicants must pass the National Dental Boards (NDB) Part 1 and the Test of English as a Foreign Language (TOEFL), and submit their transcripts and diplomas from the dental schools from which they graduated. A transcript evaluation service was used to help evaluate educational credentials for validity and consistency. Berthold spearheads the process, reviewing every application, test score and transcript. The NDB scores of PASS applicants range from 78-98, and 136 applicants had board scores over 90. The average NDB Part 1 score of the applicant pool was 87.

The admission committee also takes a good look at what applicants have done since they arrived in this country. Berthold believes that life experiences such as Onuora’s employment outside the dental profession are important because of the knowledge and familiarity one gains of the culture. “Sears, convenience stores…at these places you see what the real America is like,” he says. Onuora concurs. “I made a lot of friends and learned a lot about people.” During that time he also saw a bit of the country, traveling to Boston and California.
Based on applications, the strongest candidates are invited to attend a daylong orientation and interview session with Berthold and two faculty members. In addition to strong academic credentials, candidates must provide evidence of their desire to be a part of the fabric of a community. Some will share experiences they’ve had learning about Minnesota or the Midwest. Others will describe what they’ve done to develop their English language skills. Faculty seek to identify candidates who demonstrate a commitment to the profession and a level of personal maturity needed to meet the professional and social challenges of the program.

“I am an internationally educated dentist, and that’s a huge asset,” says Berthold of his part in the interview process. A dentist from Sweden, he came to the U.S. in 1979 and is, himself, a graduate of a program similar to PASS. He says his first six years here were a challenge, so he can relate to these students with regard to culture shock and homesickness. “Sometimes a person moves here, but it takes a while for their soul to catch up.” Until that happens, he says, they are not ready for the program. How It Works

PASS students begin with an intensive 12-week summer program that runs from early May to August. During this time, they review lectures, attend seminars, participate in discussion groups on adapting to a new culture, and perform a substantial number of pre-clinical laboratory exercises. They also have a chance to sharpen up their eye-hand coordination and learn about dental materials and procedures not used at the schools in which they were educated or countries in which they practiced. They complete rotations in University of Minnesota School of Dentistry clinics. All completed projects and examinations are identical to those given to four-year students during their first two years of dental school. The 12-week introductory course is designed to facilitate a smooth transition for PASS students as they merge with the third-year dental students into patient care experiences in September.

“It was hard at first,” says Mahale. She says she was out of practice and it took a couple of weeks to regain her skills. “As Dr. Berthold says, your mind knows what to do, but your hands can’t necessarily execute it.”

“It means leaving friends, family and the life you know.”
— OBi ONUORA

Gary Cook, director of the Division of Prosthodontics and one of the PASS students’ pre-clinical instructors during the summer course, described it as a rigorous concentration of two years of coursework into one summer session. “It was a rapid fire, no-breath-in-between approach, and they absorbed everything we threw at them. My experience with the first PASS class is that by the time they finished the summer program, they were well prepared to enter the clinical years of our dental program.”

When the summer course is over, PASS students are fully integrated into the third-year class of dental students and proceed with their colleagues through their third and fourth years of dental school. They attend all classes together, take the same exams as the other students, and treat patients in the school’s dental clinics. Says Berthold, “PASS students receive the same clinical education as any other student graduating from the University of Minnesota School of Dentistry and are similarly eligible and prepared to sit for any licensing examination of their choice.”

He’s also quick to clarify that PASS students are not taking coveted places of applicants to the four-year doctor of dental surgery program. Says Lloyd, “Our enhanced commitment to public service means that, at any given time, up to 20 percent of our fourth-year students will be off campus caring for patients at one of our community-based clinics and fulfilling the outreach portion of their clinical education. So we have the on-campus clinic space available to integrate additional third- and fourth-year students into the program.” He also pointed out that PASS students will participate in these outreach experiences, which introduce them to life and practice in greater Minnesota and additional career opportunities that might be available after graduation.

Cultural Competency

Dental practice is quite different in other countries. The materials and the ways dentists use them are different. “For example,” says Onuora, “in Nigeria we had only self-cured composites and here we use light-cured composites.” Office procedures, scheduling, and dental insurance are also different. In Nigeria, services are offered on a cash basis, which means that services are usually focused on extractions and dentures rather than restorative and cosmetic dentistry because patients can’t pay for those.

Says Mahale, “It’s also very different here from a medical-legal standpoint. Infection control protocols and regulations are not the same in India and we didn’t have HIPPA and insurance. Patients usually paid out of their pocket.”

Along with the clinical techniques, PASS students learn about U.S. practices for patient management, interaction with colleagues and cultural behaviors, and they absorb much of this from their fellow students. Working with the other dental students helps PASS students bridge the gap between their new culture.
and the old, and to develop the skills necessary to operate in their new social and professional settings. In studies of PASS groups at other schools, these students show a preference for being in the mainstream. They enjoy the social interaction with American students. The study in the Journal of Dental Education found, “The preference for integration becomes more significant when it is seen in contrast to the common practice of most immigrant groups of confining themselves to their own families and ethnic groupings.”

Still, it could be intimidating and quite the culture shock to join a group of 96 third-year dental students who have been together for two years. “All of us were apprehensive about how well we would be accepted,” says Naina, “but we were very well received. It’s been very positive.” Says Berthold, “The faculty, staff and students should get high credit for the smooth transition of our PASS students into third-year classes and clinics. They have been wonderfully supportive of the students, the program and of me.”

Onuora says, “Everyone is nice and people go out of their way to help you if you have any problems.” Beyond the clinic, “We hang out after class functions,” he says. He also joined some senior dental students for that most American of activities, watching the Super Bowl. “It can be a little lonely. On the weekends, I talk to my dad and friends in Nigeria and tell them of my adventures. Last week I told them about Give Kids a Smile Day. I feel cool and happy.”

While these students learn a lot culturally from their American counterparts, it works both ways. PASS students have shown themselves to be high-achievers and their experience—both clinical and worldly—is valuable to other students. Says Onuora, “I bring a new perspective.”

Ultimately, this mix of students fosters cultural competency, as they learn from each other. The international students gain more knowledge of this country and its practices from their peers, and those from the U.S. become more sensitive to other cultures which is critical because they will be working in an increasingly diverse world, no matter what part of the state or the country they practice.

Says Mahale, “Before it was homogenous. We add diversity to the school community. And since we’ve all had [dental] training, other students can ask us questions. They sometime ask, ‘What do you think? How will this work?’”

“They’re very humble people even though they have already graduated and practiced,” says third-year student Megan Beuckens of her PASS classmates. “They could have been intimidating to those of us just starting clinicals, but they’re very pleasant and mature. They’re fast learners and very adaptable. They share their experiences. I actually like it more with them here.”

—— They’re very humble people even though they have already graduated and practiced. —-Megan Beuckens

The new PASS program offers dentists from other countries a chance to reclaim their profession. It’s too early to say exactly what they’ll do after graduation or where they’ll practice. Unlike traditional international “exchange” students who return home after completing their education in the U.S., these internationally-trained dentists are likely to continue living in the U.S. Lonnie Norris, dean at Tufts University School of Dental Medicine in Boston where the Advanced Standing International Program was started in 1956, says that from that school’s experience, most graduates stay in the U.S. In addition to increasing the supply of practicing dentists, the School of Dentistry has high hopes that some PASS students will pursue teaching or research careers, thus helping to attract and retain ever-valuable science professionals in this country. Says Berthold, “PASS programs and other international dentist programs have been a great source of new faculty.”

Either way, we all benefit as Minnesota “globalizes” along with the rest of the world. Says The New York Times columnist Thomas Friedman in his best-selling exploration of globalization The World is Flat, “The more you have a culture that naturally globalizes—that is, the more your culture easily absorbs foreign ideas and best practices and melds those with its own tradition—the greater advantage you will have in a flat world.”

He quotes Jerry Rao, who heads a high-tech trade association in India who says, “Openness is crucial because you start to respect people for their talent and abilities…You are dealing with people on the basis of talent—not race or ethnicity—and that changes, subtly, over time your whole view of human beings, if you are in this talent-based and performance based world rather than the background-based world.”
The second trimester of pregnancy brings relief from morning sickness and the joy of feeling the baby kick for the first time. It’s also considered the best time for an expectant mother to see a dentist, after fetal development is stabilized and before she would be uncomfortable in a dental chair. In a recently completed, first-of-its-kind study, an interprofessional research team took advantage of this second-trimester “window of opportunity” to study the relationship between maternal periodontal disease and preterm birth. Known as the Obstetrics and Periodontal Therapy (OPT) study, the four-year, $10 million multi-center clinical trial funded by the National Institute of Dental and Craniofacial Research (NIDCR) explored the potential benefits of periodontal treatment during pregnancy.

Bryan Michalowicz, Erwin Schaffer Chair in Periodontal Research and associate professor in the Department of Developmental and Surgical Sciences at the University of Minnesota School of Dentistry, led the interprofessional team that conducted the study.

Prompting the clinical trial was previously reported data that periodontal disease in pregnant women was associated with increased risk for preterm birth (before 37 weeks of gestation) and low birth weight (less than 5.5 pounds).

“A few small clinical studies had previously looked at women who delivered prematurely and determined that they did, on average, have more widespread periodontal disease than women whose pregnancies were full-term,” says Michalowicz. Given those findings, the OPT study set out to determine if treating periodontal disease in pregnant women could improve birth outcomes, such as lowering their risk for preterm birth. Reducing rates of preterm birth, which have increased over 30 percent in the U.S. in the last two decades (with one in eight babies now born prematurely), is a major public health goal. Preterm and low birth weight babies experience increased rates of mortality, chronic health problems, and long-term disabilities.

“The OPT study is the first multi-center controlled study anywhere to determine if treatment of periodontal disease affects any other disease or condition.”

— Bryan Michalowicz
The OPT Study

Scientists have theorized that the link between maternal periodontal disease and preterm birth is the bloodstream which transports oral bacteria or inflammatory molecules from the infected gum tissue of moms-to-be to the placenta and amniotic fluid, causing infection or inducing early labor.

While some pilot studies by other investigators had suggested that treatment of periodontal disease in pregnant women decreased the rate of preterm birth, no one had undertaken a large, multi-center, randomized trial. Says Michalowicz, “The OPT study is the first multi-center controlled study anywhere to determine if treatment of periodontal disease affects any other disease or condition.”

According to Virginia Lupo, the OPT study’s obstetrical principal investigator at the Hennepin County Medical Center study site, one of the strengths of the study was its interprofessional nature. “This study highlights the power of merging disciplines, in this case dentistry and obstetrics, to pursue a public health question. We literally set up dental practices within our obstetrics clinics, and that was a very unique and needed approach,” she says.

The OPT study included 816 pregnant women at one of four sites nationwide (see accompanying column on page 12). All the study participants had periodontitis, a bacterial infection of the gums that destroys connective tissue and bone that hold teeth in the mouth. Half the women received scaling and root planing, a nonsurgical procedure to remove dental plaque and calculus from the tooth-root surface, during their second trimester of pregnancy. They also received monthly oral hygiene instruction and tooth polishing. The other group of women participated in the same number of dental visits but received only a brief oral exam at each appointment, with root planing and scaling provided after delivery. Investigators tracked birth outcomes, adverse medical events, and clinical measures of periodontal disease in both groups.

In results recently published in the New England Journal of Medicine, the OPT study team found that, while second-trimester nonsurgical periodontal treatment did not improve birth outcomes (risk of preterm delivery, birth weight, and Apgar scores), it did improve all measures of periodontal health (probing depth, clinical attachment loss, and bleeding on probing) without increasing adverse medical events such as hospitalizations for longer than 24 hours, congenital anomaly in an infant, and spontaneous abortion, stillbirth, or neonatal death. These results indicated that nonsurgical periodontal therapy had no significant effect on pregnancy outcomes.

An Important Step Forward

In addition to examining the impact of periodontal treatment on birth outcomes, the OPT study provided valuable information on the safety of periodontal therapy in pregnant women. “Many dentists and even patients defer non-emergency dental treatment until after delivery,” notes Michalowicz. “Similarly, many dentists defer periodontal treatment until after birth as a precautionary measure.”

Although more data are needed before a change in the standard of care will be recommended, NIDCR director Larry Tabak sees important implications in the study. “Dental care during pregnancy has long been an issue dominated by caution more than data,” says Tabak. “The finding that periodontal treatment during pregnancy did not increase adverse events is important news for women, especially for those who will need to have their periodontal disease treated during pregnancy.”

According to Jane Atkinson, program director of NIDCR’s Clinical Trials Program, “The OPT results mark a tremendously important step forward in that they provide dentists with high quality scientific data to guide their treatment decisions when a patient is pregnant. But no study is definitive, and more work is under way to confirm these data and provide the needed preponderance of evidence that ensures the safety and well-being of mother and her newborn.”

Links Between Oral and General Health

The association of maternal periodontal disease and increased risk of preterm birth is just one of an increasing number of links between oral and general health identified in recent years. Interdisciplinary basic and clinical research teams continue to pursue these connections.

Beyond the initial OPT trial, Michalowicz is actively involved in additional studies that further explore the relationship between oral and general health.

In December, 2005, Michalowicz received a $2.5 million grant from the NIDCR to lead a follow-up study of the children born to the women enrolled in the OPT trial. A research team of dentists and pediatric specialists (a developmental psychologist or pediatric neurologist, for example) paired at each study site is examining the effects of maternal periodontal disease on psychomotor and language development in these children. “Other maternal, fetal or neonatal infections during pregnancy, such as chorioamnionitis, HIV, and necrotizing enterocolitis, can affect neural development in children who were exposed to these infections while in the womb,” says Michalowicz. The study of the children of the OPT trial participants seeks to...
assess if maternal periodontal disease is another infection that, if it occurs during pregnancy, can affect neural development. By tracking and comparing the language, motor, and mental development of the children born to the two groups of women, differences that correlate to the existence of maternal periodontal infection may be identified. The OPT study facilitates the examination of such potential differences in neural development by providing access to a pre-existing study population of young children whose mothers’ periodontal health during pregnancy had been carefully documented. In addition, the network of investigators needed to conduct the neural development study at multiple sites was already in place from the initial OPT trial.

In addition to preterm birth, scientists have linked other conditions to periodontal disease, including cardiovascular disease, diabetes, and pulmonary disease. Michalowicz and colleagues are planning another clinical trial, this time examining the relationship between periodontal disease and diabetes. That study team, which includes lead dental and diabetes investigators at The State University of New York-Stony Brook, plans to test if periodontal therapy improves glycemic (blood sugar) control in patients with Type II diabetes.

Michalowicz is enthusiastic about his involvement in such multidisciplinary research projects. “All of these studies further forge ties to medical disciplines and present new and exciting opportunities for clinical research,” says Michalowicz. “There is a clear need to have more interprofessional research collaborations within the health sciences.”

OPT Study Team

The Obstetrics and Periodontal Therapy (OPT) clinical trial was conducted at four U.S. sites: Jackson, MS; Lexington, KY; Minneapolis, MN; and New York, NY. Over 800 patients were enrolled between March 2003 and June 2005. Work at each site was led by a dental and an obstetrical principal investigator. Participating investigators included:

**Jackson, MS**
- William Buchanan, Periodontics and Preventive Sciences, University of Mississippi Medical Center
- James Bofill, Obstetrics and Gynecology, University of Mississippi Medical Center
- Stacy Vance, University of Mississippi Medical Center

**Lexington, KY**
- M. John Novak, Center for Oral Health Research, University of Kentucky
- James Ferguson, Obstetrics and Gynecology, University of Kentucky
- Dawn Dawson, University of Kentucky

**Minneapolis, MN**
- Bryan Michalowicz, Developmental and Surgical Sciences, University of Minnesota
- Anthony DiAngelis, Dentistry, Hennepin County Medical Center
- Virginia Lupo, Obstetrics and Gynecology, Hennepin County Medical Center
- James Hodges, Biostatistics, University of Minnesota
- Pat Tschida, Biostatistics, University of Minnesota
- Amos Deinard, Pediatrics, University of Minnesota
- Leslie Simpson, Hennepin County Medical Center

**New York, NY**
- Panos Papapanou, Periodontics, Columbia University
- Dennis Mitchell, Periodontics, Columbia University
- Stephen Matseoane, Obstetrics and Gynecology, Harlem Hospital
- Shana Lassiter, Harlem Hospital/Columbia University

“This study highlights the power of merging disciplines, in this case dentistry and obstetrics, to pursue a public health question. We literally set up dental practices within our obstetrics clinics, and that was a very unique and needed approach.”

— Virginia Lupo, OPT Obstetrical Principal Investigator, Hennepin County Medical Center Study Site
had an idea that I was interested in dentistry,” says Mary Pariseau, “but I wanted to try it without committing to a longer program.” So, she launched her dental career in the School of Dentistry’s one-year dental assisting program in 1973. She liked it so much, she applied to the U-M dental hygiene program.

She earned her graduate dental hygienist degree and married her high school sweetheart, but again found that she wanted new levels of responsibility and challenge. So, from 1977 to 1980, while working days, she went to night school to take the classes that were required to apply to dental school and returned to the School of Dentistry in 1980, this time for a doctor of dental surgery degree. “My husband and I took turns being full-time students during the first nine years of our marriage.”

She had their first child six weeks after graduation from dental school. “I was so pregnant that I think I made the Board of Examiners a little nervous when I sat for my exams,” she says. With a few short breaks, she has been working ever since.

Pariseau practiced in a variety of settings in the following years, including nursing home dentistry, a Group Health dental clinic, and at Park Dental. Those positions allowed her some flexibility to care for that first child and two more that followed, one of whom was very ill and has developmental disabilities. In 1989, the dentist for whom she worked as a dental hygienist retired and she bought his practice. “My connection to many of my patients goes back to the time when I was their hygienist,” she says. Later, with her husband contributing contracting and design skills, they built a new office building in Maplewood.

Balance and quality of life have been important considerations along the way. When her husband’s company indicated that chances were good he would have to relocate, it was the perfect time for him to make a career change. Now, he’s a full time at-home parent.

“I think that combination [of experience] has given me an appreciation of the challenges each team member faces in their particular job.”

— MARY PARISEAU

She says, “I believe that each individual and each family must find their own way to strike a balance between work and home and there is no one formula for that. Smart people look at lives and circumstances and decide what to keep and what to change.”

The balance that Pariseau has struck includes plenty of involvement with professional groups. For example, she has served on the executive committee of the St. Paul District Dental Society as secretary since 2000. She has also been a delegate to the House of Delegates and a member of the Scientific Session Committee for the Minnesota Dental Association’s Star of the North Meeting. She’s a member of the True North study group and the Seattle Study Club, which emphasizes collaboration among specialties and a multi-disciplinary approach to patient treatment. She has also been an active participant in continuing education through the Pankey Institute for Advanced Dental Education, which places a particular emphasis on personal and professional balance for dentists.

Dental assistant, dental hygienist, dentist, and business owner…“I think that combination [of experience] has given me an appreciation of the challenges each team member faces in their particular job and how important it is for each team member to have a voice in decisions because I know how important it is to get all perspectives.” Though she took the long road to a D.D.S., “I wanted time to clarify what I really enjoyed and what I wanted to do every day. I wouldn’t have done it any other way.”
The charts below represent the unaudited revenue sources and expenses of the School of Dentistry for fiscal year 2006.

### Income & Expenses

#### Income

<table>
<thead>
<tr>
<th></th>
<th>Amount</th>
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<tbody>
<tr>
<td>Clinics</td>
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<tr>
<td>Research and ICR</td>
<td>$11,601,743</td>
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<td>Tuition and Fees</td>
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<td>Operations &amp; Maintenance (O &amp; M)</td>
<td>$9,760,603</td>
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<td>Other Income</td>
<td>$5,492,483</td>
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<td>Dean’s Strategic Investment Pool</td>
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<td>Gifts and Investment</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>$56,638,097</strong></td>
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#### Expenses

<table>
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<tr>
<th></th>
<th>Amount</th>
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<tbody>
<tr>
<td>Instruction</td>
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<tr>
<td>Clinical Activity</td>
<td>$15,247,287</td>
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<tr>
<td>Research Activity</td>
<td>$11,837,934</td>
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<tr>
<td>Institutional Revenue Sharing and Support</td>
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<tr>
<td>Administration and Development</td>
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<td>Student Services and Scholarships</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>$56,498,615</strong></td>
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</table>

#### Income Notes

The School of Dentistry’s total revenues were approximately $56.6 million in FY 2006, which represents a 3.4% increase from FY 2005. These improved revenues are attributed to increases in Clinical Revenue, Tuition and Fees, and special O&M allocations.

Tuition and Fees increased by approximately 9.6% for a total of $10.9 million dollars (now reflecting 19% of total revenues). Increases are attributed to (1) a 9% increase in tuition; (2) increased revenue resulting from the creation of a new Program for Advance Standing Students (PASS) which enrolled six students in its inaugural year; and (3) the upward adjustment of class size (from 85 to 96 students) for the Doctor of Dental Surgery program (initiated in 2003). Now in its fourth year, enrollment in all classes for Doctor of Dental Surgery program is at the expanded class size.

Research revenues decreased 2% from $12.3 million in FY 2005 to $11.6 million in FY 2006, an amount that reflects the phasing out of two of the school’s largest federal research grants as they near completion.

O&M allocations increased 1% in 2006 to $9.8 million. The increase is attributed to a reallocation of O&M funds to all tuition generating colleges to address the cost pressure of additional academic and infrastructure investments. In addition, the School of Dentistry received additional (recurring) supplemental funding in the amount of $421,000 to support initiatives to retain and recruit superior faculty through competitive compensation adjustments. This amount will be added to the O&M base in FY 2007. Of interest to many, although State O&M funding for the School of Dentistry increased 1%, O&M funding, as a percent of total budget, decreased 1% (from 18% in FY 2005 to 17% in FY 2006.)

The balance of revenues from all other sources saw a 3.5% increase from FY 2005 levels. Clinics revenue increased 4%, the result of curriculum changes and efficiencies in patient and payor management. In addition, the Dean’s Strategic Investment Pool increased by $600,000, with the additional funds dedicated to support various school initiatives to enhance technology for clinical efficiency and the student educational experience.

#### Expenses Notes

The school’s expenditures for FY 2006 totaled $54.6 million, an increase of approximately 6% from FY 2005. This amount is consistent with the increase in revenues in Clinical Activity and Instruction, and reflects expenses related to new hires for open positions and educational capital improvements (i.e. dental simulation facility and the Center for Contemporary Dentistry, etc.) Clincial Activity and Instruction expenses increased approximately $2.5 million in FY 2006 and represent the largest share of the school’s expenses. Although the combined spending in these areas as a percent of total budget was essentially the same as last year, (62% in FY 2005 and 63% in FY 2006), expenses for Clinical Activity decreased 5.8% while Instruction expenses increased 4%. Changes were the result of an internal restructuring of clinical and instructional activity, increased investments in faculty retention, infrastructure and technology enhancements, and new staff, faculty and researcher hires (in various disciplines).

Research expenses still comprise 22% of our total school’s expenses. We are aggressively pursuing additional research opportunities befitting our position as a top ten research institution.

Administration and Development expenses increased by approximately 1%. The increase can be attributed to development activities, accreditation expenditures and capital projects within the dental school.

Student Services and Scholarships increased 1% from FY 2005, consistent with the School of Dentistry’s commitment to increasing student financial assistance.

In FY 2006, the university’s Institutional Revenue Sharing and Support (IRS) increased by 2% which totaled $3.6 million compared to $3.3 million in FY 2005.

Jeff Ogden  
Chief Administrative Officer

2006 Community Report

The charts below represent the unaudited revenue sources and expenses of the School of Dentistry for fiscal year 2006.
**2006-2007 Faculty/Student Statistics**

### Paid Faculty Appointments*

<table>
<thead>
<tr>
<th>Track</th>
<th>Full Professor</th>
<th>Associate Professor</th>
<th>Assistant Professor</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenure/Tenure Track</td>
<td>25</td>
<td>28</td>
<td>13</td>
<td>66</td>
</tr>
<tr>
<td>Research Track</td>
<td>0</td>
<td>1</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>Clinical Track</td>
<td>0</td>
<td>19</td>
<td>12</td>
<td>31</td>
</tr>
<tr>
<td>Adjunct/Community Track</td>
<td>41</td>
<td>39</td>
<td>92</td>
<td>172</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>66</strong></td>
<td><strong>87</strong></td>
<td><strong>130</strong></td>
<td><strong>283</strong></td>
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*As of 3/20/07.

### Students

**Fall Quarter Enrollment 2006**

<table>
<thead>
<tr>
<th>Program</th>
<th>Count</th>
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<tbody>
<tr>
<td>Dental Hygiene</td>
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</tr>
<tr>
<td>DDS</td>
<td>392</td>
</tr>
<tr>
<td>Advanced Education &amp; Graduate Programs</td>
<td>77</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>547</strong></td>
</tr>
</tbody>
</table>

**2005-2006 Graduates**

<table>
<thead>
<tr>
<th>Program</th>
<th>Count</th>
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</thead>
<tbody>
<tr>
<td>Dental Hygiene-Baccalaureate Program</td>
<td>35</td>
</tr>
<tr>
<td>Dental Hygiene-Degree Completion Program</td>
<td>10</td>
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<tr>
<td>Certificates</td>
<td>32</td>
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<tr>
<td>Graduate &amp; Professional Degrees Awarded</td>
<td>92</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>169</strong></td>
</tr>
</tbody>
</table>

### 2006-2007 First-Year Class Profiles

#### Profile of the 2006-07 First-Year Dental Class

- Total Number of Applicants: 855*
- Class Size: 96

#### Profile of the 2006-07 First-Year Dental Hygiene Class

- Total Number of Applicants: 92
- Class Size: 24

#### Average GPAs

- Overall GPA: 3.63
- Required Course GPA: 3.57
- Science GPA: 3.57

#### Average DATs

- Academic Average: 19.4
- Perceptual Ability: 19.1

*These figures represent AADSAS calculations.

#### Average ACT Scores

- Composite Average: 21.6

*These figures represent AADSAS calculations.
Students Visit Capitol

More than 40 dental students met with legislators in St. Paul on March 8 to talk about issues related to dental education and improved access to dental care for public program patients. Students were there to discuss both the University’s request for strategic investments to sustain quality and competitiveness in education and the Minnesota Dental Association’s call for expanding access to dental care for public program patients. Although students visit the capitol each year, discussions this visit were particularly instructive because of the significant turnover in the state legislature as a result of the 2006 elections.

Student discussions with legislators focused on the need to invest in competitive faculty compensation, technology and facilities; the high cost of dental education; and the need for a new approach to expanding access to dental care, including increased funds for critical access providers.

In preparation for the legislative visits, student representatives requested and received information from the School of Dentistry, and Dean Patrick Lloyd and MDA representatives met with Student Lobby Day participants to provide background information on dental education and dental access issues.

Going the Distance

It was a long commute, but well worth the effort. Isaac Chong is the first graduate of the Certificate Program in Contemporary Restorative and Esthetic Dentistry at the University of Minnesota. Chong completed the 500-hour lecture, laboratory and clinical curriculum commuting 16 times to Minneapolis from Singapore. He selected the program at the University of Minnesota because it covered all aspects of esthetic dentistry needed for complex treatment. In addition, the extensive curriculum prepared him for the AACD accreditation exam which he successfully passed after completing Level 1 of the program. Chong believes he has benefited greatly from the program in his clinical work and has been invited to speak on dental esthetics both in Singapore and in other Asian countries.

Updates

Simulation Clinic: The walls are up, cabinetry is installed, and students will be in the clinic in May. Fundraising efforts continue. The facility will enhance student learning and improve student relations, and allow us to increase community-based educational opportunities that enhance access to care while introducing greater numbers of dental students to life and practice in greater Minnesota. Amount remaining to be raised: $1.9 million. Visit www.dentistry.umn.edu for ongoing updates and pictures of construction in progress.

Willmar Dental Clinic: The clinic is one step closer to reality after a December 13th vote by the Rice Memorial Hospital Board to proceed with the development of a dental training site in partnership with the U-M School of Dentistry. The 10-chair hospital-based clinic will provide service-learning experiences for dental and dental hygiene students, enhanced access to care for underserved and uninsured patients in the 12-county area, and interprofessional training opportunities for dental, medical, nursing and pharmacy students. The hospital is recruiting a clinic director and an architect, and the clinic is expected to be operational as early as October 2007. The project has attracted $2.1 million in state, county, federal and corporate financial support to sustain the clinic through construction and the first three years of operation. Funders include: Minnesota Department of Health, Minnesota Legislature, HRSA (U.S. Dept. of Health and Human Services), University of Minnesota Academic Health Center, Delta Dental of Minnesota, and Rice Memorial Hospital.

Alumni Survey: The school is surveying graduates from the last decade in the first of a series of regular data collection efforts that will allow us to track changing developments affecting the workforce and oral health care delivery. Questions address issues related to the effectiveness of the dental school curriculum in preparing graduates for practice, as well as the dynamics of career and current practice decisions. Information will help the school better serve students and alumni, and respond to challenges posed in the way dentists practice, the geographic distribution of our graduates, gender and generational practice trends, internal planning, and workforce policy recommendations.

Continuing Dental Education: According to the Association for Continuing Dental Education, the U-M School of Dentistry ranked first in the number of 2006 CDE participants. The top five schools: University of Minnesota (6,894 attendees); University of North Carolina (5,409); University of the Pacific (4,502); University of Michigan (4,471); and the University of Washington (3,585).
Putting Bacteria to Work  BY LINDA S. RAAB

Massimo Costalonga’s research uses bacteria as tools to dissect the immune system

With the proliferation of anti-bacterial soaps and cleaning products in our modern world, it’s easy to think of bacteria only as disease-carrying organisms to be avoided. But our bodies naturally host numerous bacterial species that are not pathogenic and are often beneficial. These commensal bacteria, meaning normally occurring within an organism without causing injury or disease, are recognized by the immune system, but do not trigger a response to eliminate them. Periodontist Massimo Costalonga, assistant professor in the Department of Developmental and Surgical Sciences, is exploring how T cells see these bacteria. T cells are white blood cells that play an important role in the body’s immune system response to infection, either by regulating the immune response or aiding the attack against bacteria. His research aids scientists’ understanding of how the immune system works and has implications for treating periodontal disease and improving vaccine delivery methods.

Through support from the National Institute of Dental and Craniofacial Research, Costalonga and his co-investigator Mark Herzberg, professor in the Department of Diagnostic and Biological Sciences, are studying mucosal immunity, meaning the body’s immune response at mucosal surfaces such as the intestine and the airways. Mucosal surfaces are often the body’s first line of defense against pathogens. Specifically, Costalonga is exploring how commensal microorganisms interact with the immune system at mucosal sites. Central to his research is a mouse model of the immune system that he developed through collaboration with Marc Jenkins and Patrick Cleary, both professors in the Department of Microbiology in the Medical School. Using a technique pioneered by Jenkins, Costalonga obtains and then transfers mouse transgenic T cells that specifically recognize ovalbumin (a foreign protein to mice) into genetically identical mice. These recipient mice are then fed a strain of the commensal bacterium Lactobacillus murinus that has been modified to express ovalbumin.

As these bacteria colonize the intestine, the transferred T cells recognize the bacteria’s ovalbumin tag and mount a response. Costalonga subsequently retrieves and analyzes these T cells to determine how the response was triggered. “The model represents a very powerful tool for delivering vaccines intranasally,” he notes. He is also examining T cell responses in the nasal lymphoid tissues after administering ovalbumin-tagged L. murinus or Streptococcus pyogenes, a pathogen that can cause rheumatic fever and other serious illnesses. That work addresses a long-term goal of the research, which is to compare the responses to commensal bacteria to those induced by pathogens.

In another mouse model, Costalonga is investigating the connection between periodontitis and the immune response to bacteria. Porphyromonas gingivalis is a bacterial pathogen commonly associated with periodontitis, an infection of the gums that results in bone loss. In laboratory studies, P. gingivalis causes an inflammatory response that induces bone loss in some strains of mice, but induces neither inflammation nor bone loss in other strains of mice. Costalonga is studying the role of a protein known as toll-like receptor 4 (TLR4), which is present on the surface of some immune system cells, in the immune response. Because TLR4 is one of the first molecules to interact with P. gingivalis, he wants to understand how TLR4-P. gingivalis binding initiates the cascade of events that culminates in bone resorption. Early results with TLR4-deficient mice indicate that the effects of the P. gingivalis bacteria on bone loss can be modulated based on TLR4 expression. In time, he plans to use the same T cell transfer techniques being used to study mucosal immunity to examine the cellular responses that may contribute to bone loss in this mouse model.

Costalonga believes that his work on mucosal immunity will contribute to efforts to develop alternate vaccine delivery systems. A few vaccines, such as for polio (oral) and influenza (nasal), are already delivered through mucosal sites. In developing countries, oral vaccine delivery is an attractive, easy-to-administer alternative to injections. “We want to find a way to deliver vaccines that do not induce disease, but instead prompt a successful immune response against vaccine antigens that will protect individuals,” he notes.
Attending the AAFP annual luncheon were Conrad (center) and her research supervisor Igor Pesun (L) and Jim Holtan (R) School of Dentistry director of the Advanced Education Program in Prosthodontics.

at the AAFP 56th scientific session in February and was recognized at the annual luncheon.

**Awarded: BreAnne MacKenzie** as the first-ever 3M Science and Technology Fellowship recipient in the Graduate Program in Oral Biology. The 3M Fellowship is one of 12 awarded among all graduate programs of the University of Minnesota. BreAnne will receive a $25,000 stipend for the first year of graduate study, and $8,000 for up to three additional years. MacKenzie has been working in the lab of Raj Gopalakrishan in the area of bone biology.

**Awarded: Kim Mansky** (Developmental/Surgical Sciences-Orthodontics) a $293,556 grant from the National Institute of Arthritis and Musculoskeletal and Skin Diseases to study the regulation of Mitf’s activation of osteoclast target genes. Mansky studies bone metabolism and Mitf is a transcription factor expressed in osteoclasts (a cell that destroys bone).

**Selected: Don Nixdorf** (Diagnostic/Biological Sciences-TMD & Orofacial Pain) as a CAPS research scholar. CAPS (Career Advancement Program for Clinical Research Scholars) is funded by the National Institutes of Health as part of its K12 career development initiative to improve health and speed the translation of research discoveries into improved patient care by educating future leaders of multidisciplinary clinical research.

**Welcomed: Jeff Ogden** (Administration) as new chief administrative officer. Formerly regional president and chief operating officer of AAA of Minnesota and Iowa, Ogden has broad-based experience in a mission-driven nonprofit services and sales organization that is a multi-million dollar subsidiary of an even larger organization. His 25 years of finance and accounting experience is enhanced by a public policy and legislative focus plus experience in operations, IT and human resources management; new product development; nonprofit reporting requirements; managing leased and owned facilities; and the sale, purchase and construction of new facilities.

**Welcomed: Annie Pennola** as director of Alumni Relations for the U-M School of Dentistry. Formerly assistant director of Special Events and Alumni Outreach at New York University’s Robert F. Wagner Graduate School of Public Service, Pennola brings with her five years of experience in alumni and external relations for a variety of business and educational organizations. She has a strong commitment to supporting and encouraging people to be active participants in their own ongoing education and to maintain a continued connection to their school. She has worked at all levels of the student experience, including marketing to prospective students, producing quality programming for current students and alumni, and development.

**Welcomed: Craig Selden** (Restorative Sciences) as director of quality assurance for the School of Dentistry. With nearly 30 years of experience as a general dentist, Selden was most recently associate dental director for care at HealthPartners where he was responsible for monitoring the quality of care provided by internal and external dentists, developing dental care guidelines and overseeing dentist credentialing.
Greetings from the University of Minnesota School of Dentistry Alumni Society (SODAS). It never fails to amaze me how quickly time passes, especially as you gain in life experiences. The alumni society continues to work hard for you, our current alumni members, and our future colleagues and members.

First, I would like to welcome Annie Pennola to the School of Dentistry Alumni Society in her role as the director of Alumni Relations. Annie comes to us from New York University where she served as the director of Special Events and Programs and associate director of Alumni Outreach for New York University’s Robert F. Wagner Graduate School of Public Service. Annie has also worked in the nonprofit and higher education sectors, both as a professional and a volunteer, and brings with her a vast amount of experience in volunteer management, communications and marketing, as well as administration of student and alumni programs. We are very fortunate to have someone of Annie’s caliber on our team. I would also like to thank Marie Baudek and her fine staff for providing outstanding support to the School of Dentistry Alumni Society and its activities. Marie has been wearing several hats for the past few years with both the Alumni Society and Continuing Dental Education and has excelled in each role.

The School of Dentistry continues to be a focal point of activity. As you have probably heard, the fourth floor renovation and the new simulation clinic are nearing completion. I want to personally thank all of the alumni who contributed financially to this effort. The new facilities will provide state-of-the-art education experiences for current students and allow the University to remain competitive in attracting future top-flight students. If you haven’t made a contribution to this fine program, I personally invite you to consider making a commitment to this endeavor. Please contact Fred Bertschinger our director of Development about supporting this program.

It also amazes me how much has changed since I was enrolled as a full-time dental student at the University. The application process has become extremely competitive. Last year we had 988 applicants for 96 positions in the class of 2011. In order to assist our alumni in providing accurate information regarding admission requirements to potential students, SODAS will sponsor a break-out session on this topic at the upcoming Career Day event to be held on April 21, 2007. The session will address academic requirements, statistics (GPA, DAT scores) of a typical successful candidate, and other factors that may influence the admission process.

Your alumni society is also active in supporting the University and our dental and dental hygiene students. We have opportunities for you to support students through the Cap and Gown fundraiser each spring and the summer golf tournament. These efforts provide scholarships and other non-monetary support to our future members—the new graduates. The School of Dentistry Alumni Society also supports continuing education for practicing professionals through the Clinical Grand Rounds program at the dental school. Clinical Grand Rounds provides an opportunity to have a great meal, network, and obtain great training in an evening.

Please stop by and say hello at the upcoming Star of the North Meeting. The School of Dentistry Alumni Society will have a booth on the exhibition floor throughout the meeting. I want to personally thank all of our current alumni members. If you are not currently a member, please consider joining this year!

Sincerely,

President, School of Dentistry Alumni Society
Award-Winning Alumni

**Jeanne M. Anderson**

2007 Distinguished Dental Hygiene Alumna

Adjunct professor Jeanne Anderson received a G.D.H. in 1971 and a B.S. in Dental Hygiene Education in 1981, both from the University of Minnesota. Since then she has been a vital contributor to the School of Dentistry and her profession as a clinical practitioner, association leader, educator, and researcher.

She’s been active in the Minnesota Dental Hygienists’ Association serving as president (1994-95) and was Member of the Year in 1997. She has been a delegate and reference committee member for the American Dental Hygienists’ Association, and is an advocate on behalf of dental hygiene at the Board of Dentistry and the Minnesota legislature. She was instrumental in promoting the rules for local anesthesia administration and supervision changes, as well as the dental hygiene scope of practice in statute. Anderson has also worked on tobacco, child abuse, and migrant oral health issues.

At the School of Dentistry, she developed and teaches the dental anatomy and pain management courses for dental hygiene students and continuing education courses. In addition, she is an instructor for the periodontology preclinical course for dental students and has been a clinical instructor for both the dental hygiene and DDS periodontal clinics. She was the faculty advisor for the Student American Dental Hygienists’ Association, and has been a recipient of the Instructor of the Year Award for several years. In addition, Anderson worked at Hennepin County Medical Center on the multi-faculty NIH research grant exploring the relationship between maternal periodontal disease and preterm birth. Her research on the administration of local anesthesia by dental hygienists was published in the *Journal of Dental Hygiene*.

**Erwin M. Schaffer**

2007 Distinguished Dental Alumnus

Erwin Schaffer has served the school and the dental profession in the nation and the world for more than 60 years. A visionary leader and the school’s most accomplished statesman, he has pioneered advances in dental education and research, guided the school through its most pivotal years, and left a 19-story legacy.

Schaffer received a D.D.S. in 1945 and an M.S.D. in periodontology in 1951, both from the University of Minnesota. He served in the Marine Corps in the mid-1950s and, during that time, was the first periodontist in the world to graft cartilage to the jaw. He is one of the founders of modern scientific, evidence-based periodontology, with over 100 articles published in scientific journals, most on the topic of periodontal regeneration. He has served as director of the American Board of Periodontology and president of the American Academy of Periodontology and helped to guide the development of the specialty at the national level.

Yet, among the many accomplishments in Schaffer’s remarkable career, his work at the School of Dentistry leaves a particularly lasting legacy. He served as a faculty member and department chair, and was dean from 1964 to 1977. During that time the school created 12 new programs and tripled the number of full-time faculty. He was instrumental in working to secure funding from the legislature and private sources for construction of the new dental school, completed in 1975. He also established the School of Dentistry’s Century Club, a model for fundraising for the University, and has been personally responsible for raising millions of dollars to support school initiatives. In 1987, the Erwin Schaffer Chair in Periodontal Research was established in his honor. Officially retired in 1992, he continued teaching until 2006. He is an avid outdoorsman and at age 70, won a silver medal in Nastar downhill ski racing.
Class Notes

Please submit brief notices about milestone events and activities to: U of M Continuing Dental Education & Alumni Relations (attn: Marie Baudel), 515 Delaware St. S.E., 6-406 Moos Tower, Minneapolis, MN 55455 or penmo008@umn.edu.

Dentistry is published two times a year. Deadlines for submission are: Spring issue: January 1; Fall issue: July 1. Please note: Dentistry cannot publish birth and marriage announcements.

1937
Margaret “Mugs” Schandel (D.H.), Blue Earth, passed away Sept. 28, 2006 at the age of 94. She was a practicing dental hygienist for over 35 years. A student during the time the Program in Dental Hygiene transitioned from a focus on nursing toward a more in-depth curriculum in dental hygiene and liberal education, she was among the early leaders of the profession in Minnesota. As a student, she typed the first fluoride research papers by Drs. Wallace Armstrong and Peter Brekkus. After graduation, she worked in the Minneapolis public schools and later in a private dental practice. She helped organize area dental hygienists as members of the Minnesota Dental Hygienists’ Association (MDHA) and served as its Trustee. In 1975, she received the “Award of Merit” from the American Dental Hygienists’ Association. She was MDHA secretary in 1980-81 and was named “Member of the Year” in 1982. In 1995 she was honored with the Marion Leeben’s Membership Award.

Once a year for five years she worked with Faribault County Nursing Service and, with the backing of the county commissioners and local dentists, visited public and parochial schools to conduct the area’s first self-applied fluoride “brush-in” program. She also conducted in-service training for nurses and aids in area hospitals. She chaired the advisory board for the local high school’s medical careers program and advised a similar program in Wells, Minn. In 1985, the Mitchell Chautauqua Circle honored her as their “Woman of Achievement.” Margaret Schandel also held leadership roles in political and community organizations, serving as first chairperson for the county Red Cross Disaster Committee, president of the local American Legion Auxiliary, and as a member of a sextet that won state music contests four years in a row.

1940
Harold J. Swift (D.D.S.), Austin, died May 9, 2006, at age 97. Dr. Swift put himself through dental school buying and selling repossessed cars. He and his wife would leave Minneapolis by bus for Detroit on Friday evenings to pick up choice cars and hitch them with tow bars—four at a time—for the drive back to Minneapolis and dental school by Monday morning, with no sleep since departure. After graduation, he began his dental practice in Austin. He enlisted in the Air Corps in 1942 as a first lieutenant and remained in the Army Reserve for 27 years, retiring as a lieutenant colonel. Dr. Swift was a member of the Minnesota Dental Association, the Austin Dental Society (serving twice as its president), and was a presenter at numerous meetings of the Minnesota Dental Association.

1942
Phyllis Guilde (nee Brecht) (D.H.), Minneapolis, died Nov. 7, 2006 at age 84. With an appreciation of “earthly beauties of the garden,” she and her husband hosted tours and teas for the Edina Garden Council, Minnesota Federated, American & Minnesota Dahlia Society, and the North Star Rose Society, and placed in many state fair competitions. She was a member of the Edina Women’s Club and the Federated Square Dancers’ Club.

1943
John E. “Jack” Echternacht (D.D.S.), Gull Lake, died Nov. 30, 2006. After graduating summa cum laude, Dr. Echternacht enlisted in the U.S. Navy, was discharged with the rank of lieutenant, and then practiced dentistry in Brainerd for 49 years until retirement in 1995. For nearly 30 years, he led the battle against strident opposition to fluoridation of Brainerd’s water system, an effort that generated national media attention. When opponents claimed that even J. Edgar Hoover was against fluoridation, Dr. Echternacht telegraphed the FBI director who responded in 1961 with a letter assuring “that I did not make the statement attributed to me…”

Dr. Echternacht was a longtime active member of the University of Minnesota Alumni Association, the Academy of Restorative Dentistry, the Minnesota Dental Association, the American Dental Association, and the International College of Dentistry. A talented fundraiser for area projects, he was also a volunteer teacher at the local dental assisting program, the visionary behind construction of the Brainerd Civic Center, and president of the Brainerd Civic Music Association. After declining the honor for several years, he was named Brainerd Citizen of the Year in 1982. His accomplishments and his story are included in a book about moral exemplars titled Dentists Who Care: Inspiring Stories of Professional Commitment (published by Quintessence).

1944
Howard K. Jensen (D.D.S.), Bellevue, Wash. passed away in Sept. 2006 after a 26-year battle with cancer at the age of 85. Dr. Jensen served in the Army Dental Corps from 1944-47. He started one of the first dental practices in Bellevue in 1949 and spent the next 43 years treating generations of Bellevue residents and friends. Later he was a clinical instructor at the University of Washington School of Dentistry. In 1981, he was followed into practice by his son who continues to treat patients in what is now the longest continuous dental practice in Bellevue.

Dr. Jensen is remembered for his sense of humor and positive outlook, his conscientious professionalism, and as a lifelong learner who enjoyed reading, playing the trumpet, golfing, photography, woodworking, jewelry making, hunting and fishing.

1960
LeRoy Wang (D.D.S.), New Brighton, passed away July, 2006 at age 77. Dr. Wang was a veteran of the Korean War. He practiced dentistry for 37 years in Columbia Heights. Upon retirement he taught at the U-M School of Dentistry.

1966
Richard Wiberg (D.D.S.), Roseville, was elected president of the Minnesota Dental Association for 2006-07.

Stephen Litton (D.D.S.), Golden Valley, was named “2006 National Volunteer of the Year” by the University of Minnesota Alumni Association (UMAA) in recognition of his 46 years of association with the University of Minnesota and his tireless efforts on its behalf. Dr. Litton received the award, the highest bestowed by the organization, at the UMAA Annual Volunteer Awards Ceremony in September 2006.

Dr. Litton is currently an orthodontist in Golden Valley. Now in his final year of a six-year position on the UMAA National Board, he is also active on the School of Dentistry Alumni Society Board of Directors.
and serves as a member of the school’s Simulation Clinic Campaign Cabinet which is working to raise funds for the renovation of the dental school’s pre-clinical teaching laboratories. He is responsible for organizing the Orthodontic Residents Endowment, which provides funds for orthodontic residents to attend professional development meetings, and is a former assistant professor in the Anatomy Department at the Medical School. In addition to his numerous activities on behalf of the University of Minnesota and its School of Dentistry, Dr. Litton has also served in numerous leadership roles within the dental profession, including tireless efforts on behalf of Sjogren’s Syndrome, the Minnesota Dental Association, the Minneapolis District Dental Society, and the American Association of Orthodontists. He currently is president of the Midwestern Society of Orthodontists, a constituent of the American Association of Orthodontists.

1977
Candace Mensing (D.D.S.), Duluth, outgoing Minnesota Dental Association trustee for the Southeastern District Dental Association, was honored with a Certificate of Appreciation for service to the association.

Tom Seidelmann (D.D.S.), Duluth, will receive the Minnesota Dental Association’s 2007 Humanitarian Service Award in recognition of his state and international contributions as a volunteer provider of donated dental services, his support of U-M School of Dentistry students, and his participation in community philanthropic and volunteer activities. The award will be presented in April at the association’s 2007 Star of the North Meeting.

1978
Michael Flynn (D.D.S.), Winona, was elected to fulfill the second term as trustee of the Southeastern District Dental Society of the Minnesota Dental Association.

Larry Wolff (D.D.S.), Edina, was inducted into the American College of Dentists (ACD) in October, 2006, at the ACD annual meeting, held in conjunction with the annual meeting of the American Dental Association. ACD is the oldest national honorary organization for dentists.

1979
James Zenk (D.D.S.), Montevideo, received the Past President’s Award from the American Dental Association, a Certificate of Appreciation from the Minnesota Dental Association and the MDA’s Past President’s Pin in appreciation for his year of service as president.

1980, 1987
Roger Ettel (D.D.S., M.S.), St. Paul, received the 2007 St. Paul District Dental Society Outstanding Service Award at the dental society’s Midwinter Meeting on January 19.

1980
Lisa Howard (D.D.S.), Scarborough, ME, was installed in June as the first woman president of the Maine Dental Association. Her involvement in organized dentistry had its roots in Minnesota, where she practiced for 14 years as a general dentist and became active in the Minneapolis District Dental Society, serving as its president in 1989-90. She was elected vice chair of the ADA Council on Membership and Communications in 1992. After the council was divided in 1993, she continued to serve on the Council on Membership until 1996. She was also a consultant to the Council on Dental Practice for two years. In 2002, she led a campaign to fluoridate the water in the community of Kennebunk, where she lives. She was appointed to the ADA Council on Access, Prevention and Interprofessional Relations in 2003 and chairs its National Fluoridation Advisory Committee. She served on a number of Maine Dental Association committees and on its executive board before being elected vice president in 2004.

1982
Peter Cannon (D.D.S.), St. Paul, authored an article awarded the 2006 Prize for Dental Journalism by the American College of Dentists for his article “When the Walls Came Tumbling Down: A Pathway to Addiction.” The article appeared in Northwest Dentistry, (Volume 84, Issue 6 and Volume 85, issues 1 and 2.) The award was presented at the annual meeting of the American Association of Dental Editors, held this year in Las Vegas, in conjunction with the annual meeting of the American Dental Association.

1987
Paul Krebsbach (D.D.S.), Ann Arbor Mich., has been nominated for the position of treasurer of the American Association of Dental Research (AADR). He currently serves a three-year term as member of the AADR’s Constitution Committee. He also is a member of the Hatton Awards Committee for the International Association of Dental Research. Dr. Krebsbach is chair of the Department of Biologic and Materials Sciences at the University of Michigan School of Dentistry.

1994
Chun-Pin Lin (Ph.D. in Oral Biology), Taiwan, Republic of China, was appointed Dean of School of Dentistry, National Taiwan University. Dr. Lin co-authored the defining article on the functional mechanics of the dento-enamel junction in Journal of Histochem Cytochem March 1993; 41:381-88 (with W. H. Douglas and S. L. Erlandsen). He was also a major contributor to the Minnesota Dental Research Center for Biomechanics and Biomaterials, and was intimately involved in the optimization of biomaterials, which became benchmarks for enamel replacement in the posterior dentition.

2004
Gary Hedlin (D.D.S.), Duluth, will receive the Minnesota Dental Association’s 2007 New Dentist Leadership Award in recognition of his contributions to the people and dental community of Minnesota. The award will be presented in April at the association’s 2007 Star of the North Meeting.

2006
Atty Smith (D.D.S.), Park Rapids, was presented with a Certificate of Appreciation at the School of Dentistry Honor’s Day in May for her service as Trustee from the Student District Dental Society.
Upcoming Class Reunions & Events

<table>
<thead>
<tr>
<th>REUNION/EVENT</th>
<th>DATE, TIME, LOCATION &amp; CONTACT INFORMATION</th>
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<tbody>
<tr>
<td>Class of 1947</td>
<td>60 Year Reunion, Monday, April 30, 1:30 p.m., Steak &amp; Ale, Bloomington, Dr. Milton Bartsh, Chair</td>
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<tr>
<td>Class of 1951</td>
<td>Wednesday, September 12, 2007, 12 p.m., The Lexington, Dr. Elmer Thiesse, Chair</td>
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<tr>
<td>Class of 1954</td>
<td>Monday, April 30, 11:30 a.m., McGoverns, Dr. Wayne D. Johnson, Chair</td>
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<tr>
<td>Class of 1957</td>
<td>50 Year Reunion, Friday, June 1, 4:00 p.m., Tour of the Dental School, 5:30 p.m., Dinner at Radisson</td>
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<td>University Hotel, Dr. David J. Fihn, Chair</td>
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<tr>
<td>Class of 1959</td>
<td>Saturday, April 28, 11:45 a.m., Holiday Inn RiverCentre, HA Penny Room, Dr. William R. Johnson, Chair</td>
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<tr>
<td>Class of 1961</td>
<td>Monday, April 30, 12 p.m., Saint Paul Hotel, Dr. Leonard Arndt, Chair</td>
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<tr>
<td>Class of 1962</td>
<td>45 Year Reunion, Monday, April 30, 12-2 p.m., Downtowner Woodfire Grill, Dr. Mark Holmes, Chair</td>
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<tr>
<td>Class of 1963</td>
<td>Monday, April 30, 12-1:15 p.m., Saint Paul Hotel, Dr. James Holton, Chair</td>
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<td>Class of 1964</td>
<td>Monday, April 30, 12 p.m., Saint Paul Hotel, Dr. James Indrehus, Chair</td>
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<tr>
<td>Class of 1967</td>
<td>40 Year Reunion, Friday, April 27, 7-10 p.m., Saint Paul Hotel, Dr. Stephen Litton, Chair</td>
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<tr>
<td>Class of 1977</td>
<td>30 Year Reunion, Saturday, April 28, 6 p.m., Saint Paul Hotel, Dr. Herbert Schulte, Chair</td>
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<tr>
<td>Class of 1982</td>
<td>25 Year Reunion, Saturday, April 28, 5-10 p.m., Saint Paul Hotel, Dr. John Shand, Chair</td>
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<tr>
<td>Class of 1987</td>
<td>20 Year Reunion, Saturday, April 28, 6:30 p.m., Private Residence, Dr. Tammy Meister, Chair</td>
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<tr>
<td>Class of 1996</td>
<td>Saturday, April 28, 6:30 p.m., Great Waters Brewing Company, Dr. Tasha Strait, Chair</td>
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<tr>
<td>Class of 1997</td>
<td>10 Year Reunion, Saturday, April 28, 6:30 p.m., Liffey Restaurant, Dr. Randy Moseng, Chair</td>
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<tr>
<td>Class of 1998</td>
<td>Saturday, April 28, 6:30 p.m., Chico Chica, Dr. Doug Wolff, Chair</td>
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<tr>
<td>Class of 2005</td>
<td>5 Year Reunion, Friday, April 27, 12 p.m., Saint Paul Hotel, Dr. Patrick McGann, Chair</td>
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<tr>
<td>Endodontic Alumni</td>
<td>Alumni Reception at the American Association of Endodontics</td>
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<tr>
<td>Association</td>
<td>Wednesday, April 25, 2007, 5:30 p.m., Philadelphia Marriott, Room 305, Dr. Scott B. McClanahan, Chair</td>
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<tr>
<td>Orthodontic Alumni</td>
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<tr>
<td>Association</td>
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<tr>
<td>Class of 2005</td>
<td>Saturday, May 19, 2007, 7:30 p.m., Sheraton Seattle Hotel, Seattle, Wash., Dr. Stephen Litton, Chair</td>
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</table>

Graduation 2007:
School of Dentistry Alumni Society Cap & Gown Fund

Since 1997, the School of Dentistry Alumni Society (SODAS) has raised funds to cover the cost of cap and gown rental for graduating dental and dental hygiene students. Thanks to the wonderful response to past appeals, SODAS is now able to also provide additional scholarship money, support of the Senior Recognition Banquet, and funds for a yearbook for the graduating classes. Our commitment to the dental and dental hygiene classes of 2007 is approximately $14,000.

The School of Dentistry Alumni Society requests your participation in this special project. Please consider making a contribution by sponsoring one or more dental or dental hygiene students. The cost of cap and gown sponsorship for each student is $45. This contribution is tax deductible and will stand as a commitment and bond between alumni and students. As students wrap up their education and focus on final exams, board examination preparations and job searches, your contribution will help to eliminate one financial worry. To make your donation, call 612-625-6164 or visit us online at www.dentistry.umn.edu/alumni.html. Your generosity will always be a part of the memories of the Class of 2007’s years at the University of Minnesota School of Dentistry.

Old friends, new friends. Former dean Richard Oliver and Jackie Oliver (center) were among the 60 School of Dentistry friends and alumni who gathered in Phoenix when the school hosted two receptions in February. Dean Lloyd provided an update on current school initiatives and introduced Arnie Hill (*63), chair of the Simulation Clinic Campaign. Pictured L to R: Fred Bertschinger, School of Dentistry development director; Arnie Hill (*63); Richard and Jackie Oliver; Annie Pennola, new alumni relations director; and Dean Patrick Lloyd.
A PRIL 2007

April 20
Dean’s Day/Research Day
8:30 a.m. to 4:30 p.m.
Coffman Memorial Union
University of Minnesota
Minneapolis Campus
Minneapolis, Minn.
For more information:
www.dentalce.umn.edu
Click on: Calendar of Courses

April 21
Career Day
Check-in: 8:00 a.m.
Program: 9:00 a.m.-12:30 p.m.
School of Dentistry
University of Minnesota
515 Delaware St. S.E.
Minneapolis, Minn.
Pre-registration required.
For more information:
www.dentistry.umn.edu

April 27
School of Dentistry Alumni Society Board Meeting
3:00 to 4:30 p.m.
Saint Paul Hotel
St. Paul, Minn.

April 27
Annual Dean’s Reception
5:30 to 7:30 p.m.
Saint Paul Hotel
St. Paul, Minn.
For more information, call:
(612) 625-7678

April 27-30
MDA Star of the North Meeting
April 27
Pre-session seminars
April 28-30
Star of the North Meeting
River Centre
St. Paul, Minn.
For more information, call:
(612) 767-8400

M AY 2007

May 8
University of Minnesota Alumni Association Annual Meeting & Celebration
Registration: 5:30 p.m.
Dinner: 6:00 p.m.
Program: 7:30 p.m.
Mariucci Arena
University of Minnesota
Minneapolis Campus
Minneapolis, Minn.
Speaker: Tony Dungy, Head Coach, Indianapolis Colts and former Gopher football star.
For more information:
www.alumni.umn.edu

May 17-20
South Dakota Dental Association Annual Session
Rushmore Plaza Holiday Inn & Civic Center
Rushmore, S.D.
For more information, call:
(605) 224-9133

May 17
School of Dentistry Senior Recognition Banquet
Awards Ceremony: 5:00 p.m.
Banquet: 6:30 p.m.
Program: 7:30 p.m.
Radisson University Hotel
University of Minnesota
Minneapolis Campus
Minneapolis, Minn.
For more information, call:
(612) 625-8947

May 18
School of Dentistry Graduation
2:00 p.m.
Northrop Auditorium
University of Minnesota
Minneapolis Campus
Minneapolis, Minn.
Speaker: Dr. David Engel

13th Annual Golf Classic
Friday, July 27, 2007

Please mark your calendars to join us for the School of Dentistry Alumni Society Golf Classic!
Return to your maroon and gold stamping grounds on Friday, July 27, 2007 for a truly fun event at the Majestic Oaks Golf Club.
Enjoy some friendly competition, prizes, and a cookout. Stop by the School of Dentistry Alumni Society booth at the Star of the North Meeting or call 612-625-1418 or 800-685-1418 for more information. It’s not too early to get your foursome together!

J UNE 2007

June 8
White Coat Ceremony
Coffman Memorial Union Theater
University of Minnesota
Minneapolis Campus
Minneapolis, Minn.

J ULY 2007

July 27
13th Annual School of Dentistry Alumni Society Golf Classic
8:00 a.m. Shotgun Start
Majestic Oaks Golf Club
701 Bunker Lake Blvd.
Ham Lake, Minn.
For more information and registration, call:
(612) 625-1418 or (800) 685-1418

SEPTEMBER 2007

September 12
All-School Retreat

September 13-15
North Dakota Dental Association Annual Session
Ramada Plaza & Suites Fargo, N.D.
For more information call:
(701) 223-8870

For more information:
Except where noted, you can obtain further information on the events listed by contacting:

Julia Cross
(612) 625-7678
cros0183@umn.edu

To stay informed about events at the University of Minnesota, see the Twin Cities Campus Event Calendar at www.events.tc.umn.edu
10% Discount Now Available

School of Dentistry Alumni Society members are eligible for discounted continuing education. Members may receive a 10% discount for “lecture only” courses offered through the University of Minnesota School of Dentistry. (This discount applies to School of Dentistry Alumni Society members only and not their employees).

MAY 2007

Proper Body Mechanics for the Dental Hygienist: A Participation Program
May 11, 2007

Local Anesthesia: A Hands-On Training Program
May 14-16, 2007

Core Competency Day for the Dental Team
May 18, 2007

JUNE 2007

Dental Hygiene Refresher: A Hands-On Program
June 4-8, 2007

Practical Periodontics: A Hands-On Nonsurgical Program
June 13-15, 2007

JULY 2007

What’s New in Pediatric Dentistry Duluth, Minnesota
July 21-22, 2007

AUGUST 2007

42nd Annual Dental Assistants’ Seminar
August 10-11, 2007

7th Annual Oral and Maxillofacial Surgery Review
August 18-20, 2007

SEPTEMBER 2007

Clinical Grand Rounds: Orthodontics
September 6, 2007

Fall Dental Hygiene Seminar
September 7, 2007

Unlocking the Diagnostic Box–Postgraduate Program in Esthetic Dentistry: Level III
September 14-17, 2007

Everyday Success with Direct Resin Restorations
September 21, 2007

Restorative Expanded Functions: An 80-Hour Training Program
September 28-30, 2007
October 19-21, 2007
November 16-18, 2007
November 30-December 2, 2007

OCTOBER 2007

TMD and Orofacial Pain Miniresidency
October 1-3, 2007

Clinical Grand Rounds: Oral Pathology
October 4, 2007

University Gold Orthodontic Study Club
October 5, 2007
November 2, 2007
December 7, 2007
February 1, 2008
March 7, 2008
April 4, 2008

Dental-Medical Management of an Aging Population
October 5, 2007

NOVEMBER 2007

Clinical Grand Rounds: Geriatric Dentistry
November 1, 2007

Dental Product Update
November 2, 2007

Winter Dental Assistants’ Seminar
November 3, 2007

Postgraduate Program in Esthetic Dentistry: Level I–Lecture/Laboratory Series
November 9-11, 2007
January 11-13, 2008
February 8-10, 2008
April 4-6, 2008

DECEMBER 2007

Clinical Grand Rounds: Endodontics
December 6, 2007

For more information and to register for classes, contact:

Continuing Dental Education
6-406 Moos HS Tower
515 Delaware Street SE
University of Minnesota
Minneapolis, MN 55455

Phone:
(612) 625-1418
or (800) 685-1418

Fax:
(612) 624-8159

Website:
Dear Friends,

During the past year, I’ve had the good fortune to meet many of you in person. You’ve told me about your student experiences and made suggestions about how to enhance those experiences for our future dentists, dental hygienists, dental educators and researchers. Almost to a person you’ve expressed your interest in what we are doing, with many commenting about the wonderful opportunities students today have that were unavailable when you and I were in dental school. You are proud of your school and the direction in which we are moving.

I’ve asked you to support the School of Dentistry in new ways and many of you have responded generously. Some have renewed and increased your giving to support multiple projects. Some of you made your first charitable gift to support the School.

Reading through the list of donors for 2006 is a gratifying experience. Support from our alumni, friends, dental organizations and dental businesses has provided the school with financial resources to accomplish great things. We would not have been able to create a new future for our students by building the Simulation Clinic without private support.

Last year the donor list for that project included 16 names; this year it has over 600 names. The response from our full-time faculty, in particular, is overwhelming positive, with over 80% making a financial commitment to the project.

I extend my personal thanks to each of the contributors in 2006 for investing in dental education at the University of Minnesota.

Sincerely,

P A T R I C K  M .  L O Y D
Dean

We strive for accuracy when preparing these lists and apologize for any errors that may appear.
We invite you to notify the Development Office (at 612-625-1657) of any corrections.

Donors to the School of Dentistry 2006

The list is based on outright gifts, pledge payments and deferred gift payments.

*President’s Club Members. The President’s Club recognizes the University’s most generous benefactors.

3i Implant Innovations
3M Co.*
3M Fdn. Inc.*
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John C. Aamodt
Olef E. Aanrud
Hans Aarstad

Lisa M. Abadeer
Matthew M. Abramson
Acorn Dental Associates PA
S. K. Adams
Mansur B. Ahmad
Folaseade A. Aiyese-Ogundare
Timothy J. Ake
Nobuhiko J. Akimoto
Kevin Albon
David B. Albrecht
Ronald L. & Frances J. Albright
Patrick C. & Brenda F. Alcorn
Deanna L. Alevizos
All Your Smile Needs Dental Center
Allan T. Bluhm Trust
Julie Y. Allen
Tamer Alpagot

Jeffrey S. Amann
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We invite you to notify the Development Office (at 612-625-1657) of any corrections.
Scott is in private general practice in St. Paul where his wife, Anne, is the business administrator. Scott and Anne have been supporters of the University since graduation and believe in giving back to the school and career from which they’ve benefited. Scott comes from a family of dentists and all have been active in organized dentistry and volunteer service. The Lingles recently became members of the President’s Club.

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Bob and Inez are both graduates from the U-M School of Dentistry. They have contributed to the dental profession by serving in many volunteer leadership positions; Inez for dental hygienists and Bob for dentists. They also support many community activities and Bob still travels to Guatemala to provide voluntary charitable dental work. Longtime supporters of the University of Minnesota, their contributions have been recognized by membership in the Presidents Club.

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