Slaying the Dragon

The School of Dentistry’s call to action and education to prevent opioid addiction.
Dear Colleagues,

It gives me great pleasure to address you as members of the community of the School of Dentistry. These past few months have been a time filled with many opportunities and challenges. It is always good to step back and reflect on a few of the many achievements that take place around us every day. It is much too easy to take each other for granted. Surprisingly, this is an even greater risk for me in the dean’s office. Although I have a broad perspective of our varied and diverse activities, I find myself less able to get around to see people doing the “work in the trenches” than at any time in my academic career.

This issue of Dentistry magazine, in both the featured articles and the sidebars, provided me with important local stories regarding the efforts and accomplishments of our students, faculty, staff, alumni and community partners.

The article about our soon-to-be “Double Doc,” José Maldonado-Ortiz, is a remarkable story of a young man’s drive and passion to be the best he can be as a scientist and a clinician. José exemplifies all we can ask for in a leader in academic dentistry, and we look forward to his future. This individual effort is balanced by the remarkable teamwork of our 350 students, staff and faculty who made possible our 13th year of participation as a site for Give Kid’s a Smile, an effort that even brought back former Dean Michael Till who helped staff the event as a receptionist.

Our cover story shines an uncomfortable, but needed, light on dentistry’s contribution to the growing problem of opioid addiction fueled by prescription drugs. Dr. Harold Tu and the Division of Oral and Maxillofacial Surgery have taken the lead in developing a new prescription protocol that will be implemented in all of our University of Minnesota Dental Clinics with the assistance and leadership of Dr. Richard Nadeau, director of the Division of Comprehensive Care, and Dr. Todd Thierer, associate dean for clinic administration and patient care.

Our Century Club Professor of the Year announcement every year is eagerly anticipated, and this past year did not disappoint. My first thought, as soon as I heard of Dr. Jorge Perdigão’s award, was “Jorge has never won this?” Dr. Perdigão has been one of our stars for many years as a true “triple treat.” His notable clinical skills, unsurpassed international teaching reputation, and his clinical research sustained over many years has benefited all of us, his students and colleagues. He is a true credit to our profession and to our school.

It also was with great pleasure that I read about the recognition of Drs. Mark and Joey Omlie with the University’s Alumni Service Award. I have known Joey since we were classmates in the Class of 1980, and Mark since my oral and maxillofacial surgery rotation when he was chief resident. The recognition for all they have done and continue to do for our school and profession is most deserved.

Our staff continues to change and evolve, and a notable event for many of us is the retirement of our Continuing Dental Education (CDE) Program Director Marie Baudek. Marie and I started at the School of Dentistry as young immigrants from the Iron Range many years ago. She was my first assistant in the Dental Auxiliary Utilization (DAU) Program when I was a dental student. We will all miss her greatly but look forward to the tenure of our new CDE Director Jo Peterson.

Thank you all for all you do. I look forward to the times ahead!

Gary C. Anderson, DDS, MS
Interim Dean

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Gary C. Anderson Named Interim Dean

Gary C. Anderson, DDS, MS, associate professor and tenured faculty member in the Department of Developmental and Surgical Sciences, Division of Pediatric Dentistry, has been named interim dean of the University of Minnesota School of Dentistry, effective November 21, 2016. His appointment follows the departure of Leon Assael, DMD, who retired from his position as dean in August.

In announcing the appointment, Executive Vice President and Provost Karen Hanson noted Anderson’s experience as an academic leader in a variety of senior leadership positions. “I am confident that Dr. Anderson will provide steady and collaborative leadership while budgetary and strategic planning moves forward to position the school for a national dean search,” said Hanson.

“Vice President Jackson and I look forward to working with him, the school leadership, faculty, staff and Academic Health Center leadership to ensure the continued success and vitality of the school.”

Anderson joined the School of Dentistry faculty in 1984. Most recently, he directed the dental school’s Cleft Palate and Craniofacial Anomalies Clinic. He also has directed the undergraduate curriculum in occlusion and served on the faculty in the Division of Prosthodontics and the Division of TMD and Orofacial Pain, was a department chair on two separate occasions, and was the senior associate dean from 2001-2007. His research interests include investigations related to temporomandibular disorders, orofacial pain and occlusion; cleft and craniofacial anomalies; and evidence-based dentistry.

“This school has given me a wonderful academic career in dentistry, one I never envisioned in the mid-1970s when I arrived as a first-year dental student at the (then) new Moos Health Sciences Tower. I look forward to working with our faculty and staff in addressing the challenges ahead. It is a distinguished group I have had the privilege to be a part of over these many years and I am honored to serve the school in such a meaningful way,” said Anderson.

Dr. Anderson is a graduate of Gustavus Adolphus College in Minnesota, and of the University of Minnesota. He received his doctor of dental surgery degree in 1980, followed by a master of science in dentistry and completion of a residency in prosthodontics in 1983. Anderson is a member of the American Dental Association, the Minnesota Dental Association and the Minneapolis District Dental Society. He also is a member of the American and International Associations for Dental Research, the American Cleft Palate-Craniofacial Association, the Association of University TMD and Orofacial Pain Programs, the American Dental Education Association, the American College of Dentists, and the American Academy of Orofacial Pain.

For the duration of his interim dean appointment, Anderson has appointed Soraya Beiraghi, DDS, MS, MSD, professor and director of the Division of Pediatric Dentistry, and Anna Thurmes, MA, speech and language pathologist and clinic coordinator, to oversee direction of the Cleft Palate and Craniofacial Anomalies Clinic.
Sharing and Caring

More than 350 students, staff and faculty volunteers were on-hand to welcome 143 children and their families to the School of Dentistry’s Give Kids a Smile® (GKAS) event on February 4, 2017.

Now in its 13th year at the dental school, the student-organized event provides much-needed care for children who’ve had difficulty accessing dental services. It also connects both children and their families with the U-M Dental Clinics as a dental ‘home’ for ongoing oral health care needs. Every child received an examination, treatment plan and as-appropriate radiographs, preventive and operative services, which were prioritized to address the most critical needs first.

Congratulations to third-year dental students and GKAS co-chairs Karin Englund, Kaitlyn Lauer and Mehrdad Hairani, and to all of the volunteers who helped make this event possible.

Shared Values: Husband and Wife Team Receive Alumni Award

In a departure from tradition, the University of Minnesota Alumni Association (UMAA) selected not one, but two, School of Dentistry alumni as recipients of its prestigious Alumni Service Award.

Husband and wife team Drs. Mark and Jo Ann (Joey) Omlie were honored at the annual UMAA Awards Ceremony on Thursday, October 20, for their service to the School of Dentistry and the University.

For more than four decades, they have been unwavering champions on behalf of the dental school and its education, research and service mission, and have been devoted and generous volunteers who have given selflessly to broaden awareness of the school’s advancement and achievements.

Four-time U-M graduate Mark Omlie (BS, DDS, MD, Oral Surgery Certificate) is an enthusiastic advocate for dental education and an outstanding surgeon and citizen. A key member of the volunteer faculty in the Division of Oral and Maxillofacial Surgery (OMS) for 11 years, he has been an interviewer of prospective OMS resident candidates and a guest lecturer. He’s conducted countless mock board examinations that annually assess resident performance, and assisted the division in recruiting associates to teach within the school whenever there is a need. He also has been active in fundraising programs for a variety of division initiatives.

Sand and Citizen. A key member of the volunteer faculty in the Division of Oral and Maxillofacial Surgery (OMS) for 11 years, he has been an interviewer of prospective OMS resident candidates and a guest lecturer. He’s conducted countless mock board examinations that annually assess resident performance, and assisted the division in recruiting associates to teach within the school whenever there is a need. He also has been active in fundraising programs for a variety of division initiatives.

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Focus on Rural

A new “destination dentistry” program for regional high school students launched on March 11 at the Hibbing Community College (HCC). Building Bridges in Hibbing is one of the dental school’s pipeline admissions initiatives to encourage rural students to consider dental careers. Taught by students in the dental school’s rural dentistry mentoring program, Building Bridges features interactive dentistry activities—taking impressions, tooth numbering, removing “plaque” from dentoforms—and Dental Jeopardy, an oral health quiz competition. John Zupancic, DDS, director of the HCC Dental Clinic and School of Dentistry faculty member, supervised the event. Funding is provided by the dental school’s Minnesota Collaborative Rural Oral Health Project (MN-CROHP), which is supported by the Human Resources and Services Administration (HRSA). For more information, contact Aimee Cloutier at adclouti@umn.edu.

Rice Health Foundation Supports Dental School Outreach Site

The Rice Regional Dental Clinic is the beneficiary of a $218,000 gift from Rice Health Foundation (RHF) in Willmar, Minn. The clinic opened in 2007 as a partnership between Rice Memorial Hospital and the School of Dentistry, with financial support from RHF, Delta Dental of Minnesota Foundation, and several community and grant-making organizations. Staffed by School of Dentistry students and dental residents who treat patients under faculty supervision, the clinic enhances access to care for area residents while providing students with opportunities for interprofessional education and an introduction to life and practice in Greater Minnesota. To-date, some 640 dental, dental therapy and dental hygiene students, along with 23 pediatric dentistry residents, have completed rotations at the clinic, providing care for more than 13,000 patients from 17 Minnesota counties.

Board of Visitors Meets

The dental school’s Board of Visitors met on September 30, 2016. Created in 2013, the board meets semi-annually to advise the dean on issues internal and external to the school that affect our mission. Members include dental professionals from Minnesota, North Dakota and South Dakota; representatives of the Minnesota Board of Dentistry, organized dentistry and dental service provider agencies; state and federal government representatives; a dental insurer; and dental equipment suppliers. The agenda included updates on research, clinical systems, budgets and general news, as well as a discussion about curriculum initiatives, rural dentistry, and the School of Dentistry leadership transition.
Slaying the Dragon

The School of Dentistry’s call to action and education to prevent opioid addiction.

Michael Jackson, Phillip Seymour Hoffman, Prince, Heath Ledger. Celebrity drug deaths grab headlines. But over the last 15 years, the news of drug addiction and drug-related deaths has become increasingly more personal and these stories seldom make the evening news.

No longer the tale of ‘others’, the degree of separation between ‘us’ and ‘them’ has disappeared. Now, just about everyone has a story of a friend, loved one or acquaintance who has battled drug addiction. Or, they struggle with the problem themselves.

These stories have a common villain: opioid drugs. According to the Centers for Disease Control (CDC), since 1999, the number of overdose deaths involving opioids, including prescription opioid pain relievers and heroin, nearly quadrupled. On average, 91 Americans die every day from an opioid overdose. 1 Drug overdoses have surpassed motor vehicle accidents as a leading cause of death in the U.S. 2

According to Harold Tu, DMD, MD, associate professor and director of the School of Dentistry’s Division of Oral and Maxillofacial Surgery, “Opioid analgesics are a frequently prescribed drug by dentists. Dentists prescribe about 12 percent of all immediate-release opioid prescriptions, second only to family practice at 15 percent in the U.S. For the age group between 10 to 19—the patients who are most vulnerable to misuse, abuse and addiction—dentists are the most frequent prescribers.”

The plot line is almost always the same, too. It starts with opioid painkillers—drugs such as Oxycontin, Vicodin and Percocet that are chemical cousins of heroin—prescribed or filched from someone’s medicine cabinet. It’s easy to become hooked and users require ever-increasing doses to attain the pleasure of that first high, then just to feel normal, a process that’s come to be known as ‘chasing the dragon.’ Because prescription meds are expensive, addicts often turn to a cheaper and more readily available alternative, heroin. In a 2013 study reported by the Substance Abuse and Mental Health Services Administration, “Examining national-level general population heroin data (including those in and not in treatment), nearly 80 percent of heroin users reported using prescription opioids prior to heroin.” 3

Though it’s difficult, Angie Rake, DDS (’97, certificate 2002), a Twin Cities’ oral and maxillofacial surgeon and adjunct professor at the University of Minnesota School of Dentistry, tells the tragedy of her own brother with the hope of increasing awareness and inspiring change. He was the last person anyone would pick as a potential drug addict. He had everything going for him—attended Tulane University on a full scholarship, then law school at...
Pepperdine. He landed his dream job and had a promising future. Yet, she says, “This problem crosses every single education level and background there is. Opioid addiction does not discriminate.”

Her brother was diagnosed with testicular cancer and doctors prescribed Percocet for the pain. Ultimately, cancer was the least of his problems as he quickly became addicted and spiraled from prescription medication into life as a heroin user living somewhere on the streets of Seattle. She says, “I lost my brother. He’s still here on earth, but he’s gone.”

The story of opioid addiction is particularly painful for Rake because her brother asked her about the safety of the medication early in his illness. “I was on my general surgery rotation at the time,” she says. “I told him to keep taking them as prescribed; that’s what we were taught.”

The Dentist's Role

Stories like Angie Rake’s seldom make the front page, but they’re shockingly common. From 1999 to 2014, says the CDC, more than 165,000 Americans died from overdoses related to prescription opioids. It’s not a new problem. “What is new,” says Todd Thierer, DDS, MPH, clinical associate professor and associate dean for clinical administration and patient care at the U-M School of Dentistry, “is the recognition of dentists’ role in the epidemic. That came to the forefront only in the last year or so.”

Dentists are frequent prescribers of opioids to young people, mainly to treat pain from third molar (wisdom tooth) removal. That means dentists often provide young people’s first experience with narcotics. That has larger implications. In 2015, the Journal of Pediatrics reported, “Legitimate opioid use before high school graduation is independently associated with a thirty-three percent increase in the risk of future misuse after high school.”

In addition, more than half of opioids prescribed to patients following surgical tooth extraction were left unused by patients. A survey of dentists by the University of Pennsylvania’s Perelman School of Medicine and School of Dental Medicine found that “the majority of patients (94 percent) received a prescription for an opioid medication to manage pain, with 82 percent also receiving a prescription-strength nonsteroidal anti-inflammatory drug (NSAID), and 78 percent received a prescription antibiotic. On average, participants who did not have post-surgical complications (93 percent) received prescriptions containing 28 opioid pills, but three weeks following surgery had only used 13, leaving more than 1,000 unused opioid pills.” The problem is, patients often keep the leftovers for a ‘rainy day’ and evidence shows that those medications don’t remain in the medicine cabinet. Individuals who abuse prescription opioids often use leftover pills that were prescribed for friends or family members.

“The dental profession has a responsibility to acknowledge its role in the opioid epidemic,” says Tu. Consequently, the school is taking action to help slay the dragon of opioid addiction.

“Our goal,” he says, “is to significantly reduce the number of opioid prescriptions here at the School of Dentistry by shifting towards evidence-based mandated guidelines for the treatment of mild, moderate, or severe acute pain of dental origin.” That’s why the School of Dentistry has become one of the first in the country to implement new guidelines for prescribing opioid painkillers in its clinics. It’s also helping to educate the larger dental community on the problem and its prevention.

How We Got Here

Clinical Specialist Richard Nadeau, DDS, MPH, director of the dental school’s Division of Comprehensive Care, says that, “Originally, the fear of addiction to opiates led to under-treating pain for cancer and other diseases.”

But in the 1990s, campaigns to make pain control a priority sent the pendulum the other direction. Drugs such as Oxycontin, Vicodin and Percocet arrived on the market. Says Nadeau, “The discussion became dominated by a pharmaceutical industry that marketed opioids as a safe, risk-free option for all sorts of pain, not just acute pain.” Health care professionals considered these drugs safe (though now we know that physical dependency to opioids can occur in a couple of weeks). Prescriptions for opiates soared.

Says Rake, “In the late 90s, when these meds came out, someone had surgery and the nurses tracked pulse rate, temperature, respiration rate, blood pressure—and pain. It was the fifth vital sign. Nobody wants patients to be in pain.”

And, says Theierer, prescribing more pills than necessary has made dentists and physicians feel certain that they were sending their patients off.
91 Americans die every day from an opioid overdose (that includes prescription opioids and heroin). The majority of drug overdose deaths (more than six out of ten) involve an opioid. (CDC website: Understanding the Epidemic)

According to the American Society of Addiction Medicine, in 2012, 259 million prescriptions were written for opioids, which is more than enough to give every American adult their own bottle of pills. (ASAM: Opioid Addiction Facts and Figures)

According to the American Society of Addiction Medicine, most adolescents who misuse prescription pain relievers are given them for free by a friend or relative. (ASAM: Opioid Addiction Facts and Figures)

Legitimate opioid use before high school graduation is independently associated with a 33% increase in the risk of future misuse after high school. (Prescription Opioids in Adolescence and Future Opioid Misuse, Journal of Pediatrics, October 2015)

According to the American Society of Addiction Medicine, “Drug overdose is the leading cause of accidental death in the US, with 55,403 lethal drug overdoses in 2015. Opioid addiction is driving this epidemic, with 20,101 overdose deaths related to prescription pain relievers, and 12,990 overdose deaths related to heroin in 2015.” (ASAM: Opioid Addiction Facts and Figures)

According to the Drug Enforcement Administration, controlled prescription drug (CPD) abuse is the nation’s fastest growing drug problem and opioid pain relievers are fueling that growth. Opioids are the most widely misused or abused prescription drugs and are involved in most CPD-related overdose incidents. (DEA: National Drug Threat Assessment Summary 2013)

A 2015 federal report called the National Prescription Audit concluded that dentists ranked fifth among primary care providers in the number of opioid prescriptions, after family practitioners, internists, general practitioners and surgeons. (CDC: Overview of the Public Health Burden of Prescription Drug and Heroin Overdoses)
with plenty of medication, thus avoiding nighttime phone calls and emergency office visits. “I worked in a hospital for many years,” says Thierer. “Residents wrote prescriptions for far more pills than needed on Fridays.”

“Overall,” he says, “there’s been a cultural change in the way we look at pain. Opioids help with pain but they also can create a feeling of euphoria. So now, people don’t think a pain killer is doing the job unless they feel loopy. They also think it works better if it comes from a prescription than if it’s a simple over-the-counter medicine like Motrin.” In other cases, patients anticipate a pain level that might occur in only a small minority of patients.

So, patient expectation is a major cause of overprescribing. He says, “They want a strong pain reliever and have a perception that something with an opioid is better.”

But it’s bigger than that, he says. “It used to be if you had a headache you’d go lie down in a dark room. Now we reach for a pill. There’s an idea that you should never feel pain, whether its physical or psychic pain, you shouldn’t feel that way and pharmaceutical companies make money from that. We’ve had a ‘pharmaceuticalization’ of our culture.”

Changing Protocols, Changing Minds

All of these factors contribute to the current state of opioid use, misuse, diversion and abuse. And, the problems of current addicts often seem intractable. Going forward, though, the solutions seem surprisingly hopeful. Contrary to the perception that prescription opioids are the definitive answer to pain, non-opioid medications are actually equally effective with fewer side effects (e.g. nausea and constipation). Says Tu, “Multiple randomized, controlled trials support the use of NSAIDS (nonsteroidal anti inflammatory drugs) alone or in combination with APAP (acetaminophen) to provide analgesia at least equivalent to those of commonly prescribed opioid combination formulations.”

Evidence. That’s at the heart of the school’s new prescription protocols that have been created using those guidelines from the American Dental Association with some modifications by the school’s Division of Oral and Maxillofacial Surgery. They rely on the evidence-based guidelines that the NSAIDS/acetaminophen combination should be the first choice for pain management. Decisions to use opioid drugs will be based on established indications and, ultimately, prescriber judgment.

The school began to implement the new protocols in April 2016, with the Division of Oral and Maxillofacial Surgery taking the lead and school-wide implementation to follow. As part of that process, data is being collected by prescribers in the school to assess behavior and indications. Says Thierer, “We also have surveyed the dental students and we want to see if their attitudes change about prescribing opioids over time. That hasn’t been done before.”

In clinical teaching, the new protocols will influence all students with regard to better pain solutions, monitoring narcotics and in-patient education. For example, Nadeau cites one incident when a student consulted the Minnesota Prescription Monitoring Program (MPMP) before prescribing narcotics to a patient. The MPMP is a database that monitors the controlled substances that have been dispensed for patients across the state and can help practitioners identify patients who are improperly seeking drugs. Says Nadeau, “The student saw that the patient had received 300 tablets of Oxycontin in two months from five different physicians. That inspired her to do a case presentation on how to identify and say ‘no’ to a drug seeker.”

Says Thierer, “Because 73 percent of dentists in Minnesota graduate from this school of dentistry, the fact that we’re teaching a new way to manage acute pain has the potential to have a profound impact on the problem. We’re sending graduates out into practices with a new way of thinking and with new prescribing behaviors.”

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— Todd Thierer, DDS, MPH
Associate Dean for Clinic Administration and Patient Care

Still, in the larger community, it will take time to change decades-old prescribing habits and patient expectations. Says Thierer, “It’s been a short period of time that dentists have recognized our role and we’re slowly educating the dental community.” At the state level, Richard Nadeau serves on an opioid prescribing work group of the Department of Health. They’re designing protocols for acute, post-acute and chronic pain for all health care professionals. “It’s a balancing act,” he says of prescribing. “Opioids have value in many cases, but they’re no longer considered risk-free.” He says prescribers now must be more aware of other factors to assess when prescribing opioids, such as suicide and mental stability.

Patient education takes extra time, too. Says Rake, “As an oral and maxillofacial surgeon I was aware of this epidemic for years, but it took the ‘loss’ of my brother and Prince to make me spring into action in the way I prescribe and to call out the problem. I’ve been pleasantly surprised at how appreciative patients are.”

It’s a mission for her and for the School of Dentistry to slay the dragon. “We need to do all we can to educate ourselves about the magnitude of the opioid issue. If word can get out in every facet, we can make a big a change.” “After all,” she says, “We’re in this to help people. That’s why we’re in dentistry.”

FOOTNOTES

1 CDC website: Understanding the Epidemic.
Double Doc

José Orlando Maldonado-Ortiz is pursuing a rigorous DDS/PhD dual-degree program with a drive and passion to be the best that he can be.

BY RICHARD BRODERICK

It’s a Tuesday morning in December and 30-year-old José Maldonado-Ortiz is on his way to the University of Minnesota’s School of Dentistry where he is eight years into a rigorous DDS/PhD dual-degree program that few qualify to undertake.

He’s making this 6.5 mile trip to campus by bike from the condominium he shares with his wife of four years, Lorie. An all-weather rider, he approaches today’s winter ride with the same dedication, energy and good humor he tackles everything he does. “I commute to school year-round, riding my bike to the U,” he explains. “I love it!”

With the PhD portion of his graduate work in oral biology behind him—he shares his clinic with his wife of four years, Lorie. An all-weather rider, he approaches today’s winter ride with the same dedication, energy and good humor he tackles everything he does. “I commute to school year-round, riding my bike to the U,” he explains. “I love it!”

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He’ll present in Tokyo at the International Conference on Human Retrovirology in March. His name also appears as co-author on a half dozen articles published in journals like Virology, Retrovirology, and Viruses. Last September, one of these pieces was the cover article in Journal of Virology.

“José is outgoing, he’s curious, he’s a hard worker, and an outstanding researcher,” observes Mansky.

That Maldonado-Ortiz has earned the respect of an established virologist belies the fact that, starting out, his background in virology was “next to zero,” says Mansky. That soon changed. Maldonado-Ortiz added a year to his PhD studies and spent five years conducting research on retroviruses, in particular the HTLV-1, which causes adult T-cell leukemia and may play a role in the long-term effectiveness of current anti-HIV medications.

Employing a range of tools, including electron microscopy, Maldonado-Ortiz investigated the mechanisms that govern HTLV-1 replication.

“HTLV-1 was the first human retrovirus identified by science,” he says. The kind of leukemia it causes is not common in the United States, but it is in other parts of the world. He notes that in some areas of Japan, 10-15 percent of the population has the virus.

Dental School

Maldonado-Ortiz has proven to be a stand-out in dental school, as well. Adjunct Faculty Member Jerome Erickson, DDS, teaches in the school’s pre-clinic lab where first and second-year dental students fine-tune the eye-hand coordination and manual dexterity skills they must master before they can treat patients.

“I had him in pre-clinic for three months last year,” Erickson says. “I know most of the students there pretty well. When faculty members were asked to nominate candidates for a clinical excellence award, I knew exactly who to choose.” When Erickson ran into Maldonado-Ortiz this fall, José greeted him cheerfully. “Guess what, Dr. Jerome—I got the award! It’s a $5,000 scholarship! I guess I owe you a cup of coffee!”

It’s not just José’s clinical skills and personality that have impressed Erickson, who also teaches in the school’s patient clinics. It’s José’s dedication and cooperative spirit. “If José doesn’t have a patient, he doesn’t go home. He’s upstairs assisting...
“During my second year of college, I spent a year at the University of Alaska, Fairbanks,” he says. “I was looking to expand my horizons, both academically and culturally.” Upon his return to UPR Cayey, he joined the Honor’s Program and conducted research under the mentorship of Evangelia Morou-Mermudez, DDS, MS, PhD, at the UPR School of Dental Medicine, where he compared alkali-producing and acid-producing bacteria in dental plaque samples of healthy versus carious sites. “She played a very important role in my decision to become a clinician/scientist,” says José. “She wanted me to pursue the dual degree program in Puerto Rico.” But Minnesota beckoned.

“In the Comprehensive Care Clinic, we focus on developing a student’s clinical thinking, reasoning, professional judgment, communication, problem solving skills, and ethical decision making. José gets high marks in all of these areas. He’s…in many ways a stellar student who stands out across time and years of students.”

— ERIC MILLS, DMD
COLOR GROUP LEADER

José was told by friends about a summer research program sponsored by the University of Minnesota’s College of Biological Sciences. He was accepted into the program and, because of his interest in dentistry, was matched with Mark Herzberg, DDS, PhD, a mentor in the program and director of the dental school’s DDS/PhD program. After two summers working with Herzberg studying the interaction of surface proteins on oral strep bacteria with human platelets, Maldonado-Ortiz returned to Minnesota in 2009 to pursue the dual degree.

One of his earliest colleagues was Colleen Holtz, a friend/mentor who was a year ahead of Maldonado-Ortiz in the classmates. He doesn’t have to do that. But he does—it comes naturally to him.”

There are, in fact, a lot of things that José does ‘naturally’ that speak to his commitment to excellence and professionalism.

Eric Mills, DMD, a group leader in the dental school’s Comprehensive Care Clinic, remembers his first introduction to José at last year’s International Association for Dental Research meeting in Los Angeles. He says, “I was reviewing poster presentations and José just walked up to me, introduced himself, and said that he’d be in my color group next year.” Mills now supervises the student as he cares for patients in the clinic.

“In the Comprehensive Care Clinic we focus on developing a student’s clinical thinking, reasoning, professional judgment, communication, problem solving skills, and ethical decision making,” says Mills. “José gets high marks in all of these areas. He’s personable, friendly, and in many ways a stellar student who stands out across time and years of students.

Ann Kubitza, CLDA, a dental assistant in the clinic, is quick to agree. “He’s the whole package—he’s what we want our students to be when they leave our dental school,” she says.

Minnesota Calling
Maldonado-Ortiz grew up in Cayey, a city of about 45,000 in Puerto Rico where he attended public school and earned a bachelor of science degree in natural sciences from the local branch of the University of Puerto Rico (UPR). His father is an accountant and his mother a retired dress designer. One of four siblings, he is the only family member involved in clinical care or research.

It was in Cayey that he discovered his long-term goal in life. “Through my own experience with dental treatment and how it affected me and my sense of self-esteem, I knew I wanted to be a dentist,” he recalls. Still, he wasn’t sure that the goal of becoming a dentist was within his reach.
Dual Degree
The application process for the dual program is described by Maldonado-Ortiz as “long and highly competitive.” His first step was to spend time during his campus summer research program meeting faculty members to “let them know who I was.”

Once accepted to the program, he had another equally challenging hurdle to clear. Everyone in the DDS/PhD program is expected to apply for individual scholarships from the National Institute for Dental and Craniofacial Research (NIDCR). He put together a 40-page application that outlined his research and how it would help him succeed in the program. Only about 10 percent of applicants receive funding. He was one of them—a $300,000, six-year scholarship designed to fund his education.

Given his persistence and his shared interests in dentistry and research, the DDS/PhD program is a perfect fit. Candidates for the dual degree typically spend four years pursuing a dental degree and four years a PhD.

“A practitioner must have good clinical skills,” Maldonado-Ortiz explains. “But you also need to be able to understand what is going on with the patient and ask questions that tie into research.”

It’s that focus on evidence-based interventions, materials and techniques that unites research and practice in their commitment to providing quality patient care.

“Research experience is invaluable for all clinicians,” says Herzberg. “By engaging in research, clinicians learn to evaluate data and the professional literature. These skills are crucial when making clinical decisions on behalf of our patients and make practice more interesting and beneficial as we implement new concepts and technologies. Our faculty are committed to training the next generation of clinician-scientists, like José, who will ultimately improve the oral health of the nation.”

Long term, Maldonado-Ortiz sees himself pursuing a three-track career—teaching in academia, research, and clinical practice. In addition to the grant he received from the NIDCR, he also has received funding from the dental school, 3M and elsewhere.

“When I’m done with the dual program, I don’t intend to stop,” he says. “I don’t just want to absorb knowledge and apply it in clinical care. I also want to generate knowledge and share it with other dentists.”

In turn, that interest has led him to consider specializing in an area that would draw on both parts of his education—and interests.

“I’m thinking about specializing in oral pathology. It’s the connection between my clinical and biomedical research training. Right now, they are two independent entities.

Oral pathology is the missing link I’m looking for!”

About the DDS/PhD Program
The DDS/PhD program prepares students to meet the challenges of interdisciplinary research and advancing technologies. Graduates are positioned for careers in clinical dental practice, as well as in academia, industry, and government institutes.

The program requires eight years of study. Students must apply to and be accepted by both the School of Dentistry and the Graduate School (for the PhD). DDS/PhD trainees are encouraged to major in Oral Biology, but other majors may be possible. A cross-disciplinary academic minor is also required in fields such as molecular biology, genetics, or neuroscience. The Oral Biology Program provides a broad understanding of the orofacial region, its development (including aging), structure, function, and pathology.

Most students begin with the PhD coursework and requirements, completing all but the final aspects of the research project in four years. Students then begin the full-time DDS program in year five of their training. During the DDS portion of their program, redundant basic science courses are waived, allowing a student to stay current on scientific literature while continuing to write research articles or a dissertation. As students begin full-time clinical responsibilities, they are granted a half day per week for research. This time increases as clinical competencies are met and mastered. Students may defend their dissertations at any time during the eight-year program. After the defense, students still in the DDS program may use their research time to pursue a new project or training in another lab.
Highlights of 2016
A YEAR IN REVIEW

1
2
3
4
5
[2] First-year dental students provide one-on-one waxing lessons to pre-dent students.
[9] Give Kids a Smile®
[12] Former Secretary, U.S. Dept. of Health & Human Services, visits dental therapy program.
[13] Student Community Outreach Committee organizes event to pack & box food for families in low income communities.
[15] White Coat Ceremony—class photos are done; let the work begin.
The charts below represent the unaudited revenue sources and expenses of the School of Dentistry for fiscal year 2016.

### Revenues & Expenses

#### Revenues (in thousands)

<table>
<thead>
<tr>
<th>Revenue Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition and Fees</td>
<td>$27,894</td>
</tr>
<tr>
<td>Clinics</td>
<td>$26,779</td>
</tr>
<tr>
<td>State Funding Allocation</td>
<td>$13,838</td>
</tr>
<tr>
<td>Research</td>
<td>$5,116</td>
</tr>
<tr>
<td>Gifts and Endowed Earnings</td>
<td>$1,619</td>
</tr>
<tr>
<td>Indirect Cost Recovery</td>
<td>$1,132</td>
</tr>
<tr>
<td>Other</td>
<td>$299</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$76,677</strong></td>
</tr>
</tbody>
</table>

#### Expenses (in thousands)

<table>
<thead>
<tr>
<th>Expense Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instruction</td>
<td>$30,920</td>
</tr>
<tr>
<td>Clinical Activity</td>
<td>$28,112</td>
</tr>
<tr>
<td>University Overhead &amp; Support</td>
<td>$10,412</td>
</tr>
<tr>
<td>Research Activity</td>
<td>$5,116</td>
</tr>
<tr>
<td>Administration and Development</td>
<td>$3,863</td>
</tr>
<tr>
<td>Student Services and Scholarships</td>
<td>$1,873</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$80,296</strong></td>
</tr>
</tbody>
</table>

#### Revenues Notes

**Financial results** for the University of Minnesota School of Dentistry for the fiscal year ended June 30, 2016 continue to reflect a challenging environment for public research intensive dental schools. The mission of the University of Minnesota School of Dentistry is divided into three basic components: Education, Research, and Public Service. While our Education mission continues to be strong and growing, our research mission felt pressure of reduced federal grant funding, and our public service mission continues to grow as some private safety net dental clinics are hiring additional dentists.

Research revenues decreased by $6.3 million to $5.1 million. Federal research funding in FY2017 is on track to hit 18% of overall revenue. Despite increases in Central Allocations partially offsetting decreases, overall overhead expenses for the School of Dentistry were in deficit as a result of non-strategic cost cutting measures.

Expenses exceeded revenues for the School as a whole by $3.6 million for the fiscal year which included losses at outreach and safety net clinics of nearly $3.4 million. Overall fund balances for the School of Dentistry were in deficit as a result of the loss. A Budget Review Task Force was created and made recommendations for operational restructuring and cost reductions of over $2 million in expenses in response to the financial results. Recommendations from the task force were implemented during the FY2017.

Total revenues for the School of Dentistry increased by $3.4 million for the fiscal year ended June 30, 2015, from $73.3 million to $76.7 million. Increases resulting from both higher tuition and fees and higher clinical revenue were offset by reduced research funding support. State funding through the central university declined by $162,400 for the fiscal year. Research funding declined modestly as described below.

Clinical and Affiliation revenues increased $0.2 million from $10.2 million to $10.4 million. Clinical activities reflect continued concerns with public program reimbursement levels, however, efforts to increase pre-doctoral patient flow and patient visits at all clinics had positive impact on overall clinic revenues.

State Operating and Maintenance (O & M) funding received by the School of Dentistry was reduced by $162,400 by the University. State funding as a percentage of overall revenue remains stable. In absolute dollars, funding declined slightly to $13.8 million from $14.0 million in FY2014. Tuition and fees continued to widen their gap over state funding support and this trend was in evidence across the University. Student debt levels continue to be a serious concern, and although our institution has seen no decline in applicants, national applicant levels to dental schools declined slightly this past year.

Research revenues decreased due to increased federal budget reductions in this area and the competitive climate for basic research. Research revenue decreased from $6.3 million to $5.1 million. Federal research funding in FY2017 is on track to hit 18% of overall revenue.

#### Expenses Notes

**Total expenses** for the School of Dentistry increased for the fiscal year ended June 30, 2016, at $80.3 million.

**Instructional expenses** increased $1.7 million from $29.1 million to $30.8 million, primarily related to contractual fringe benefits. The category includes the School of Dentistry’s pro-rata portion of such University-wide expenses as facilities management, libraries, central administration, technology and research administration, and compliance. Despite these increases in Central University allocations, overall overhead expenses for the School of Dentistry were reduced by $588,000 through various cost saving measures.

**Research expenses** declined by $1.2 million, from $6.3 million to $5.1 million, commensurate with the decrease in research.

**Central Allocations** increased $0.2 million from $10.2 million to $10.4 million. The category includes the School of Dentistry’s pro-rata portion of such University-wide expenses as facilities management, libraries, central administration, technology and research administration, and compliance. Due to the decrease in Central Allocations, overall overhead expenses for the School of Dentistry were reduced by $588,000 through various cost saving measures.

**Administration and Development** expenses decreased $0.1 million, from $3.9 million to $3.8 million as a result of non-strategic cost cutting measures.

**Scholarships and Student Services** increased from $1.5 million to $1.9 million.

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Joel Heuschele, CPA, MBA  
Chief Financial Officer

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The University of Minnesota continues to be a top performing dental school for research.

**Indirect Cost Recovery revenues** that are connected to direct research revenues decreased to $1.1 million from $1.4 million in FY2014.

**Tuition and Fee revenue** increased $2.1 million from $25.8 million in FY2015 to $27.9 million in FY2016. The University of Minnesota School of Dentistry has historically targeted the mid range of publicly supported Midwestern dental schools when determining tuition rates, and continues to be much less expensive for residents than private institutions.

**Other Income** was negligible for FY2016.

**Gifts and Investment Returns included in operational results** decreased by $0.3 million, from $1.9 million to $1.6 million. These amounts do not include gifts to the School of Dentistry that are managed by the University of Minnesota Foundation that are still invested with the Foundation.
**2016-17 SCHOOL STATISTICS**

### Paid Faculty Appointments*

<table>
<thead>
<tr>
<th></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>20</td>
<td>34</td>
<td>2</td>
<td>56</td>
</tr>
<tr>
<td>Research Track</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Clinical Track</td>
<td>2</td>
<td>17</td>
<td>43</td>
<td>62</td>
</tr>
<tr>
<td>Adjunct</td>
<td>23</td>
<td>32</td>
<td>74</td>
<td>129</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>45</strong></td>
<td><strong>83</strong></td>
<td><strong>123</strong></td>
<td><strong>251</strong></td>
</tr>
</tbody>
</table>

*As of October 26, 2016.

### Students | Fall Semester Enrollment 2016

Dental Hygiene, B.S. 43
Dental Hygiene, Master Degree 22
Dental Therapy, B.S., M.S. 21
D.D.S. 415
Advanced Education & Graduate Programs 86
Program for Advanced Standing Students 28
**Total** 615

### 2016 Graduates

Dental Hygiene-Baccalaureate Program 24
Master of Dental Hygiene 3
Doctor of Dental Surgery 109
Professional & Graduate Degrees Awarded 38
Dental Therapy 6
**Total** 180

### 2016-17 FIRST-YEAR DENTAL CLASS PROFILE

- **Total Number of Applicants**: 1,268*
- **Class Size**: 111

![2016-17 FIRST-YEAR DENTAL CLASS PROFILE](chart)

- **Total** 111
- **Women**: 57 (51%)
- **Men**: 54 (49%)
- **Ethnically Diverse**: 29 (26%)
- **Minn.**: 66 (59%)

- **Average GPAs**
  - Overall GPA: 3.59
  - BCP (Bio, Chem, Physics) GPA: 3.50
  - Science GPA: 3.51

- **Average DATs**
  - Academic Average: 20.18
  - Perceptual Ability: 20.44
  - Total Science: 19.77
  - Reading: 21.71

*These figures represent AADSAS calculations.

### 2016-17 FIRST-YEAR DENTAL HYGIENE CLASS PROFILE

- **Total Number of Applicants**: 50
- **Class Size**: 24

![2016-17 FIRST-YEAR DENTAL HYGIENE CLASS PROFILE](chart)

- **Total** 24
- **Women**: 23 (96%)
- **Men**: 1 (4%)
- **Ethnically Diverse**: 3 (13%)
- **Minn.**: 20 (83%)

- **Average GPAs**
  - Overall GPA: 3.36
  - Science GPA: 3.16
  - Prerequisite GPA: 3.38

### 2016-17 FIRST-YEAR DENTAL THERAPY CLASS PROFILE

- **Total Number of Applicants**: 15
- **Class Size**: 6

![2016-17 FIRST-YEAR DENTAL THERAPY CLASS PROFILE](chart)

- **Total** 6
- **Women**: 4 (67%)
- **Men**: 2 (33%)
- **Ethnically Diverse**: 1 (17%)
- **Minn.**: 5 (83%)

- **Average GPAs**
  - Overall GPA: 3.29
  - Prerequisite GPA: 3.20

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**DENTISTRY SPRING 2017**

15
Jorge Perdigão, DMD, MS, PhD, is one of those unique individuals who gives when they don’t have to, lives authentically, empowers others, and serves with humility. Described by colleagues as their go-to guy for second opinions and patient-care advice, he’s respected by practitioners, researchers and faculty for his expertise and willingness to share all that he knows, and by his students who’ve been known to burst into applause in his classroom.

In recognition of his significant contributions as an educator and scientist, Dr. Jorge Perdigão was named the School of Dentistry’s Century Club Professor of the Year. The award is the school’s highest honor, presented annually to one faculty member in recognition of outstanding services as a teacher, and for significant contributions to the education, research and service mission of the school. Perdigão accepted the award at the Dean’s Reception, held at the St. Paul Hotel on April 29, in conjunction with the Minnesota Dental Association’s 2016 Star of the North meeting.

“Jorge is an exceptional educator who exemplifies all that a professor should be,” said Leon Assael, DMD, immediate-past dean, who presented Perdigão with his award before a room filled with School of Dentistry faculty, staff and alumni.

“He is passionate about his subject matter, an authority in his field, and a ‘natural’ in the classroom. He treats his students with respect; his command of his subject matter and presentation skills are second to none.”

Jorge Perdigão is a professor in the Department of Restorative Sciences, Division of Operative Dentistry at the University of Minnesota School of Dentistry. He received his DMD degree from the University of Lisbon, Portugal, a master’s degree and certificate in operative dentistry from the University of Iowa, and a doctorate in dental materials at Catholic University in Leuven, Belgium. He began his academic career at the University of Lisbon, Portugal, as a clinical instructor, and served as an associate professor of operative dentistry at the University of North Carolina at Chapel Hill (1996-1999). Dr. Perdigão joined the University of Minnesota School of Dentistry faculty in 1999.

Jorge Perdigão is widely recognized as a passionate and knowledgeable educator and researcher. He is an international expert and prolific lecturer and publisher on the topic of dental materials, with a research focus on the efficacy of new dental materials and clinical trials of dentin adhesives, posterior composites, and dental whiteners. He’s presented more than 140 lectures—in places as near as North America and as far away as Oceania, Asia, Europe, and South America—and has published more than 100 scientific articles in international journals. He also has authored seven chapters on dental adhesion in several textbooks, including the Sturdevant’s Art and Science of Operative Dentistry (Mosby). He is editor and author of Restoration of Root Canal–Treated Teeth: An Adhesive Dentistry Perspective, and Tooth Whitening: An Evidence-Based Perspective (Springer).

In 2000, he provided forensic evidence in a high profile Minnesota murder trial. Perdigão identified the technique that was used (with a new 3M dental material) to restore a single tooth found in a fire pit on the property of the murder suspect. A review of the victim’s dental records established with high probability that the remains were those of the victim. The murder and trial became the story of numerous true crime television documentaries, including Forensic Files, Extreme Forensics, On the Case with Paula Zahn, and See No Evil.

Dr. Perdigão also is the recipient of several international research awards, including the 1993 Microscopy Society of America Presidential Award. He’s served as an associate editor, section editor or an editorial board member for five different professional journals in operative, adhesive, esthetic/restorative dentistry and biomaterials, and has been a reviewer for several international peer-reviewed journals.

Additionally, he’s been a consultant for manufacturers worldwide in the development of new adhesive materials and has mentored numerous postdoc research fellows, graduate students and undergraduate fellows. Dr. Perdigão is a consultant to the American Dental Association’s Committee for Scientific Affairs (since 1999) and to the FDA Dermatologic & Ophthalmic Advisory Committee since 2006. He also is a member of the American Association for Dental Research (AADR) Edward H. Hatton Awards Committee.
Updates

An Important Milestone for Incoming Students. The School of Dentistry welcomed incoming dental, dental therapy and dental hygiene students to the profession at its annual White Coat Ceremony held September 16, 2016, in Northrop Auditorium.

A traditional rite of passage in many health profession programs, the ceremony recognized 140 students who were all given white coats. In the clinic setting, professional attire evokes the trust and respect of patients. The awarding of white coats at the beginning of each student’s professional education is intended to impress upon these future practitioners the significance of that trusting relationship, and celebrate their commitment to the goals of professionalism, ethical practice, scientific and technical expertise, and compassionate service to others.

As part of the ceremony, students affirmed their commitment to uphold the ideals of their chosen professions and affixed their signatures to a code of ethics written by each class. The guest presenter for the event was School of Dentistry alumna Dr. Melissa Zettler ('95).

Big Students Teach Little Students. Forty first-graders at Elizabeth Hall Elementary School in North Minneapolis learned about dental health, healthy diets, and careers in dentistry from 10 dental student members of the newly organized U-M Student National Dental Association who visited their classroom on February 24, 2017. The visit was part of the organization’s Children’s Dental Health Month activities.

“We had a great day,” says Hannah Afwerke, third-year dental student and president and founding member of the U-M Student National Dental Association. “The children were excited and engaged, and volunteers had a lot of fun, too.”

The day featured videos and interactive dental-related activities, including brushing and flossing lessons, and discussions about sticky plaque and how to make healthy food choices. Plus, every child received an orange lunch box with a toothbrush, toothpaste and dental floss inside of a carrot-shaped case, with a personal rinse cup. The day also included oral health information for parents and teachers.

Happy Anniversary. The Minnesota Dental Resource Center for Biomaterials and Biomechanics (MDRCBB) celebrated its 25th anniversary with colleagues from around the world on October 17-18, 2016. The celebration featured a mini symposium, with presentations by current and former students and faculty members representing dental industry and dental education. Attendees also toured the research center and renewed acquaintances at an evening river cruise.

The timing of the event coincides with two announcements that give reason for even more celebration. It was announced that Associate Professor Emeritus Maria Pintado, MPH (MDRCBB) established the Maria R. Pintado and William H. Douglas Visiting Scholar Fund in honor of Professor Emeritus Douglas, BDS, MS, PhD, her long-time friend, colleague and MDRCBB founding director. The endowment will support a visiting scholar for the MDRCBB. Additionally, 3M Gives made an exceptional multi-year commitment in support of the MDRCBB’s Key Opinion Leaders program. The award will provide $100,000 each year for six years to support the program, which brings international opinion leaders in dentistry to the MDRCBB to learn about the center’s research and the dental industry.

Celebrating a Job Well Done. The School of Dentistry celebrated with members of the sixth class of dental therapy graduates at a Senior Banquet held in their honor at the Campus Club on December 8, 2016. More than 110 students, guests, faculty and staff were on-hand to congratulate the class of eight new professionals.

A highlight of the event was the awarding of the second annual Karl D. Self Dental Therapy Student Achievement Award to 2016 graduate Emily Strawhacker.
People

Appointed: Dan Skaar, DDS, MBA, MS, as interim chair of the Department of Developmental and Surgical Sciences. He also directs the Division of Periodontontology.

Appointed: Third-year dental student Jerad Servais to the position of electronic editor for the American Student Dental Association (ASDA). Servais was chosen from a competitive field of national candidates and will play an important role in achieving the association’s goals for the coming year.

Selected: Jeff Karp, DDS, MS, (Developmental/Surgical Sciences-Pediatric Dentistry) as a member of a three-person interdisciplinary team named by the Robert Wood Johnson (RWJ) Foundation to participate in its Clinical Scholars Program.

The three-year national leadership program brings together 30 innovative clinicians from different fields/specialties to tackle complex health problems.

Karp’s team project, Building a Dental Home Network for Children with Special Health/Care Needs, was selected after a competitive review process.

Clinical Scholars is one of four new national change leadership programs, designed by the RWJ Foundation to extend the influence and impact of change leaders working to establish health as a shared value and a ‘culture of health.’

Selected: Vasiliki Koidou, DDS, (Dental Fellow, Advanced Education Program in Periodontontology), as one of six individuals to receive the 2017 International Association of Dental Research (IADR) Colgate Research in Prevention Travel Award. The award recognizes young investigators who undertake research in the prevention of oral diseases and facilitates their presentation of this work to the international dental and oral health research community. The award was announced at the opening ceremonies of the IADR/AADR/CADR General Session & Exhibition, March 22-25, 2017, in San Francisco, Calif.

Selected: Sheila Riggs, DDS, MS, DMSc, (Primary Dental Care-Dental Public Health) to serve as a member of the Medical Education and Research Costs Program (MERC) Advisory Committee of the Minnesota Department of Health.

The department administers and distributes MERC grants annually to providers of medical education—including dental and dental therapy students, and dental residents—to fund a portion of the cost for clinical training of the health professionals in Minnesota.

The committee was established in 1993 by the Minnesota Legislature to examine the financing of medical education and research in Minnesota’s changing health care market. The committee provided essential support to the Department of Health, both through legislation recommendations and analysis of pertinent issues.

Transitioning: Marie Baudek, MEd, retired at the end of March 2017. On staff since 1976, she tirelessly served the school in a variety of capacities and departments, building relationships and trusted colleagues along the way.

Baudek began her career as a School of Dentistry instructor with the Dental Auxiliary Utilization (DAU) Program. She then spent three years as a community program specialist helping to coordinate the externship program for dental assistants, before being appointed associate director of continuing dental education in 1989. In this position, she was instrumental in helping to build the reputation of the program into one of national prominence, along the way earning a master’s degree in adult education and doing double-duty as director of alumni affairs for five years.

In 2012, she was named director of continuing dental education. Under her leadership, the program increased enrollments, added additional technology options, and continued to offer nationally recognized courses with locally and internationally recognized presenters.

Jo Peterson, PhD, joined the School of Dentistry as the new director for continuing dental education in January 2017. With more than 20 years of experience working in continuing education, Peterson has worked as an independent practice management consultant, director of the University’s Medical School Community Faculty, and with Minnesota State Colleges and Universities. She received her PhD in philosophy from Virginia Polytechnic Institute and State University, after graduating with a MS degree from Bemidji State University.

Appointed: Dan Skaar

Selected: Vasiliki Koidou

Selected: Sheila Riggs

Transitioning: Marie Baudek

Jeff Karp

Sheila Riggs

Vasiliki Koidou

Marie Baudek

Jo Peterson
A Letter from the President

“The real voyage of discovery lies not in seeing new landscapes, rather in seeing with new eyes.”
— MARCEL PROUST

This inspiration remains a constant reminder for me to stay open to new thoughts and to revisit old beliefs. As I began my tenure with the School of Dentistry Alumni Society, I wanted to learn more about the culture of the dental school in today’s world. I sought to understand what has changed and evolved academically and clinically. The dental classes have become more diverse over time and are now a more accurate reflection of the world.

We will be searching for a new dean for the dental school soon. I have appreciated the administration’s efforts to advance dental care as oral health care. We, on the alumni society board, feel that the alumni voice should be heard in searching for and selecting our next dean. We believe that a supportive, respectful environment with flexibility to respect our students’ various life demands will develop proud alumni. And in the process, we can help to cultivate in these students the virtues of character that will continue to advance the integrity of dentistry. The alumni society looks forward to working with Interim Dean Anderson and other school administrators to ensure a positive student experience.

Minnesota dental health professionals have historically created and maintained strong connections with each other in their personal relationships through study clubs, involvement in organized dentistry, and class reunions. We, on the alumni society board invite you to bring that passion and energy to support the school and current students who will soon be our colleagues. The alumni society supports traditions such as the very successful Cap and Gown Graduation Fund, which covers the fees for graduation regalia. We also have been involved in the White Coat Ceremony, which is a proud induction into the profession of dentistry for incoming dental students. Additionally the alumni society can provide assistance for alumni who wish to organize a reunion.

In endeavoring to be a resource for continuing education, we have been partnering with Continuing Dental Education to provide Clinical Grand Rounds throughout the academic year. For many people, a drive to campus on a Thursday evening is not an option, so we offer live streaming to different sites around the state. Registering your site is easy; contact Continuing Dental Education to learn how. Clinical Grand Rounds is also recorded and available online for viewing 24/7.

There are so many resources available to you through the UMAA and the School of Dentistry. To highlight two: the dental school sends out an email newsletter every second Tuesday with highlights of what's going on in the dental school. And the University provides an online job search tool called GoldPass that is free for employers to post and for alumni and students to use.

Every year we love to celebrate our exceptional alumni in awarding the Distinguished Dental and Distinguished Dental Hygienist alumni honors. This year’s recipients are Dr. George Kinney, Jr., ’69 and Mrs. Lisa Ahmann, ’80. The awards will be presented at the all new Minnesota Reception, a joint event hosted by the School of Dentistry and the Minnesota Dental Association on April 28 during the Star of the North annual session.

It is my honor to serve as president of the School of Dentistry Alumni Society. I am challenging myself to “see with new eyes.” I invite you to join me. I look forward to any way that I can contribute to supporting our students’ experiences and strengthening our alumni relationships with our exceptional School of Dentistry.

MARY PARISEAU, D.D.S., ’84
President, School of Dentistry Alumni Society
www.dentistry.umn.edu/alumni

Time for a Class Reunion?

The Alumni Office can help. Contact Emily Best (612-625-6811 or emilyj@umn.edu) to request current mailing labels for your classmates, promote your reunion via email, and receive Gopher spirit items and prizes for your event.

CONNECT WITH US ON LINKEDIN AND FACEBOOK.
and student research initiatives, both as a contributor and as someone who helps to recruit donors. Most notably, he served on the OMS Endowment Committee that resulted in the James Q. Swift Endowed Professorship, which will help the OMS division maintain and advance excellence in the education of OMS residents. His unwavering dedication to the field of oral and maxillofacial surgery and his patients is evidenced by his many published works which continue to provide educational information to School of Dentistry students, as well as by his volunteer service on multiple occasions for Sharing and Caring Hands, Project Homeless, Missions of Mercy, and Give Kids a Smile®.

Three-time U-M graduate Jo Ann (Joey) Omlic (BS, BDH, DDS) is an enthusiastic ambassador of alumni engagement and community service, and a passionate spokesperson and advocate for the University and its School of Dentistry. She served on two dean’s search committees and as a year-long member of an advisory committee convened to support the school’s preparation for accreditation review. For six years, she represented the School of Dentistry on the UMAA National Board where she was on the national Awards Committee, was a strategic planning participant, and participated fully in the reorganization of the National Board structure. Her tenure on the UMAA National Board led to an invitation to serve on the School of Dentistry Alumni Society (SODAS) Board, and she began her second, three-year term in 2016. She’s been active in the UMAA National Day of Service, was a member of the SODAS Alumni Engagement Committee and Honors Task Force, and represented the association at the SODAS-sponsored Clinical Grand Rounds continuing dental education sessions and at the Minnesota Dental Association’s scientific session. She also applied her experience with UMAA strategic planning to provide guidance and ensure a successful SODAS strategic planning initiative.

Dr. Adena Borodkin
Mrs. Shirlee Benson
Kathleen Bellamy
Elizabeth Bejarano
Mrs. Sarah Basile
Ms. Marie Baudek
Dr. Carl Bandt
Dr. Joseph & Ms. Susan Evans
Mrs. Julie Kinney
Dr. Hugh Norsted
Dr. Howard & Mrs. Cheryl Taylor
Dr. Bruce Horswell
Dr. Bruce Keup
Dr. Thomas Pink
Le Center Dental Clinic LLC
Dr. Julie & Mrs. Betty Sue Lipschultz
Dr. Stephen Litton
Dr. Jeffrey Loveless
Dr. natural text started on page 3

Hats off to you!

Graduation caps and gowns were once again donated to the Class of 2016 thanks to the generosity of the donors listed below. Graduation is the final step of our students’ education program. Since 1997, alumni and donors have made donations to underwrite the cost of caps and gowns for graduating students, while simultaneously welcoming them into the profession. The Cap & Gown Graduation Fund also supports other graduation activities, including senior recognition awards (named after Drs. Mellor Holland, Kathleen Newell and Karl Selj), and senior recognition banquets. On behalf of the alumni society and the Class of 2016, thank you! If you would like to make a donation in honor of the Class of 2017, use the enclosed envelope or make an online gift at www.give.umn.edu to the Dentistry Cap & Gown Graduation Fund (#9802).
Upcoming Class Reunions

<table>
<thead>
<tr>
<th>REUNION</th>
<th>DATE, TIME, LOCATION &amp; CONTACT INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class of 1964</td>
<td>Saturday, April 29, Noon, Saint Paul Hotel, Dr. James Indrehus, Chair</td>
</tr>
<tr>
<td>Class of 1967</td>
<td>Friday, September 8, daytime and evening events on campus and at Commons Hotel, Minneapolis, Dr. Steve Litton, Chair</td>
</tr>
<tr>
<td>Class of 1977</td>
<td>Friday, April 28, 6:00 p.m., Mancini’s Char House in St. Paul, Dr. Herb Schulte, Chair</td>
</tr>
<tr>
<td>Class of 1982</td>
<td>Saturday, April 29, Noon, Saint Paul Hotel–James J. Hill Room, Dr. Gregory Nelson and Dr. John Shand, Co-Chairs</td>
</tr>
<tr>
<td>Class of 2002</td>
<td>Saturday, April 29, 7:00 p.m., Saint Paul Hotel Summit Room, Dr. Patrick McGann, Chair</td>
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<tr>
<td>Class of 2007</td>
<td>Saturday, April 28, 5:30 p.m., Downtowner Woodfire Grill, Tickets $20/pp, Dr. Geoff Archibald, Chair</td>
</tr>
</tbody>
</table>
| Class of 2012 | Dental Therapy: Saturday, September 16, evening, details to be announced, Ms. Danae Helton, Chair  
DDS: Saturday, April 29, 6:00 p.m., Bonfire Wood Fire Cooking, St. Paul, Dr. Stephanie Lee, Contact |
| All DH       | Friday, April 28, noon, Saint Paul Hotel–James J. Hill Room, Ms. Emily Best, Alumni Director |

### Celebrating a Reunion?

If you are interested in planning a class reunion, we can help! We can provide mailing lists, address labels, and name tags, as well as list information about your class reunion on our website and in Dentistry magazine. Contact Emily Best at (612) 625-6811 or emilyj@umn.edu for more information.

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Join Fellow Gophers on Adventures Around the World

The University of Minnesota Alumni Association provides opportunities for alumni to travel together on cruise, land and small-group tours. Our 2017 offerings include every continent and are available to view at umnalumni.org/travel.

To opt-in to our mailing list, email umtravel@umn.edu

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University of Minnesota Alumni Association
1939
Clio Griffin (D.H.) died on May 3, 2016. After graduation, she served during WWII with the Army Dental Corps in Santa Barbara. She practiced dental hygiene for 21 years and, in 2012, was honored at the Minnesota Dental Hygienists’ Association Annual Session as the oldest living hygienist in the state.

1950

Barbara (Witte) Tiede (D.H.) died on August 4, 2016. After graduating with her dental hygiene degree, Tiede returned to the University of Minnesota for a B.A. ('75) and M.A. ('83) in Library Science.

1951
Ruth Johnson (D.H.), Rockford, Minn., died on September 24, 2016. After graduation, she practiced in Minneapolis for many years.

1954
Irving Borkon (D.D.S.), Edina, Minn., died on May 10, 2016. Borkon served as a dental officer in the U.S. Navy from 1954 to 1957 aboard the U.S.S. Hector. He returned to Minneapolis to establish his dental practice in Bloomington and, for most of his 45 years in practice, was at the Oxboro Dental Building that he established with three others in 1963. Dr. Borkon also taught at the University of Minnesota School of Dentistry and was inducted as a Fellow in the International College of Dentists in 1985.

1957
Fred Requa (D.D.S.) died March 16, 2016. He practiced general dentistry for 50 years in Austin, Minn., retiring in 2007. He was a member of the Southeast Minnesota Dental Association.

1958
Jean Ann (Morton) Streed (R.D.H.), age 79, Sun Lakes, Ariz., and Nisswa, Minn., formerly of St. Cloud, Minn., passed away unexpectedly at Mercy Gilbert Hospital in Gilbert, Ariz., on April 23, 2016. She is survived by her husband, Wesley Streed (D.D.S. ‘62), and two sons.

Raymond Warpeha (D.D.S.) died on June 14, 2016 in Oak Brook, Ill. He was a faculty member at Loyola University Chicago for almost thirty years. In 1972, he was appointed the director of surgical anatomy and, that same year, opened the Loyola Burn Center and served as its director for 18 years. In 1975, Warpeha was selected as Loyola’s chief of the Division of Plastic and Reconstructive Surgery. He was promoted in 1981 to the rank of professor in the Departments of Surgery and Anatomy. Upon his retirement in 2000, he was granted the title of professor emeritus. In 1999, he was the deserving recipient of the “Lifetime Humanitarian Award” from the KNAPP Foundation.

1960
Joyce Ranger (D.H.) died on August 16, 2016.

1966
The Class of 1966 held its 50th class reunion on September 10, 2016. Classmates met on campus and enjoyed a tour of Moos Tower, followed by the Gopher football game and a banquet dinner at The Commons Hotel. Forty-two alumni attended the reunion; for many it was their first time on campus since the day they graduated.

1967

1968
Patrick Gaspard (D.D.S. & Periodontology ’71) died on May 7, 2016. He was a member of the American Dental Association, the Minnesota Dental Association, the Minneapolis District Dental Society, and the American Academy of Periodontics. He practiced for 47 years in St. Louis Park, Minn.

1969
George Kinney, Jr. (D.D.S.) will receive the 2016 Distinguished Dental Alumni Award from the School of Dentistry Alumni Society in April.

1973
Timothy A. Peterson (D.D.S., M.S. ’75) received the 2016 Private Practice Prosthodontic Award (Region 3) from the American College of Prosthodontists (ACP) during the Annual Awards and President’s Dinner on October 7 at the ACP’s 46th Annual Session in San Diego. Peterson has been in private practice since 1976, the same year he founded the General Practice Residency program at Hennepin County Medical Center.

1974
Mark Omlie (D.D.S. ’74 and Oral Surgery Certificate ’78) received the prestigious Minnesota Alumni Service Award from the University of Minnesota Alumni Association. See story on page 3.

1975
Robert Erickson (D.D.S.) was appointed assistant professor and associate clinical director of the Advanced Education in General Dentistry Program at the Arizona School of Dentistry and Oral Health in Mesa, Ariz., on May 1, 2016.

1977
Subhashchandra ‘Pat’ Patel (D.D.S.) has retired after 39 years of treating dental patients in offices in Clarkfield, Minn., and Cottonwood, Minn. Dr. Patel and his wife, Annette, have donated both offices to the respective cities in hopes of attracting a new dentist to serve the dental needs of those areas.

Bruce C. Haglund (D.D.S.) has practiced dentistry in Maplewood, Minn., since 1977, but is also a competitive flyboarder. Last year, he was invited to participate in the World Flyboarding Championship in Dubai. Though he attended as an alternate in his age group, one competitor didn’t show up which allowed him to compete. He finished 9th out of the 10 in his age group and was the oldest competitor—by 11 years.

1979
Nathan Jorgenson (D.D.S.) and his wife, Teresa (Terry) Jorgenson (D.D.S. ’75, B.D.H. ’76), have joined the dental team at Reuter Family Dentistry (Heidi Reuter, D.D.S. ’07) in Wadena, Minn. Terry joined the practice as a dental hygienist working three days a week, and Dr. Jorgenson will work two days a week. The couple was previously retired, but missed working.
1980
Lisa Ahmann (B.S., M.Ed.) will receive the 2016 Distinguished Dental Hygiene Alumna Award from the School of Dentistry Alumni Society in April.

Gary C. Anderson (D.D.S., M.S.) was named interim dean of the University of Minnesota School of Dentistry. See story on page 2.

Jo Ann (Joey) Omlie (D.D.S. ’80 and BDH ’74) received the prestigious Minnesota Alumni Service Award from the University of Minnesota Alumni Association. See story on page 3.

1981
Judith Gundersen (D.D.S.), St. Paul, Minn., died November 11, 2016, of metastatic breast cancer. In addition to her dental surgery degree, she also received her master of public health degree from the University of Minnesota. After practicing privately for 20 years, Gundersen pursued dental education and public policy work at the School of Dentistry and the Minnesota Department of Human Services. She frequently volunteered for mission and aid trips.

1982
Kirk Almendinger (D.D.S.), Taylors Falls, Minn., died tragically in a vehicle-related accident on November 23, 2016. He practiced general dentistry at three offices in Grantsburg, St. Croix Falls, and Woodville, Wisc.

1984
Stacie Carlson (D.H.) of Minneapolis, died unexpectedly on January 2, 2017. At the time of her death, she was in active dental hygiene practice in the offices of Dr. Anne Norlander (Minneapolis) and Dr. Robert Kingston (’79), also in Minneapolis. Carlson was the 2017 Membership Chair for the Minnesota Dental Hygienists’ Association and involved in organized dental hygiene on the national level. She also was a professional photographer, active in CareerFusion, and a community facilitator for 1Health, an interprofessional collaborative practice curriculum for professional students at the U-M. A memorial scholarship fund has been established at the University in her name.

Gregg Hipple (M.S. in Orthodontics ’84) died on June 10, 2016 from pancreatic cancer. Hipple practiced in Eagan, Minn., for 32 years. He was an adjunct professor in the Division of Orthodontics and an avid Gopher fan.

Peder Arnason (D.D.S.) and Matthew Hieb (D.D.S.) joined Family HealthCare of Fargo, N.D.

1987
Paul Krebsbach (D.D.S.) has been named dean of the UCLA School of Dentistry. Krebsbach has been a member of the faculty at the University of Michigan since 1996 and is a leading researcher in tissue engineering and stem cell biology.

1999
Douglas Benting (D.D.S., M.S. ’02) is the new Forum Director for the American College of Prosthodontists (ACP). This position is responsible for proposing policies and practices, monitoring the performance of Forum volunteers and committees, and reports to the Board of Directors and ACP members. Benting currently practices in Phoenix, Ariz., and is a visiting faculty member at Spear Education in Scottsdale. He also is a current member of the ACP Spokesperson Network and is past-president of the Arizona section of the ACP. Benting is a Diplomate of the American Board of Prosthodontics.

2009
C.J. Specht (D.D.S.) opened a second location for her Up North Dental practice. She now provides care for patients in Nashwauk and Virginia, Minn.

2012
Aruna Rao (D.D.S.) is partnering in a pediatric dental practice with Drs. John (’73) and J. David Collier (’02) in Saint Cloud, Minn.

2014
McLean Severson (D.D.S.) joined River Oaks Dental in Aitkin, Minn. He is practicing alongside Sean Fleming (’08); their new building opened to patients mid-summer 2016.

2015
Seth Huiras (D.D.S.) joined Montgomery Family Dental in Montgomery, Minn., where he practices with Mark Brahs (’76).

Jill Balgaard (D.D.S.) joined LifeSmiles Dental in Fergus Falls, Minn. She is practicing with School of Dentistry alumni Todd McGovern (’87), Michael Andrews (’93), and Bud Mellon (’72).

2016
Lisa Kylo (D.D.S.) is practicing at Family HealthCare of Fargo, N.D.

James Lipon (Pediatric Dentistry) received the American Academy of Pediatric Dentistry Resident Recognition Award. Lipon was selected because of the training he provided to other dentists to deliver safe, office-based sedations across disciplines.

Christine Lucachick (D.D.S.) is the 2016 recipient of the Dr. Michael Till-Northern Minnesota Scholarship. This scholarship, honoring former School of Dentistry Dean Michael Till, D.D.S., Ph.D., provides financial assistance to young dental professionals from rural Minnesota, encouraging them to practice dentistry in Greater Minnesota. The scholarship is provided annually by Northern Minnesota Dental, a group of dentists who live and practice in Iron Range communities. Christine plans to return home to International Falls to help meet the needs of patients in that area.

Ben Thomas (D.D.S.) joined Dr. Bob Maley Family Dentistry, St. Paul, Minn., where he practices with Dr. Maley (’87) and Dr. Ann Jennen (’98), to provide comprehensive care to patients of all ages.

Matt Merfeld (D.D.S.) joined the Potach and Mitchell Dental Clinic in Austin, Minn. After receiving an undergraduate degree in biology (UW-LaCrosse, ’06), he worked at the Mayo Clinic’s newborn screening lab in Rochester, Minn. While there, he was a volunteer dental assistant with the Salvation Army, an experience that sparked a passion for dentistry and led to his return to dental school.

Faculty/Staff
Thomas Casselman (lab technician) died on September 7, 2016. He retired in 2015 after 35 years of service to the School of Dentistry. Working first as a ceramic technician for the Dept. of Prosthodontics in 1980, he spent 15 years as a ceramist on the 9th floor of Moos Tower. In 1995, he transitioned to the 9 North Lab, where he assisted students with lab work and fabricated crowns and implant restorations for faculty and staff.
April 20
School of Dentistry Alumni Society Board Meeting
6:00 to 8:00 p.m.

April 21-25
American Association of Orthodontists
San Diego Convention Center
San Diego, California
Alumni Reception:
April 22
8:30 to 9:30 p.m.
San Diego Marriott Marquis
For information:
Jodi Kelly
(612) 626-4166
roone005@umn.edu

April 22
27th Annual Daniel Waite Conference
The Commons Hotel
615 Washington Ave. S.E.
Minneapolis, Minnesota
For information:
Katie Olsen
(612) 624-7133
kmolsen@umn.edu

April 27-29
Star of the North Meeting
Saint Paul RiverCentre
Saint Paul, Minnesota
For information:
Minnesota Dental Association
(612) 767-8400
(800) 950-3368

April 28
Minnesota Dentistry Reception
5:30 p.m. to 7:30 p.m.
Saint Paul Hotel
Saint Paul, Minnesota
For information:
RSVP by April 17
Rance Flory
(612) 625-7678
chan0572@umn.edu

April 28
Dental Hygiene Alumni Lunch
Noon to 2:00 p.m.
Saint Paul Hotel
Saint Paul, Minnesota

May 2017

May 3-5
Montana Dental Association Annual Session
Hilton Garden Inn
Missoula, Montana

May 12
School of Dentistry Graduation
10:00 a.m.
Northrop Memorial Auditorium
University of Minnesota
Minneapolis Campus

May 18-20
South Dakota Dental Association Annual Session
Sioux Falls Convention Center
Sioux Falls, South Dakota
Alumni Reception:
May 19
Sioux Falls Convention Center

May 25-28
The American Academy of Pediatric Dentistry
Washington, D.C.
Alumni Reception:
May 27
5:30 to 7:00 p.m.
Gaylord National Resort and Convention Center, Azalea 2
For information:
Elizabeth Limmer
(612) 624-2161
limm0005@umn.edu

August 2017

August 16-18
New Student Orientation

September 2017

September 15
White Coat Ceremony
2:00 p.m.
Northrop Memorial Auditorium
University of Minnesota
Minneapolis Campus

For more information
Except where noted, you can obtain further information on the events listed and/or request disability accommodations by contacting:

Emily Best
Alumni Relations
(612) 625-6811
emilyj@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
Discount Available
School of Dentistry Alumni Society members are eligible for discounted continuing education. Members may receive a 10 percent 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.)

**APRIL 2017**
- Improving Restorative Results with Crown Lengthening: A Lecture & Hands-on Program
  - April 1, 2017
- Spring Recordkeeping Workshop for the Dental Team
  - April 6, 2017
- Clinical Grand Rounds for the Dental Team: Endodontics
  - April 6, 2017
- Dental Hygiene Refresher: An Online & Hands-on Clinical Program
  - April 10-May 5, 2017
  - (Online Learning Component)
  - May 8-11, 2017
  - (Hands-on Clinical Component)
- Advanced Occlusion & TMD—Postgraduate Program in Contemporary & Esthetic Dentistry: Level III
  - April 20-22, 2017

**MAY 2017**
- Local Anesthesia: A Hands-on Training Program
  - May 1-3, 2017
- Spring Core Competency Day for the Dental Team
  - May 12, 2017
- Protocols in Panoramic Radiographic Interpretation
  - May 19, 2017

**JULY 2017**
- Clinical Pharmacology in Dentistry: A 2017 Update—Duluth, Minnesota
  - July 15-16, 2017

**AUGUST 2017**
- 52nd Annual Dental Assistants’ Seminar
  - August 11-12, 2017
- 17th Annual Oral and Maxillofacial Surgery Review
  - August 19-20, 2017

**SEPTEMBER 2017**
- Fall Dental Hygiene Seminar
  - September 8, 2017
- Three Appointment Dentures: A Hands-on Workshop
  - September 8-9
- 11th Annual Robert J. Feigal Symposium
  - September 15, 2017
- Mastering Digital Full-Mouth & Panoramic Radiograph Technique: A Hands-on Program
  - September 16, 2017
- The Bottom Line on Tooth Bleaching 2017
  - September 22
- Gingival Displacement & Soft Tissue Management: A Training Program
  - September 23, 2017

**OCTOBER 2017**
- Occlusion & Function: Evaluation and Restoration of the Worn Dentition
  - September 23-25, 2017
- Interpreting Cone Beam CT Images: An Interactive Workshop
  - September 29, 2017
- Clinical Grand Rounds for the Dental Team
  - October 5, 2017
- 23rd Annual Practice Management Seminar: A Pathway to Sustained Practice Growth and Success
  - October 6
- Miniresidency in Pediatric Dentistry
  - October 6-8, 2017
- Infection Control Update: From Guidelines to Compliance
  - October 7
- Miniresidency in Geriatrics and Long-term Care for the Dental Team
  - October 11-14, 2017
- New Materials, Technologies & Laser Training
  - October 13-15
- Nitrous Oxide/Oxygen Inhalation Sedation: A Training Program
  - October 20-21, 2017
- Office Oral Surgery: A Guided Experience for the General Dentist
  - October 23-24, 2017
- Differential Diagnosis of Oral Lesions: An Interactive Lecture Program
  - October 27
- Increased Success Through Restorative Endodontics: A Lecture & Hands-on Workshop
  - October 28

**NOVEMBER 2017**
- Clinical Grand Rounds for the Dental Team
  - November 2, 2017
- Postgraduate Program in Contemporary and Esthetic Dentistry: Level II—Patient Series
  - November 10-12, 2017

**JANUARY 2018**
- Advanced Composite Restorations: Postgraduate Program in Contemporary, Esthetic & Implant Dentistry: Level II (Course Two)
  - January 12-14, 2018

For more information
For more information, to register for classes and/or to request disability accommodations, 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:**
[www.dentalce.umn.edu](http://www.dentalce.umn.edu)
Minnesota Dental Association and University of Minnesota School of Dentistry present

Minnesota Dentistry Reception

Friday, April 28, 2017
5:30-7:30 pm

The Saint Paul Hotel
Promenade Ballroom
350 Market Street, Saint Paul

Light appetizers & a cash bar will be available. Disability accommodations will be provided upon request.

Please RSVP by April 17:
Ranee Flory
chan0572@umn.edu
(612) 625-7678

Minnesota Dental Association Award Honorees:

Dr. Edward Kishel
2017 Guest of Honor

Dr. Lewis Pierce
2017 Humanitarian Service Award

Dr. John Wainio
2017 Outstanding Service Award

Dr. David Bates
2017 New Dentist Leadership Award

Mr. Carmelo Cinqueonce
2016 President’s Award

University of Minnesota School of Dentistry Award Honorees:

Dr. George L. Kinney
Distinguished Dental Alumnus Award

Lisa Ahmann
Distinguished Dental Hygiene Alumna Award

50th Annual Century Club Professor of the Year Award
To Be Announced at the Reception