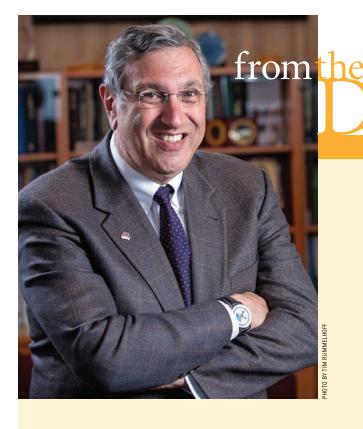
entistry

FOR ALUMNI OF THE SCHOOL OF DENTISTRY

SPRING/SUMMER 2016

Finding Gary Plotz

After studying neuroscience at Brown University and graduating from dental school, Gary Plotz and his wife, Betsy, moved to Slayton, Minnesota, where they found that life can be big in a small place.



Dear Colleagues,

At the University of Minnesota School of Dentistry, we endeavor to advance health by educating the next generation of great dentists, specialists, scientists, dental hygienists and dental therapists. We seek new knowledge to find cures for diseases, and to allow people to live more meaningful and enjoyable lives. From cover to back page, this issue of *Dentistry* magazine embodies those goals of our School of Dentistry.

Our cover says it all. Dr. Gary Plotz and his lovely family are sharing a great day in a beautiful spot. Thanks to the beauty and peace that rural Minnesota has to offer, he will make countless differences in the lives of his patients as he raises a family of new leaders for his community. Look to the article about Dr. Plotz to see how the truly best and brightest that Minnesota has to offer can make differences in their communities and build a rich life in dentistry. His odyssey is no accident: A family of dental health professionals, a school and community in Hutchinson that supported him, and, of course, our dental school, has made his career and his contributions possible.

Our back page and *NewsBites* also says it all. Dr. Louis Mansky is a scientist who is driven to discover the secrets of the human immunodeficiency virus so that someday it can be outsmarted. Read also about his work on understanding a target to halt the spread of HIV. He stands on the shoulders of a generation of virologists that have made the School of Dentistry their home, investigating how HIV penetrates oral mucosa and how this and other viruses replicate and mutate. His leadership is also recognized in his role as head of the Academic Health Center's Institute for Molecular Virology.

Before turning to the texts of these great articles, admittedly, I find myself looking at the pictures, and they are, in themselves, page-turners. Indeed, they tell a remarkable story. On page three, there is a picture of Louis B. Sullivan, M.D., former Secretary of Health and Human Services for President George Herbert Walker Bush, standing in our clinics with Karl Self, D.D.S., and our dental therapy students. His visit was prompted by our school's national reputation for break-through thinking, and he wanted to learn about what we are doing to help improve access to care and address the critical issue of untreated dental diseases. He was impressed with our school's spirit of innovation, commitment to the public, and devotion to educating the oral health care team. As a school, we can all be proud of the positive impression we've made on this great man and so many others who recognize us as national leaders.

Of course, nothing quite exemplifies the concepts of interprofessional education and collaborative practice like the photo on page four. Dentistry stands with the Murray County Medical Center as a health resource to the community. It is clear from this photo that the patients in Slayton, Minnesota, and beyond, know that oral health is essential to what it means to be healthy.

Dentistry is, of course, such a visual profession—and it is so built around the mouth and the face—that it is impossible for us as oral health professionals to resist the smiles on so many pages of this issue of *Dentistry* magazine: Smiles of our scientists, our graduates, our grateful alumni, our awardees, our students, our staff and, of course, the necessarily hidden smiles (thanks to HIPAA) of our patients. Each of those smiles sends a message of the great accomplishments of our school.

As you look through these pages, you might also note one of our Minnesota treasures whose mouth cannot be seen smiling, but whose eyes twinkle with delight and anticipation of discovery. That would be Ralph DeLong Ph.D., D.D.S., M.S., examining his research device. He expresses the satisfaction and meaning that a career in the School of Dentistry can bring. We can all look at his face and share a bit of his sense of joy and privilege for being a part of our school.

LEON A. ASSAEL, D.M.D.

Dean

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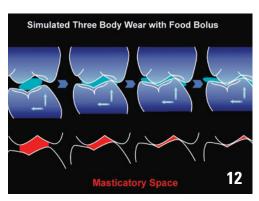


SPRING/SUMMER 2016

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PHOTO BY FRED BERTSCHINGER



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Defined as the *opposite* of déjà vu, vujà dé is a term that describes what happens when you look at something you *think* you know well and see it with fresh eyes. Many are intrigued to learn that the dental school's technologies and expertise extend well beyond the oral cavity.

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PHOTO BY L.A. PHOTOGRAPHY

University of Minnesota

School of Dentistry

Driven to Discover™

The University's mission, carried out on multiple campuses and throughout the state, is threefold: research and discovery, teaching and learning, and outreach and public service.

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NewsBites



School of Dentistry Researcher Helps Identify Mechanism in Drug Target That Helps Block HIV's Ability to Spread

University of Minnesota researchers have identified the mechanism of a potential HIV drug target, which could provide a more cost-effective treatment option than current HIV drugs.

The study expanded upon previous research, which identified that the RNA-based nucleoside 5-azacytidine (5-aza-C) blocked HIV's ability to spread by triggering lethal mutagenesis, a process in which HIV mutations speed up to a point that the virus essentially wears itself out.

A collaborative team of researchers at the University of Minnesota and Emory

University found that 5-aza-C converts to a DNA form (5-aza-deoxyC), a process that allows 5-aza-C to infiltrate HIV and speed up the mutation rate.

The majority of HIV medications currently on the market are

DNA-based, but RNA-based drugs like 5-aza-C have a manufacturing advantage because they are more affordable to produce.

The study appeared in print in the American Society for Microbiology's journal *Antimicrobial Agents and Chemotherapy* in April 2016.

"We now understand the mechanism for how 5-aza-C blocks HIV's infectivity through hypermutation. This information may aid in developing cheaper HIV drugs," said lead-author Louis Mansky, Ph.D., professor in the University of Minnesota School of Dentistry and director of the dental school-based Institute for Molecular Virology. Mansky is also a Masonic Cancer Center member.

This also helps explain why 5-aza-C is able to block HIV infectivity, despite its RNA-origin. 5-aza-C acts similarly to its DNA-based counterpart 5-aza-deoxyC, but is not nearly as effective. However, it can be mass-produced more cheaply.

"More than half of the world's HIV population is concentrated in sub-Saharan Africa where there is very limited access to HIV drugs and treatment. Our study could lead to developing more cost-effective medication, which in turn could lead to

new and more economical treatments for poorer, developing countries," Mansky said.

5-aza-C has been approved by the FDA for clinical use in treating myelodysplastic syndrome, but it's only available as an IV-based medication. The

study's findings encourage efforts to explore ways to produce 5-aza-C in capsule form.

"While it's not as effective as its DNA-based form, we can use what we know to try mimicking 5-aza-C to discover new compounds that could be more effective, while still being more affordable to produce," Mansky said.

It's another step towards ultimately finding a cure for HIV, Mansky says.

In addition to being more cost-effective HIV drugs, these RNA-based drugs could have potential use in the treatment of a wide variety of emerging viral infections, including Zika virus, Ebola virus, MERS virus and influenza virus.



For the fourth time since 2011, University of Minnesota Dental Clinics earned the Angie's List *Super Service Award*, reflecting an exemplary year of service provided to members of the consumer review site in 2015. Approximately 5% of all organizations rated on Angie's List receive the award.

Top Honors x 2

The American Dental Association Gies Foundation (ADEAGies) has awarded the School of Dentistry, in partnership with the Minnesota State Colleges and Universities System (MnSCU) and the Minnesota Board of Dentistry, its prestigious 2016 Gies Award for Outstanding Vision by a Public or Private Partner for their efforts to advance dental therapy education in Minnesota. The Foundation also awarded School of Dentistry Professor Mark Herzberg, D.D.S., Ph.D., the 2016 Gies Award for Outstanding

"This is a proud moment for dental education and patient care in Minnesota," said Leon Assael, dean of the University of Minnesota School of Dentistry.
"The Gies Award is the Academy Award for dental educators. For the

Achievement by a

Dental Educator.

GiesFoundation to recognize the outstanding achievement of one of our esteemed faculty members is a significant honor. To receive a second Gies Award—in partnership with MnSCU and the Board of Dentistry—for efforts to establish dental therapy education in the United States is a remarkable accomplishment."

Presented annually by the ADEAGies Foundation, the Gies Awards are the profession's preeminent recognition of exceptional contributions that exemplify the highest standards in oral health and dental education, research and leadership.

The Procter & Gamble Company is the premier sponsor of the awards, which were presented on March 14 at the ADEA Annual Session in Denver, Colorado.

Read more about Dr. Herzberg on page 19.



Dr. Louis B. Sullivan (second from right), former Secretary of the U.S. Department of Health and Human Services, visited the School of Dentistry on April 14 to meet with dental therapy students and educators and tour the school's team care clinic. The visit followed his testimony on April 13 before the North Dakota interim Health Services Committee about the importance of dental care and overall health, dentist workforce shortages in that state, and the licensure of dental therapists to help enhance patient access to care.

Quick Takes

Mentoring Program Launches in Partnership with Community Dentists in Three Rural Regions

The Minnesota Collaborative Rural Oral Health Project (MN-CROHP) held its inaugural banquet on May 20, 2016. Nineteen rural dentist mentors were matched with dental and dental therapy

students who will spend three weeks this summer in community engagement and orientation to rural dentistry. The project targets 13 counties in Northeast, West Central and Southeast



Minnesota. The five-year program is funded to the School of Dentistry by the Health Resources and Services Administration (HRSA). Naty Lopez, Ph.D., M.Ed., assistant dean of admissions and diversity, directs the program.

Oral Health Services for Older Adults

The long-awaited ribbon-cutting event for the expanded Walker Methodist Dental Clinic was held March 10, 2016. Designed for older adults living either independently or in long-term care facilities, the clinic will be home to the dental school's Oral Health Services for Older Adults Program. Care will be provided by faculty dentists, geriatric dental residents, and senior dental/dental hygiene students under supervision of Mary Owen, D.D.S., M.S., and Stephen Shuman, D.D.S., M.S., who led the expansion in collaboration with Walker's leadership and dental team.

New Ways to Welcome Patients

Students, staff and faculty learned to share common greetings and to understand some of the intricacies of communicating in another language at student-led language classes. Noon-hour classes in five languages were offered during Spring semester, courtesy of dental, dental hygiene and dental therapy students who are native speakers of Somali, Hmong, Vietnamese, Arabic and Spanish. Each language group met five sessions. Attendance was voluntary. Classes resume in September.

Regents Approve Dual-Degree Dental Therapy Program

At its October 2015 meeting, the University of Minnesota Board of Regents approved the creation of a dual-degree Bachelor of Science in Dental Hygiene and Master of Science in Dental Therapy program. The new 32-month program provides students with all of the coursework needed for state licensure as both a dental hygienist and an advanced dental therapist.

Finding Gary Plotz

After studying neuroscience at Brown University and graduating from dental school, Gary Plotz and his wife, Betsy, moved to Slayton, Minnesota, where they found that life can be big in a small place.

BY TERRI PETERSON SMITH



hey're here because they're curious and maybe a little skeptical.

Nearly 140 dental, dental hygiene and dental therapy students and their spouses or

significant others are drifting into Room 4-150 in Moos Tower for the School of Dentistry's eighth *Rural Practice* event. They're looking ahead, some with trepidation, to their next big step—deciding where to practice after graduation.

These students have heard about the need for dental professionals in Greater Minnesota since their first days at the dental school. And their education program has required they all spend up to two months on outreach rotations, treating patients in underserved communities such as Hibbing, Willmar, Cook, Red Lake, Cloquet, Cass Lake and Ogema. A few students will have fulfilled that outreach requirement in similar-sized communities in North and South Dakota and Montana. Still, they're curious to hear from someone close to their own age about what it's really like to find their personal and professional life far away from the Twin Cities.

Among tonight's speakers are School of Dentistry alumni Drs. Eric and Meghan Rambow, a husband and wife team who graduated in 2008 and 2009 and practice together at the Morris Dental Clinic, in Morris, Minnesota. Also here is Dr. Gary Plotz, class of 2006, who just might be one of the most enthusiastic promoters of rural life.

Plotz owns Shetek Dental Clinic in Slayton and Fulda, in the southwest corner

of Minnesota. Tonight, he's brought along two members of his dental team, Dr. Paul Enberg (2012) and Advanced Dental Therapist Lydia Diekmann (2013). And they're here to tell these soon-to-be graduates that life can be big in a small place.

Right Practice, Right Place

Gary Plotz grew up in Hutchinson, Minnesota, and studied neuroscience at Brown University before applying to dental school. "I credit my grandparents with steering me toward a dental career instead of medicine," he says. His grandfather Erwin Plotz ('43)-who, according to Gary is rumored to have been, at that time, the youngest student ever admitted to the University of Minnesota School of Dentistry—practiced general dentistry in Oshkosh, Wisconsin. His grandmother, Mavis Dane Plotz, was a dental hygienist. "When I was really little, they'd give me rides in the dental chair," he says. "And I remember enjoying discussions with both of them, starting as early as grade school, about things like taking care of people, how dentistry is an art and a science, changes in the profession, and family life."

By the time Gary graduated from dental school, his sights were set on rural Minnesota as fertile ground to achieve his professional goal—practicing comprehensive general dentistry. "I had interests in most all the disciplines and wanted a broad private practice with variety every day. There's no better place for that than rural Minnesota," he says.

On any given day, his reception room is filled with people of all ages and oral health needs. He's added surgical implant placement, orthodontics, laser dentistry,







and full mouth rehabilitation to the services available in Slayton and Fulda, in addition to endodontic, oral surgery, and general dentistry services. "I refer out only really complicated procedures that I'm not comfortable with or that require special equipment, such as higher powered microscopes."

He's quick to acknowledge, though, that having to do too much restorative work leaves little time for those more challenging procedures. He solves that problem by relying on Lydia Diekmann—a graduate of local Murray County Central High School and of the School of Dentistry's Dental Therapy Program—to do a lot of restorative dentistry.

"I had interests in most all the disciplines and wanted a broad private practice with variety every day. There's no better place for that than rural Minnesota."

— DR. GARY PLOTZ

Because the shortage of dental specialists in rural areas often forces patients to travel long distances for their advanced needs, they've welcomed the idea of local, comprehensive general dentistry. "They say, 'Please can you do this here so I don't have to take a whole day off from work and travel 80 miles to get this done," he says.

Preaching What He Practices

"We're all trying our best to get more dentists out into rural areas to better serve the entire state," says Plotz. It's an issue he knows the dental school addresses through admissions decisions, adjustments to class size, new educational programs, and by introducing students to life and practice in underserved communities through required outreach rotations. "When I was a student," he says, "I spent time in Hibbing and the Mobile Dental Clinic."

It's also an issue he's focused on during his time as president of the Southern District Dental Society of the Minnesota Dental Association (MDA), and in his previous role as a member of the MDA's Rural Dentist Task Force. And it's why

he's always happy to return to the dental school to talk with students. "I want to dispel any misconceptions students might have about rural practice," he says. For example, he's quick to point out that technology makes it possible to have a sophisticated, connected rural practice. "I have professional mentors in states as far away as Colorado and Texas, and confer on cases with other dentists via computer and electronic dental records."

Plotz also notes that communities are getting involved in recruiting young professionals, recognizing that it's easier to replace a retiring rural dentist than it is to expect a young dentist to start a practice from scratch.

That was something Slayton recognized when it launched a dental clinic through the local hospital with long-term plans to privatize the clinic. The town had been without a dentist for a number of years and so came together to build a clinic, aided by an experienced mentor dentist David L. Cannon (Louisiana State University School of Dentistry) and his staff. Gary was warmly welcomed to the practice seeded by a motivated community.

"I purchased the Slayton clinic in 2010 and added the Fulda practice of retiring dentist R. George Brockway ('75) in 2014," he says. "I hired another University of Minnesota School of Dentistry grad Paul Enberg as an associate in 2015." Originally from Chanhassen, a community in the southwest metropolitan area of the Twin Cities, Enberg says he, too, was drawn to the family atmosphere of the dental practice and local community.

The entire venture has been a successful one for both Gary and the community. "Dentists do a lot more than just improve health," says Plotz, noting that the availability of oral health care services also helps to enhance and maintain the economic viability and vitality of a community. "When patients need to travel to the next largest town for care, they'll also spend time there shopping and eating out, maybe see a movie or attend an event. That's money taken away from Main Street," he says. Maybe even more important, he notes, is that a community that can meet the basic needs of its citizens for healthcare services is better able to both retain and attract residents and businesses. @



Team Portrait: Shetek Dental Clinic

For Plotz and his wife Betsy, life in Greater Minnesota has had many rewards. They've become an integral part of their community, enjoying opportunities for involvement that might not have been as varied elsewhere. In addition to his participation in organized dentistry, Gary serves on a hospice board, an economic development committee and is active in church and Kiwanis. Betsy Plotz found time to serve as president of the Kiwanis Chapter and as a board member of the SW chapter of the Minnesota Academy of Nutrition and Dietetics. She also coaches volleyball, soccer and serves on the church health ministry team. Together, Gary and Betsy trained and served as voluntary EMTs. "These are areas looking for leadership," says Gary.

"Plus there will be more kids in the school district with our family." And this, he says, is an important point. "Communities that want their young people to pursue health care careers and then return home to practice must provide the challenging academic preparation that will make them competitive applicants for those education programs."

Their children are now ages 7, 5, and 2 (another is due in October) and enjoy t-ball, swimming, soccer and dance activities. In Slayton, Plotz anticipates that his children will have many of the opportunities that come with growing up in a smaller community. "I was involved in everything Hutchinson had to offer," he says. He participated in the arts (musicals and choirs) and sports (he was a member

of a state champion swimming team.) He also was in the University of Minnesota Youth Talented and Mathematics Program for six years in middle school and, in high school, took college level classes.

A Big Life

In southwest Minnesota, Gary and Betsy Plotz have found the formula for what is as close as possible to their ideal blend of professional and personal life. Betsy, who grew up near St. Cloud, was supportive of the move. "I was working for the Roseville Area School District (in St. Paul) prior to becoming the dietitian at Murray County Medical Center in Slayton, so the new job was an advancement of my career when we moved," she says.

"Leaving the Twin Cities was hard at first because of the stage we were at in life without kids and with friends there," she says. "For a while, we went back frequently to visit. Now, friends and family enjoy taking a break from the Cities to come visit us here." Also on the plus side is the comparatively low-stress life with a lower cost of living. "It was easier to balance work and family in the early years we lived in Slayton than I imagine it would have been in the Cities," says Betsy. "I really enjoy the personal touches here, not feeling like a number, the ability to breathe and focus on what is important in life, the calm and quiet no-traffic days." And, she says, they can always drive back to the Cities for a concert or a fun weekend away.

But when it comes to the activities of everyday life, daycare, work and home are all within a mile of each other. "I can come home for lunch if I want to and I can walk to the school if needed," says Plotz. That leaves more time to enjoy life. In addition to his civic and professional activities, Plotz is in a local dart league, and has played in volleyball and softball leagues. Contrary to the rural stereotype, he's not an avid hunter or fisherman but says, "If you like those things, a rural practice is a really great opportunity for those activities."

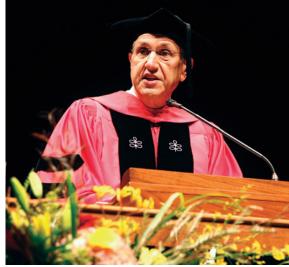
Even at work, Plotz and his team build-in time for both professional activities and fun. He and two of his dental assistants traveled to Denver for a continuing education program on full mouth reconstruction last fall, and returned home in time to sponsor a Halloween candy buy-back—one dollar per pound—in which 30 children donated 70 pounds of candy. The candy was sent, along with toothpaste and toothbrushes, to the troops serving overseas. He partici-



pated at the Mankato Mission of Mercy program, and recently the entire staff devoted most of an afternoon to welcoming students from three first-grade classrooms who visited their office to learn about oral health. The day included a tour of the office and every child got to ride in the dental chair.

"It was a fun outing for the kids," he says, "and a chance for them to learn a little about science and oral health." In the back of his mind, though, he knows that little eyes are watching. And who knows, maybe one or more of those enthusiastic first-graders will choose to follow in his footsteps. "It's a possibility," he says. "Wouldn't it be great to see that happen?" •









Celebrating a Job Well Done and a Bright Future

he School of Dentistry celebrated the accomplishments of its graduating classes at its 127th Commencement Ceremony held May 13, 2016, in Northrop Auditorium. Included among the 177 graduates were 109 new doctors of dental surgery, 38 recipients of master's degrees and/or advanced education certificates, six dental therapists who received master's degrees, and 24 dental hygienists (21 who received bachelor of science degrees and three who earned a master of dental hygiene degree.)

Dr. Jorge Perdigão, School of Dentistry 2015 *Century Club Professor of the Year*, carried the University mace as he led the processional of graduates, faculty and dignitaries into the auditorium. Dean Leon Assael emceed the event, and graduates Jennifer L. Schleifer (dental hygiene), Kassie Scott (dental therapy) Jeremy S. Berger (doctor of dental surgery) and Fouad Badr (advanced education programs) shared remarks on behalf of their fellow students. Vice Provost Brown Young conferred the degrees on behalf of the University of Minnesota Regents. **O**

PHOTOS BY LIFETOUCH













ABOVE: School of Dentistry 125th Anniversary Celebration.

Dentistry Magazine: You've been our dean since 2012 and students entering dental school that year just graduated. *They* learned a lot in four years. What have you learned along the way?

Dean Assael: Much of how I approach my work comes from my mentors' experience and my own guiding principles. I'd say that I try to rely on the Golden Rule as a starting point. It's not something I've learned here, but I daily recognize new applications for that ethic of reciprocity.

Beyond that, another lesson reinforced almost daily is the need to be mission-oriented in all that we do. As a land grant institution, the University applies its vast resources to meet the needs of Minnesotans through learning, discovery and engagement for the common good. That is the point of its existence. And quite simply, the School of Dentistry is one of those resources. Our mission—to advance health through scientific discovery, innovative education, and the highest quality health care for all communities—

goes hand in hand with the mission of this great University.

What I have learned in the last four years—and am regularly reminded of because I get calls, letters and emails from mayors, legislators, dentists, patients and state agencies—is the extent that access-to-care challenges in rural and inner city communities affect our ability to fulfill that mission. Access to dental care is an issue throughout the country, of course, but there are levels of complexity here that make it a particularly vexing challenge.

Finally, underlying both of these two issues is the need to set priorities so as to allocate the appropriate level and type of resources to solve problems. The application of resources, such as money and effort, by the school must be done with a detailed knowledge of what is likely to work well, and an understanding gained by being a good listener. The faculty, staff, students, patients and community offer exceptional wisdom on what and how we should do things, as evidenced, in part, by the priorities identified in our new strategic plan.

Notwithstanding this framework that might seem straightforward, I've learned of the need for careful contemplation. So, after I hear a point of view, I often spend many more hours considering its meaning and incorporating it into my thinking. But after all that, it is time to act. The most exciting and meaningful part of action is that it always brings change. And if the action is well considered and inclusive of all relevant ideas—it will be the right action.

DM: What are some examples of those 'changes' you mention?

Dean Assael: As I mentioned, graduating students who will meet the needs of Minnesotans to gain the benefits of good oral health is essential to our mission. But we are not achieving that goal to the extent of our capacity. There's been a declining oral health workforce in rural Minnesota for some years and the problem is approaching a crisis. Seventy-five percent of recent Minnesota graduates who are practicing in the state are doing

so within the Twin Cities' seven-county area, even though about half of the state lives in Greater Minnesota.

If we're to be successful in meeting the oral healthcare needs of the state, then decision-making about who we bring to Minnesota to educate as members of the oral health care team is one of our most profound responsibilities. While it is not the responsibility of the Dean to admit students, the framework underpinning the admissions process is the responsibility of the University administration as structured by the Dean of each unit.

The school has a history of decisions intended to enhance access. And shortly after I arrived, we embarked on a multifaceted approach that focused on admitting and graduating students from communities that need us. Here are some things we've done in the last four years that I consider to be significant "wins."

- We fine-tuned the admissions tool called UMAST (University of Minnesota Applicant Selection Tool) that we developed in 2010 to conduct a holistic review of dental school applicants. We did a retrospective analysis of applicant data from two admissions cycles and piloted the approach for one admission cycle before it was refined to its current form. We're now preparing to review the GPA, board scores and other non-academic factors of students admitted using UMAST to determine its effectiveness in predicting student performance in dental school.
- We received a \$1.7M federal grant for a new five-year program to address access-to-care disparities in rural Minnesota. Dr. Naty Lopez, our assistant dean of admissions and diversity, directs the MN-CROHP program, which pairs our dental and dental therapy students with dentist mentors in solo practice in 19 locations in smaller communities throughout Northeast, West Central and Southeast Minnesota.
- We asked the admissions committee to consider 'rural need' when evaluating candidates for admission to the Doctor of Dental Surgery Program. In 2015, we increased the number of rural Minnesotans in the first-year class of dental students to 31.

- We presented at MDA regional societies to encourage "shadowing" and other inspirational and informative activities by rural dentists.
- We expanded our outreach activities and now send students to care for patients in 15 underserved communities, a number that is up from seven several years ago. We also increased the time students spend on outreach rotations to 9-12 weeks (from six to eight weeks in the past.) Seven of our sites are in American Indian health care and we are partnering with the University of Minnesota, Duluth, to develop a pipeline project to inspire American Indian students to apply to dental school. The early success is that we've now enrolled 13 American Indian students. Nine of them have graduated; two are working in American Indian clinics and two in safety net clinics.

(where students learn with the other major health professions such as medicine, nursing and pharmacy) and practice opportunities for students in all three programs. I, and others from the school, met several times with University and college leaders on both campuses and I think I was in St. Paul maybe 15 times that year, talking with legislators and/or testifying in support of the proposal. That it has not (yet) been funded is a significant disappointment. I'm hopeful that the issue will be revisited. If funded, it would mean challenges in developing a new rural curriculum, but we're 'up' for those challenges.

DM: Are there other curriculum challenges? **Dean Assael**: Yes. We recently completed a two-year, all-school, strategic plan.

Everyone had a chance to participate and to share input. The plan helps set the direction for the school's education, research and service activities for the next five years.





LEFT PHOTO: Recent graduate Dr. Christine Lucachick (International Falls) is the 2016 recipient of the *Dr. Michael Till-Northern Minnesota Dental Scholarship*. Seen here with *(L to R)*: Dr. Michael Zakula, Dr. Michael Till and Dean Assael. **RIGHT PHOTO:** Arizona donor reception.

 Thanks to donors and the support of government and foundations, scholarships and loan forgiveness programs for rural students are benefiting communities across our region, as well.

DM: Have there been disappointments?

Dean Assael: Sure. In 2015, we advanced a proposal to develop a rural track dental education program, similar to those at the University's Duluth campus for rural-track medical and pharmacy students. The program holds great promise for helping to address the dental access challenges of rural communities. It also would provide enhanced interprofessional education

A primary objective is to develop a new curriculum model that will eliminate redundancies and integrate educational experiences in the basic behavioral and clinical sciences across all years of dental education. It also will provide stronger training in general dental competencies, an increased focus on care delivery within a collaborative care environment, and enhanced synergy between learning in our campus and outreach clinics. The goal is to have students move more quickly into the clinical phase of their training and to provide an innovative fourth-year education. A group of faculty, staff and students is moving ahead under the direction of **⊙**

Associate Dean for Academic Affairs Dr. Keith Mays to make all of this 'happen.' It's an enormous undertaking but one that will have significant benefit for our students and the patients we all serve.

DM: What else did the plan focus on?

Dean Assael: We developed a new mission, vision and core values statement for the school. The plan also provides strategic direction for a clinical services/clinical education plan, research initiatives, and we integrated our plan with the strategic plan, goals and objectives of the University.

MICCION

The University of Minnesota School of Dentistry advances health through scientific discovery, innovative education, and the highest-quality care for all communities.

VISION

The University of Minnesota School of Dentistry leads the profession into the future of comprehensive healthcare.

CORE VALUES

- · Diversity
- Excellence
- Integrity
- Pursuit of Knowledge
- Respec
- · Service to All Communities
- Leadership

DM: What does that entail?

Dean Assael: When it comes to clinical care, the plan charges us with providing high-quality, patient-centered care and education that treats oral health as an integral component of health and wellbeing. It includes things like evaluating our clinical model for efficiency and patient-centeredness, expanding patient care in underserved communities, increasing the collaboration of the school with other Academic Health Center (AHC) schools and the University, and promoting oral health through community education and service as an integral component of health and wellbeing.

Our research focus going forward is to develop stronger, innovative research programs throughout the school that address the critical needs of the community, with a focus on 1) enabling the pursuit of discovery by providing protected time for faculty and managing resources efficiently; 2) fostering collaborative basic, translational, clinical and educational research; 3) communicating and promoting discoveries to stakeholders and the public; and 4) investigating and implementing an organizational model that builds strong research groups based on current strengths and forecasted needs.

We also need to establish a philanthropy program to support and sustain cutting-edge research within the School, which includes things like endowed chairs for research leaders, a general research endowment, and additional support and opportunities for student research.

DM: What are some of the other challenges the school is facing?

Dean Assael: We are in the midst of several challenging budget years in which our expenses have exceeded our income. This is due to the many physical needs of our aging building and the increased costs associated with patient care and education. That is not sustainable, so we are developing a plan to address the strategic needs of our programs, to right size them, and to create efficiencies to present a balanced budget going forward. We must do this with an understanding of our primary mission for great education at an affordable cost. We must not rely on the students to be the source of income to offset increasing costs. Reducing expenses and increasing efficiency are achievable goals. This is a process that broadly includes our faculty, staff and students and has already produced significant gains. I am confident that the future will bring more sustainable expenses and greater income to support our programs.

DM: Tell us something about being a dean that we might not know.

Dean Assael: Well, it's no secret that the dean is the face of the school to internal and external audiences. I spend a lot of time talking *about* the school—with donors and alumni, both locally and around the country—and with legislators, organized dentistry in its various constituencies, and with public and private stakeholders, be they in the business of education, industry, philanthropy or regulation. We host receptions at state, regional and national dental meetings (specialties,

too) and I try to meet with the leadership of these dental organizations, as well. We also host a variety of campus events for donors and alumni. There are annual marathon tours to meet donors and alumni in places like Arizona and California. I've also met twice annually with 30-plus members of a dean's advisory group created in 2013. And, of course, there are meetings and events with students, faculty and staff.

A lot of what a dean does, though, is internal to the University to support shared responsibilities and missions in teaching, research and service. These relationships have been critical to our success with respect to things like the development of interprofessional education throughout the Academic Health Center; advocating and planning for dentistry's role in the University's new M Health system; creating greater functional partnership and joint hiring with Boynton Health Services; being involved in the architectural and programmatic planning for a new health sciences education building; working with the University to promote our rural health initiative for the supplemental budget request; partnerships with various Federal Qualified Health Centers, etc.

DM: Someone once used the term "boundary spanner" to describe the role of academic leadership. Is that a description that resonates with you?

Dean Assael: Yes. As an example, I am the dean, but I'm also a faculty member who firmly believes in faculty and departmental governance. So, I work with and through faculty leaders. Still, difficult decisions remain that are mine to make. I try, first, to listen to the input of others, and then make those decisions based on what I believe to be in the long-term best interests of the school and our education, research and service mission.

Another example is that academic leaders span the past and the future. We need to respect our past, but the future of dental practice is being re-defined by a shifting health and consumer environment. Our patients are aging and more diverse, with different disease patterns. Student debt loads affect decisions about where and how young professionals will practice, and consumers are more discerning in their health care purchasing decisions. Payment models and practice models are changing in favor of more collaborative

care, and treatment is research-based and outcomes-focused. Change is inevitable, and we're up to our necks in change.

A final example is that no one exists in a vacuum or silo anymore. Dental education, research and care today is increasingly interdisciplinary and interprofessional. Every area within the school—whether focused on education, research or service initiatives-is a contributor to an overall vision of who we are and what we can accomplish as a whole school. And together, our school is part of a greater University with responsibilities throughout the state, region and the world. It's easy to get silo-ed, though, which is a way of thinking and working that can sometimes cause us to work harder but be less productive than as a 'whole.'

DM: So, given all that, what are some examples of de-siloing efforts?

Dean Assael: We have a multi-faceted approach, which includes the directives of our strategic plan. So, for example, we developed a team-care model for our clinical services. Groups of students in each of our dental, dental therapy and dental hygiene programs are now working together to care for patients efficiently and with the highest quality. A new patient in our clinics can have intake data—an examination, radiographs, initial hygiene visit—and initial care completed in the same visit by a team that is coordinated and working in concert. We hope to provide great care but also to promote and model the intra-professional team (dentists, dental hygienists, dental therapists, and all of our clinical staff) that will change and improve the way care is delivered.

We also developed a student learning community through small group learning, student projects and team problem solving. We combine this with interprofessional education, in which dental professionals learn in collaboration with nurses, pharmacists, physicians, and other health professionals. This underscores the message for all that oral health providers are a vital part of the health care team, and that oral health is an essential component of overall health. Some recent examples: In our Moos Tower clinics, a pharmacist from the School of Pharmacy interacts daily with students and patients about medication management. Our students consult with patients at the

M Health Nurse Practitioners Clinic. Our dental hygiene program partnered with Fairview Hospital, as well, to be a resource within its health system. And thanks to generous donors, Walker Methodist recently opened a prototype 21st century dental clinic for geriatric care under the leadership of Dr. Stephen Shuman. In each of these environments, we've created learning and practicing communities for our students that model the practicing community we hope to create that will increase the value and richness that both patients and practitioners can gain by working together.

DM: Is starting your fifth year as Dean a time for reflection or for moving forward?

Dean Assael: I think of it as both and reflect on our achievements to inspire us to do more. We are not even close to achieving our land grant mission in oral health to make a better Minnesota through solving the seemingly insurmountable burden of oral diseases.

tors, Minnesota communities, our profession, alumni and donors, public-private partners, and the list goes on from there). Being responsive to all constituencies is a tremendous challenge and it requires that we work as a community.

Beyond that, I've said that the School of Dentistry exists to educate the next generation of oral health professionals. But we can't do that in a vacuum. We need to continue to cultivate public-private partnerships between the school and communities and practitioners, as well as with corporate, foundation and regulatory donors and grantors. Communities need to provide us with competitive applicants and play a role in recruiting young professionals into their communities.

We need to continue our search for answers to some of the great challenges of human health. We have tremendous expertise in innovative basic, clinical, and social behavior sciences/public health research in such areas as biomaterials and biomechanics, bone biology and craniofa-





LEFT PHOTO: Student recognition event. RIGHT PHOTO: Grand opening: Wilder Methodist Dental Clinic.

Looking forward these are some of the things I know we must do.

We need to help raise public awareness that oral health is an integral part of overall health and wellness. We're doing this through our curriculum, our public messaging, and our clinical care models.

We need to apply the newest science and technology in patient care, much of which is to be discovered at the University of Minnesota.

Ours is a big school with an ambitious mission and responsibilities to multiple constituencies (e.g. students, patients, faculty and staff, the University of Minnesota and the State of Minnesota and its legisla-

cial development, oral infections and microbiology, oral health disparities and community health, oral inflammation and cancer, and orofacial pain and neuroscience. We have a responsibility both to contribute to the growing body of knowledge that shapes our profession and to advance health through those discoveries, as well as innovative education and the highest-quality care for all communities.

There are a world of challenges and things to accomplish. I look forward to every day, and for all of us to be a part of this great University and make a better world, with good oral health. •

BY CLAUDIA KANTER

n a recent *Ted Talk*,* organizational psychologist Adam Grant talked about a concept he called 'vujà dé.' According to Grant, 'vujà dé' is a term that means just the opposite of déjà vu. He says, "Vujà dé describes what happens when you look at something you *think* you know well and see it with fresh eyes."

This is a story about seeing things with fresh eyes. While few would be surprised to learn that School of Dentistry scientists develop and test new dental materials used to restore the form and function of damaged teeth, many are intrigued to learn that the school's technologies and expertise are applicable far beyond the oral cavity.

The Study of Force and Function

Alex Fok, Ph.D., M.Sc., directs the dental school-based Minnesota Dental Research Center for Biomaterials and Biomechanics (MDRCBB). The multidisciplinary center houses advanced technology used to help develop and test dental materials, and has research capabilities in such areas as measurement of polymerization shrinkage; analysis of fracture mechanics; simulation of materials wear; implant surface characterization; and more.

"With advanced imaging systems such as micro-CT, we can do things like create detailed three-dimensional images of the *inside* of a tooth—or the inside of a piece of bone—without destroying the external structure," says Fok. That means school researchers can review a series of images that documents the stages of change that take place inside a tooth as a result of de- or remineralization, inside bone



MDRCBB Director Alex Fok (center) and Conrado Aparicio, deputy director (right).

when studying resorption, and even inside a piece of food as it collapses under the force of the human bite.

Fok says that the study of force and function is the same whether applied to the design of dental restorations or conducting stress analysis of the fuel core of nuclear reactors. "The boundaries of physics are not rigidly defined. The study of force and function—loading, material

properties and shape—are applicable across all industries."

As examples, he notes that MDRCBB researchers are studying how to disrupt the adhesion of biofilms in order to prevent colonization and infection, insights that are as relevant to the goal of providing clean water as they are to enhancing the success of dental implants and other prostheses, such as for the hip or knee. They're also working with pharmacists and civil engineers to develop a suitable microstructure that will support the combination of two or more medications into a single tablet without separating or 'delaminating.' "That's a challenge similar to the one posed at the interface between composites and the tooth structure," says Fok. Oh, and they're helping a geobiologist to study the dissolution of minerals mediated by bacteria, research that can lead to a better understanding of the co-evolution of the biopsphere and geosphere.

The ART of Research

Recently, MDRCBB researchers used a new version of a robotic mouth developed 30-plus years ago to help the food industry evaluate product reformulation. Nicknamed ART (an acronym for artificial resynthesis technology), the mechanical mouth was an early foray into robotics and so unique, when first developed in

^{*}Ted Talk is a global series of presentations offered for free online viewing under the slogan 'ideas that are worth spreading.'





MDRCBB Investigator Ralph DeLong, Ph.D., D.D.S., M.S., with ART.

PHOTO BY PATRICK O'LEARY

1983, that it was selected by *Industrial Research and Development* as one of the 100 most significant new technological products of the year. A model of ART even spent time in the Smithsonian.

"ART can replicate a year of chewing in a single day," says Ralph DeLong, Ph.D., D.D.S., M.S., who, along with William Douglas, B.D.S., M.S., Ph.D., professor emeritus and founder of the MDRCBB, invented ART. "It was created for use in the development of new dental materials," he says, "and we use it just about every day. If we want to know how well a dental material will wear over a decade, ART will chew for just ten days and we'll have the answer."

Recently, though, the robotic mouth has had more than dental materials to chew on. "Food companies are changing their product formulations," says DeLong, noting that consumer interest in healthier foods (e.g. less salt and sugar) poses challenges to the industry. "Changing the ingredients changes what those ingredients interact with, which can affect things like taste, texture, wettability, crunchiness, etc.," he says.

So, ART has been chewing away at new food formulations while the Center's staff applies sophisticated technology to evaluate before-and-after changes in things like how fast a cereal breaks down in response to chewing (both with and without milk), even to the point of analyzing

audio frequencies to quantify changes in 'crunchiness.' They're also working on a test to measure and evaluate aerosol emissions to determine the effect of ingredient changes on scent.

Transdisciplinary Technology and Aspiration

The Center still retains its primary focus on dental materials development. But

"It's also extremely rewarding to know we can work together across disciplines and apply our expertise in biomaterials, biomechanics and biofilms to help address the grand challenges of human health and welfare in such new and exciting ways."

— ALEX FOK, PH.D., M.SC.

Fok is quick to point to the benefits of removing the barriers to transdisciplinary aspiration and achievement, noting that the MDRCBB has contributed to research in such non-dental industries as food sciences, energy, medicine, pharmacy and geobiology. "Dentistry also has reaped the benefits of interdisciplinary investigations," he says.

"Studies of shape optimization, a well-developed concept in engineering used to design more durable engineering structures, have important applications in the development of restorative materials that must withstand occlusal load caused by chewing," he says. "And civil engineering studies into the fracture of concrete and rocks using acoustic emissions to detect the microcracking events prior to final fracture have been applied to the study of dental restorations." He also believes that understanding bacterially-mediated dissolution of minerals can help us develop better preventive treatments for dental caries.

For Fok, the ability to explore research opportunities at the interface of scientific disciplines is one of the intriguing advantages of being at a research-intensive University. "The expertise is all here," he says. "It's gratifying to know that we can help improve oral health by developing better and safer materials used by dentists around the world. It's also extremely rewarding to know we can work together across disciplines and apply our expertise in biomaterials, biomechanics and biofilms to help address the grand challenges of human health and welfare in such new and exciting ways." •

2015 Community Report

The charts below represent the unaudited revenue sources and expenses of the School of Dentistry for fiscal year 2015.

REVENUES & EXPENSES 3% 2% 1% Revenues Revenues (in thousands) Tuition and Fees \$ Tuition and Fees 25,800 Clinics \$ Clinics 23,700 State Funding Allocation \$ 14,000 State Funding Allocation 19% \$ Research 6,300 Research Gifts and Endowed Earnings \$ 1,860 Gifts and Endowed Indirect Cost Recovery 1,445 Earnings Other 190 Indirect Cost Recovery Other **Total** 73,295 32% 5% 2% Expenses 8% **Expenses** (in thousands) Instruction 39% \$ Clinical Activity 29,143 Instruction Clinical Activity \$ 22,622 University Overhead 16% & Support University Overhead & Support 11,000 Research \$ 6,300 Research \$ Administration and Development 3,940 Administration \$ Student Services and Scholarships 1,490 and Development Student Services \$ **Total** 74,495 30% and Scholarships

Revenues Notes

Financial results for the University of Minnesota School of Dentistry for the fiscal year ended June 30, 2015 continue to reflect a challenging environment for public, research intensive dental schools. Expenses exceeded revenues by \$1.2 million for the fiscal year for the third consecutive year. Overall fund balances for the School of Dentistry declined to the lowest levels in a number of years as a result of the loss. The School made the decision to freeze faculty and senior staff salaries for FY2015 in response to the financial results while continuing to invest in programmatic opportunities.

Total revenues for the School of Dentistry declined \$0.3 million for the fiscal year ended June 30, 2015, from \$73.6 million to \$73.3 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 was flat for the fiscal year. Research funding declined modestly as described below.

Clinical and Affiliation revenues increased by \$1.1 million. Clinical activities reflect continued pressures on public program reimbursement levels as well as the effect of the access challenges to our clinics presented by the light rail construction project. However, efforts to increase pre-doctoral patient flow, as well as a full year of results for the pediatric clinic, had positive impact on overall clinic revenues. We have also experienced positive results from our marketing campaign efforts.

State Operating and Maintenance (O & M) funding received by the School of Dentistry, was held constant by the central University. State funding as a percentage of overall revenue continues to decline. In absolute dollars, funding declined slightly to \$14.0 million (which includes a \$2.0 million allocation to replace MERC funding eliminated by the state legislature in 2012) from \$14.2 million in FY2014. Tuition and fees continued to widen their gap over state funding support. This trend was in evidence across the entire University. Student debt levels are an increasing concern. 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 \$8.3 million to \$6.3 million. Despite the reduction, 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 \$1.4 million from \$1.8 million in FY2014.

Tuition and Fee revenue increased \$0.8 million from \$25.0 million in FY2014 to \$25.8 million in FY2015. 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 FY2015.

Gifts and Investment Returns included in operational results decreased by \$0.4 million, from \$2.3 million to \$1.9 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.

Expenses Notes

Total expenses for the School of Dentistry were unchanged for the fiscal year ended June 30, 2015, at \$74.6 million.

Instructional expenses increased \$1.1 million, from \$28.0 million to \$29.1 million, primarily related to contractual fringe benefit increases, contractual compensation increases and additional faculty.

Clinical expenses were increased by \$0.3 million, from \$22.3 million to \$22.6 million in support of increased clinical revenues.

Research expenses declined by \$2.0 million, from \$8.3 million to \$6.3 million, commensurate with the decrease in research.

Central Allocations increased \$0.2 million from \$10.0 million to \$10.2 million. This 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.

Administration and Development expenses increased \$0.3 million, from \$3.6 million to \$3.9 million as a result of filling an open associate dean position.

Scholarships and Student Services increased from \$1.2 million to \$1.5 million.



2015-16 SCHOOL STATISTICS

Paid Faculty Appointments*

		Associate Professor		Total
Tenure/Tenure Track	23	37	2	62
Research Track	0	0	5	5
Clinical Track	3	15	44	62
Adjunct	23	34	79	136
Total	49	86	130	265

^{*}As of November, 2015.

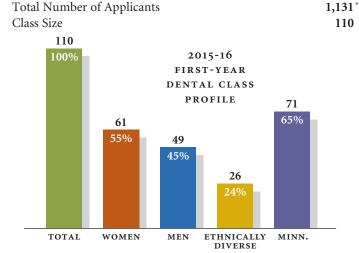
Students | Fall Semester Enrollment 2015

Dental Hygiene, B.S.	47
Dental Hygiene, Master Degree	15
Dental Therapy	21
D.D.S.	403
Advanced Education & Graduate Programs	90
Program for Advanced Standing Students	25
Total	601

2015 Graduates

2013 Gradates	
Dental Hygiene-Baccalaureate Program	23
Master of Dental Hygiene	3
Doctor of Dental Surgery	108
Professional & Graduate Degrees Awarded	31
Dental Therapy	9
Total	174

2015-16 FIRST-YEAR DENTAL CLASS PROFILE



Average GPAs

Overall GPA	3.55
BCP (Bio, Chem, Physics) GPA	3.47
Science GPA	3.47

Average DATs

TOTAL

41

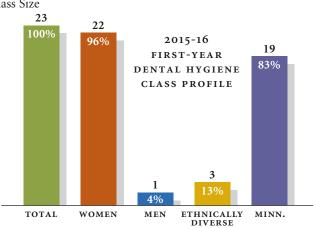
23

Academic Average	19.93
Perceptual Ability	20.27
Total Science	19.57
Reading	21.57

^{*}These figures represent AADSAS calculations.

2015-16 FIRST-YEAR DENTAL HYGIENE CLASS PROFILE

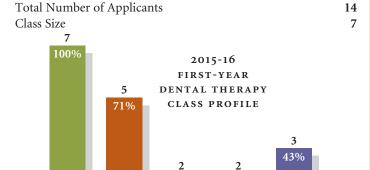
Total Number of Applicants Class Size



Average GPAs

Overall GPA	3.42
Science GPA	3.17
Prerequisite GPA	3.32

2015-16 FIRST-YEAR DENTAL THERAPY CLASS PROFILE



29%

MEN

29%



WOMEN

DENTISTRY SPRING/SUMMER 2016

SchoolNews

A Natural Collaboration

Dental and pharmacy students work together to benefit patients.

BY KALI DINGMAN



t first glance, dentists and pharmacists seem quite different. One treats diseases of the mouth, the other focuses on medications. But they face a

common challenge.

"Dentists and pharmacists work in specialized health fields and they aren't often thought of as part of someone's primary care team," said Amy Pittenger, Pharm.D., Ph.D., associate professor in the University of Minnesota College of Pharmacy.

"That perception is changing, though," says Todd Thierer, D.D.S., M.P.H., associate dean for clinical affairs at the University of Minnesota School of Dentistry. "More and more, contemporary health care is recognizing that the body is one complete system and that our parts all work together. And that's the way we need to teach."

Recently, the School of Dentistry teamed up with the University's pharmacy college to enhance opportunities for interprofessional education and better patient care. Thierer leads a new initiative with Pittenger and Grishondra Branch-Mays, D.D.S., M.S., associate professor in the School of Dentistry's Division of Periodontology. "Qualifying patients now receive a medication consultation with a pharmacy resident during their dental clinic visits," says Thierer.

"Patients come to the University of Minnesota Dental Clinics for oral health care, but they have comprehensive care needs that affect the whole body," Pittenger said.

Alexandra Paffrath is the pharmacy resident who currently participates in the initiative. She's learning about oral health



Alexandra Paffrath

and its relationship to systemic health. She's also educating dentists and dental students about how medication use can affect oral health. "It's important for the dental team to have an understanding of pharmaceuticals to properly treat oral problems and identify potential complications," she says. "And it's important, too, for pharmacy students to recognize the mouth can provide evidence of systemic disease and the ways in which oral health can impact overall health and wellness."

Paffrath says she's learning about oral health education in a way she can promote in her other clinic settings as well as in her career.

"We're hoping this creates a natural collaboration between the dental and

pharmacy worlds," Pittenger said. "We're hoping dentistry and pharmacy students who come out of this program can have a working relationship in practice, too."

This also creates an opportunity to work with a primary-care physician to identify potential problems and maximize care.

The dental and pharmacy faculty members associated with the collaborative effort plan to assess how pharmacydentistry integration affects patient outcomes. Going forward, they hope to expand the program to accommodate more pharmacy students.

"Health care shouldn't be siloed," said Thierer. "Working together, we're providing team-based care, where both providers and patients will benefit." •

Driven to Discover

The productive basic, clinical, social science and translational research taking place at the School of Dentistry was on display at the 12th Annual Dental Research Updates from the U of M on March 30.

Highlights of the day included a keynote presentation by Dr. Ira Lamster, Columbia University Mailman School of Public Health and College of Dental Medicine, titled "Oral Health as a Component of Health: Lessons Learned from Diabetes Mellitus."

The all-day program also showcased faculty research on topics such as a baseline study of dental therapy practice patterns in Minnesota, evidence from the oral microbiome about the role of sugars in dental caries, measuring sensory function in health and disease, and the nuts and bolts of clinical research. Also featured were presentations by two students who discussed implant placement for individuals with congenitally

missing teeth and an inconspicuous treatment approach for the correction of a unilateral cross-bite.

Thirty-two students from the dental school's Summer Research Fellowship Program, Graduate Program in Oral Biology, and Master of Dental Hygiene Program also gave poster presentations on their research.

Congratulations to the following 2015 *Paper of the Year Award* recipients:

CLINICAL SCIENCE

Estephan Moana-Filho (Diagnostic/Biol. Sci.-TMD/Orofacial Pain),
David Bereiter (Diagnostic/Biol. Sci.-Basic Sciences) and Don Nixdorf (Diagnostic/Biol. Sci.-TMD and Orofacial Pain), for their paper "Amplified Brain Processing of Dentoalveolar Pressure Stimulus in Persistent Dentoalveolar Pain Disorder Patients." The paper was printed in the Journal of Oral and Facial Pain and Headache 29(4): 349-62.

BASIC SCIENCE

Paul Jardine and Shelley Grimes (Diagnostic/Biol. Sci.-Institute for Molecular Virology), with co-author W. Zhao (Diagnostic/Biol. Sci.-Basic Sciences), for their paper "An RNA Domain Imparts Specificity and Selectivity to a Viral DNA Packaging Motor." The paper was printed in *Journal of Virology*, 89(24): 12457-66.

SOCIAL AND BEHAVIORAL SCIENCE AND PUBLIC HEALTH

Christine Blue (Primary Dental Care -Dental Hygiene) and Sheila Riggs (Primary Dental Care-Dental Public Health), with co-author T. Rockwood, for their paper "Minnesota Dentists' Attitudes Toward the Dental Therapist Workforce Model," which was printed in *Healthcare* 3(2): 108-13.

New Dental Clinic Opens at Minnesota Health Clinics and Surgery Center

The School of Dentistry has a six-chair dental clinic at the University's new M Health Clinics and Surgery Center (CSC).

Designed to facilitate collaborations and allow care teams to work together in new ways to meet each patient's unique needs, the CSC re-imagines the out-patient care experience. The facility houses 37 medical specialties, from primary care to neurology and orthopedics. It's also home to the Masonic Cancer Clinic, an infusion center, lab and imaging services, a retail pharmacy, an outpatient surgery center and other clinical services.

Included are adult outpatient clinics, diagnostic and treatment services, and inter-professional care, education and research.

"The presence of a dental clinic in the CSC offers a unique opportunity for



Architectural rendering of the University's new M Health Clinics and Surgery Center.

the dental school to be a part of this rich educational environment and promotes the profession as an integral component of collaborative health care," says Leon Assael, D.M.D., dean of the School of Dentistry.

Residents in the dental school's General Practice Residency Program (GPR) began rotations in the clinic in February 2016, under direction of the GPR Clinic Director Mark Roettger, D.D.S.

People

Appointed: Richard Nadeau, D.D.S., M.P.H., by the Department of Human Services Commissioner to a position on the Opioid Prescribing Work Group. The group will set prescribing protocols to address the opioid crisis currently affecting Minnesota and help shape the opioid-prescribing improvement and monitoring program. The workgroup was created in 2015 at the direction of the governor and the Minnesota legislature.

Awarded: Megan Guthmiller, D.T. ('15) the inaugural *Karl Self Dental Therapy Student Achievement Award* at a Campus Club reception for dental therapy gradu-



Karl Self and Megan Guthmiller

ates on December 3, 2015. Created by the School of Dentistry Alumni Society (SODAS), the annual award honors a senior dental therapy student for leadership, scholarship and personal character. The award was presented by SODAS Vice President Mary Pariseau, D.D.S. The new award is similar to the *Mellor R. Holland Dental Student Achievement Award* and the *Kathleen J. Newell Dental Hygiene Student Achievement Award*, which are presented annually to a graduating dental and dental hygiene student.

Awarded: Kristine Krafts, M.D. (Diagnostic/Biological Sci) the University-wide 2016 Outstanding Contributions to Postbaccalaureate, Graduate and Professional Education Award and named to the University's Academy of Distinguished Teachers with the title "Distinguished University Teaching Professor" or "Distinguished University Teacher" conferred. Krafts, who teaches the dental school's general histology and pathology courses,



Kristine Krafts

and the hormonal medicine and hematology courses at the Duluth campus of the Medical School, was acknowledged as "perfecting the art of teaching complex medical concepts

with simplicity, grace and humor." The award recognizes recipients for their performance as teachers, advisors, and mentors; their development of instructional programs; and/or their inclusion of students in research, scholarship and professional development. The award presentation ceremony was held at the McNamara Alumni Center on April 26, 2016. Krafts was introduced to members of the Board of Regents at their May 12-13 meeting.

Awarded: Brent Larson, D.D.S., M.S. (Developmental/Surgical Sci-Orthodontics) the *Roger I. Fr.*

Sci-Orthodontics) the *Roger J. Fredsall*Distinguished Service Award from the
Minnesota Association of Orthodontists
(MAO). Larson is a past president of
both the MAO and of the Midwestern
Society of Orthodontists, and is a
trustee of the American Association
of Orthodontists (AAO). He will serve
as AAO president in 2018-19.

Awarded: Samantha Roach, D.D.S., M.S., (Restorative Sci-Endodontics) the 2015 Endodontic Educator Fellowship Award by the Foundation for Endodontics. The award is intended to ensure specialists are teaching endodontics at dental institutions across the U.S. and Canada by funding individuals who commit a minimum of five years to a full-time academic career in endodontics.



Jorge Perdigão

Awarded: Jorge Perdigão, D.M.D., M.S., Ph.D., (Restorative Sci-Operative Dentistry) the 2015 Century Club Professor of the Year Award. The award is the School of Dentistry's highest honor, presented annually to recognize one faculty member for outstanding contributions in education, research and service. Dr. Perdigão will be profiled in the next issue of *Dentistry* magazine.

Awarded: James Swift, D.D.S.,

(Developmental/Surgical Sci-Oral and Maxillofacial Surgery) the *R.V. Walker Distinguished Service Award* from the American Association of Oral and Maxillofacial Surgeons. The award is the association's highest honor. Dr. Swift accepted the award in Washington D.C. on September 20, 2015, at the opening ceremony of the association's 97th annual meeting, scientific sessions and exhibition.

Elected: Dean Leon Assael, D.D.S., C.M.M., as president-elect of the American Dental Education Association Board of Directors.

Elected: Aaron Henderson (third-year dental student) as vice president of the American Student Dental Association (ASDA). Henderson previously served as ASDA district trustee, chapter publica-



L to R: ASDA officers Aaron Henderson, Minnesota (vice president); Sohaib Soliman, Washington (president); and Jordan Telin, Buffalo (vice president).

tions co-chair, and chapter licensure chair. Additionally, he served as student district delegate to the Minnesota Dental Association's House of Delegates in September 2015 and was, for two years, his class representative to the association's New Dentist Committee.

Presented: Audrey Weber (fourth-year dental student) at the 2015 Student Clinical Research Program held in November 2015 in Washington, D.C.

Mark Herzberg Receives Gies Award



Mark C. Herzberg, D.D.S., Ph.D., is the recipient of the 2016 ADEAGies Award for Outstanding Achievement by a Dental Educator. A man of intense intellectual courage and an insatiable passion for science, creativity and innovation, Herzberg has had a significant impact on the history of dental education and provided a sound roadmap to assuring continued excellence in academically-based dental research.

Herzberg began his career in engineering, studied literature and English education, and then earned a doctor of dental surgery degree, a Ph.D. in oral biology, and a specialty certificate in periodontics. In 2002, he created the innovative Minnesota Craniofacial Research Training (MinnCResT) Program which has been lauded as the preeminent interdisciplinary training program in craniofacial research and a model program for the nation.

MinnCResT is a collaboration between the School of Dentistry and University of Minnesota partner colleges. The program forms cross-disciplinary teams of trainees and mentors from such fields as biology, neuroscience, microbiology, genetics, immunology, engineering, psychology, dentistry, medicine and other disciplines. Mentors are paired with students at all levels of dentist-scientist training: D.D.S., Ph.D., D.D.S./Ph.D. and post-doctoral. With continuous funding from the National Institute for Dental and Craniofacial Research (NIDCR), the program engages trainees in novel, mentored research that is fundamental to biology and human health, and translational research that expands the frontiers and scope of craniofacial, dental and oral health.

If the true measure of success for any training program is the career success of its graduates, it is here that Herzberg and MinnCResT excel. Four of the nine fellows who applied have obtained NIH F-awards since 2008. Since 2002, 17 pre-doctoral and 34 post-doctoral fellows published 59 and 60 peer-reviewed papers, respectively. In the last 10 years, 17 trainees have secured appointments in academia and 14 in corporate research environments.

Herzberg also served on grant reviews and as a board member for such organizations as the National Institutes of Health, NIDCR, the American Cancer Society, and the Veterans Administration. He's published some 100 papers, including a number with a focus on the future of dentistry, science in dentistry, and the training of dental school faculty members. Herzberg's own research spans 25 years with grants totaling more than \$54 million. He also served as the editor of the *Journal of Dental Research* for 11 years.

Herzberg accepted the award on March 14, 2016, at the American Dental Education Association Annual Session in Denver, Colorado.

New Site for Dental-related Job Listings

The School of Dentistry recently partnered with GoldPASS (goldpass.umn.edu), the University's no-charge online job database. Statewide, national, and international employers may post their open positions, including practices for sale. All current students and alumni have access to the job database now and indefinitely after graduation.

GoldPASS is currently being promoted to dental employers interested in posting jobs, and this new system will eventually replace the listings currently on the dental school's website and shared through the University of Minnesota School of Dentistry LinkedIn group. Through July 2016, GoldPASS, LinkedIn, and current website job postings will be active.

Students and alumni may register with GoldPASS at any time, but students will be formally introduced to the system during summer semester through communications and a *Lunch and Learn* seminar.

Individuals and organizations wishing to post jobs may contact Kari Volkmann-Carlsen (**volk0084@umn.edu**). Alumni with questions about GoldPASS may contact Emily Best (**emilyj@umn.edu**) in the Alumni Office.

Give Kids a Smile



More than 300 students, staff and faculty were on-hand to welcome 159 children and their family members to the school's 12th annual *Give Kids a Smile* event on February 6, 2016. A total of 693 procedures were performed. Every patient received radiographs, an examination and treatment plan plus emergency and restorative care, as needed and prioritized to address the most critical needs first.

AlumniNews



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.

A Letter from the President

A printed dental school curriculum is a well-defined schedule that outlines four years of coursework. Between the lines is where the values, motivations, and attitudes develop. Unlike coursework, these attributes are not well defined and come from within. Joining the University of Minnesota Alumni Association and being involved with the School of Dentistry Alumni Society and the dental school is a commitment that comes from within. It is not mandatory, and it is not a static curriculum. It is a dynamic process that can lead to personal development, satisfaction, and rewards for a lifetime.

The Cap and Gown Graduation Fund is the essence of involvement. Organized by the School of Dentistry Alumni Society, it provides a chance to honor our future colleagues. Does it make a difference? Absolutely and directly! It is not required, but we need alumni to step up. Approximately half the people honor more than one student. Thank you to all who continue to keep this program vibrant!

Held on select Thursday evenings throughout the academic year, Clinical Grand Rounds provides short (one and a half hour) continuing education opportunities. Topics are variable, but always interesting. The programs are also transmitted live via webcast to sites in Bemidji, Cook, Duluth, Hibbing, Moorhead and Willmar, Minnesota; and Madison, Wisconsin. Take a look at this opportunity.

Your involvement with SODAS is unique to you. It's not mandatory. It's not taxing. It's dynamic, and something that is successful when you make it work for you.

The alumni society has decided to discontinue the annual Alumni Golf Classic after 22 years. We're pleased that the event has been a tradition for a number of regular foursomes and know that students have enjoyed the opportunity to network with alumni and sponsors. But we've also watched as alumni participation in the event decreased significantly over each of the past several years, despite efforts to encourage attendance. So, we feel it is time to end one tradition and to find a new one. We will be working hard in the coming year to identify an opportunity to more fully engage a larger audience of alumni. We're open to ideas! You can submit them to any of our board members (listed on page 2 of *Dentistry* magazine) or share them with Emily Best in the Alumni Office.

You can make a difference. There is no set pattern, and no right or wrong. I urge you to take the first step and take advantage of these opportunities to make a difference.

The Alumni Society is proud to recognize Dr. Mike Zakula and Ms. Kimberly Johnson for making a tremendous difference! They are the 2015 recipients of the Distinguished Dental Alumni Awards. See more on page 21.

ROBERT GARDETTO, D.D.S. '86

President, School of Dentistry Alumni Society

www.dentistry.umn.edu/alumni

Award-Winning Alumni

Kimberly S. Johnson: 2015 Distinguished Dental Hygiene Alumna



Kim Johnson

Kim Johnson ('79) is a 'can do' and 'will do' educator, clinician, researcher and volunteer whose commitment to professionalism serves as an example to those who know her.

A three-time graduate of the University of Minnesota, Johnson is an alumna of the School of Dentistry GDA, BS and Master's degree programs in dental hygiene.

Following a successful career in clinical practice, Johnson joined the dental school faculty in 2006, teaching dental hygiene and predoctoral dental students in clinics and classrooms, and serving as course director (2009-12) for a number of pre-clinic and clinical courses. She was adviser to the Student Dental Hygienists' Association and initiated the first Dental Therapy Student Association, serving until recently as its faculty liaison. In 2012, she received a *Faculty of the Year Award*. She's also taught dental education courses both locally and in Germany, a collaboration that continues to this day.

Beyond the classroom, Johnson served for seven years on the School of Dentistry Alumni Society Board of Directors where, as president in 2013-14, she led the organization through a strategic planning process that continues to guide the organization. In 2013, she became a research project manager for the Health Partners Institute for Education and Research where she is involved in the (now) 10-state Midwest Region of the National Dental Practice-Based Research Network (PBRN). She conducts continuing education courses related to PBRN involvement as a method of network engagement, is a study manager for network research, and helps translate clinical research methods into approaches that can be readily operationalized in a variety of busy practice settings to improve patient care.

Michael Zakula: 2015 Distinguished Dental Alumnus



Michael Zakula

Michael Zakula ('76) is a problem solver and a change agent whose efforts to support dental education and enhance access to dental care for northeastern Minnesota patients have resulted in initiatives that serve as models for the nation.

Zakula was instrumental in identifying an opportunity for the School of Dentistry to partner with the Hibbing Community College (HCC). The partnership resulted in an expanded teaching facility for HCC dental assisting students and the dental school's first outreach teaching facility, which quickly became one of the most popular clinical rotations for School of Dentistry students. Since 2002, more than 1,000 dental and dental hygiene students have spent time at the clinic, caring for patients and learning about life and dental practice in Greater Minnesota.

Zakula also helped launch the *Michael J. Till Dental Scholarship Program* for dental students choosing to practice in northeastern Minnesota and, in 2010, worked to advance and pass legislation that established a loan forgiveness program to attract dentists to the Taconite Assistance Area (TAA). Today, Zakula is a director of the Minnesota Dental Foundation Board which administers the program.

Recently, he worked through Delta Dental of Minnesota Foundation to create another program that provides loan repayments for dentists who commit to practicing general dentistry full-time for five years in designated dental health professions shortage areas. For these, and community and professional activities too numerous to mention, Dr. Zakula received the University's prestigious *Alumni Service Award* (2015).

Dr. Zakula earned his Certificate in Orthodontics from Emory University School of Dentistry.

Class Notes

Please submit brief notices about milestone events and activities to: U of M School of Dentistry, Alumni Relations (attn: Emily Best), 515 Delaware St. S.E., 15-136 Moos Tower, Minneapolis, MN 55455 or emilyj@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.

1935

Earl Vincent Weibeler (D.D.S.) died in December 2015 at the age of 103. He practiced dentistry in Belle Plaine, Minn., before joining the United States Army Dental Corps as a lieutenant in 1942. He was soon transferred to Washington, D.C. and served in the Pentagon Dental Corps during WWII. After the war, he returned to Minnesota and practiced in downtown Minneapolis until his retirement in 1980.

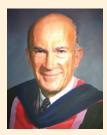
1941

Leah Veker (D.H.), Edina, Minn., died February 18 at age 95. She was a member of the Women's Auxiliary of the Shrine Zuhrah chapter and a volunteer at Southdale Fairview Hospital.

1944

Joan Kiecker (D.H.), Kissimee, Fla., died in March 2015.

Edgar Lechner (D.D.S.), St. Paul, Minn., died on November 5, 2015 at age 95.
Lechner was a member of the Gopher Football National Championship Team in 1940 and 1941. After one season with the New York Giants, he returned to Minnesota to practice general dentistry in Highland Park, St. Paul, where he remained for nearly fifty years. He also served as the Minnesota Vikings team dentist from 1960-1985.



Donald Legler

1956 Donald Legler (D.D.S.) died December 2015. He was on faculty at the School of Dentistry as professor in oral biology and associate dean for research and advanced education from 1981-1983.

He also served as the director of Continuing Dental Education from 1982-1983. In 1983, he left the University of Minnesota to become dean of the University of Florida College of Dentistry, a position he held until 1994.

1957

Glenn Haugan (D.D.S.), Watertown, S.D., died on October 19, 2015. Haugan practiced in Watertown at Northside Clinic for more than 30 years. He retired in 1990.

Fred Requa (D.D.S.) died March 16, 2016. He was a member of the Southeastern District Dental Society and practiced general dentistry for 50 years in Austin, Minn. until his retirement in 2007.

1960

Harry Dorvinen (D.D.S.) died on October 18, 2015, in Albuquerque, N.M., at age 79. Dorvinen served in the Dental Corp of the United States Army after graduation. He volunteered his time and services on dental mission trips and practiced dentistry at Piedmont Heights Dental Associates in Duluth for 39 years.

Craig Clausen (D.D.S.), Ellendale, Minn., died on November 19, 2015, at age 80. He practiced dentistry in Ellendale and Albert Lea, Minn., for 45 years.

1966

Reunion Notice: The DDS Class of 1966

will hold its 50th reunion on Saturday, September 10, 2016. The day includes a 9:30 a.m. school tour, followed by the Gopher football game (time TBA), and a reception and dinner at The Commons Hotel at 5:30 p.m. Contact: Jerry Erickson (jeromeerickson77@yahoo.com or 612-721-6110).

John Isaacson (D.D.S.) died February 12, 2016. Isaacson served as a Captain in the U.S. Air Force and practiced dentistry for 35 years.

Richard Wiberg (D.D.S.), Mahtomedi, Minn., was named the Minnesota Dental Association's 2016 *Guest of Honor* in recognition of his nearly five decades of service to the profession. He was a St. Paul District Dental Society presi-



Richard Wiberg

dent, an MDA trustee, a delegate to the ADA House of Delegates, and a Minnesota Dental PAC and Minnesota Dental Foundation board member. As MDA president (2006-07) he led through the decision-making and construction of the

association's headquarters building. Additionally, he's been active in charitable dentistry activities, including *Give Kids a Smile*, Minnesota Mission of Mercy, Union Gospel Mission, Donated Dental Services (DDS), and the Minnesota DDS program.

1968

David Lang (D.D.S.) died February 2, 2016. After retiring from his Bloomington, Minn. dental practice in 1998, Lang spent time in St. Pete Beach, Fla., and his summer home on Whitefish Lake in Minnesota.

1969

John Nelson (D.D.S.) died September 23, 2015. Nelson served in the United States Army at Fort Knox, Ky., and then in the Army Reserves until 1977. He owned and operated Nelson Dental in Austin, Minn., for 40 years. He was a member of the American Dental Association, the Minnesota Dental Association, and the Austin Dental Society.

1976

Red Track Dental Hygiene Class of 1976

is holding a 40 year reunion on August 20, 2016. For details, contact Colleen Brickle, Lynn Cooley, Sue Mahler or Anita Steichen.

1978

Michael Flynn (D.D.S.), Winona, Minn., received the 2016 *Outstanding Service Award* from the Minnesota Dental Association (MDA) in April. He is a past-MDA president,



Michael Flynn

and trustee, ADA delegate, and has been involved in multiple initiatives to enhance access to care for underinsured and underserved patients. He's also served on MDA committees, focusing his efforts on reducing the negative impact of

regulatory activity on dental practice and to advance special needs health care and rural health care in the state. Closer to home, he's been a township supervisor for 30-plus years, a long-standing board member of the area Chamber of Commerce, and a member of zoning and planning committees.

1979

Richard Moen (D.D.S.), Alexandria, Minn., received the 2016 *Humanitarian Service Award* from the Minnesota Dental Association in April. He's been president of the West



Richard Moen

Central District Dental Society, participated in dental mission trips to Jamaica, and was instrumental in legislative initiatives in support of critical access clinics. He's also been active in his church, school district, and Chamber of

Commerce, and was president of a Morris, Minn., economic development group. His retirement in 2009 allowed him to increase his involvement with the Caring Hands Dental Clinic, a free clinic for the underserved in Alexandria, Minn. Under his guidance the clinic opened a new state-of-the-art facility in 2015.

1980

Kathryn Green (D.H.) was named presidentelect of the Minnesota School Boards Association (MSBA). Green has served on the Austin School Board since 2000 and the MSBA Board of Directors since 2010, representing board members from District 1. Green currently practices dental hygiene and is a financial secretary for Elrod, Green and Hyland, D.D.S. in Austin, Minn.

1984

Brad Bekkedahl (D.D.S.), Williston, N.D., received the North Dakota Dental Association 2015 *Outstanding Achievement Award*. Bekkedahl is active in community, state, and national organizations. He is a member of the Williston Dental Society, the Northwest District Dental Society, the North Dakota Dental Association and the American Dental Association. He's practiced in Williston since 1984 and is currently a North Dakota State Senator from District 1.

Elizabeth McCauley (D.D.S.) died January 20 after her battle with ALS. After graduation, McCauley joined and became a partner of Dental Associates in Detroit Lakes, Minn., where she practiced for 30 years.

Karl Self (D.D.S., M.B.A.), Minneapolis, Minn., at the American Dental Education Association's 2016 Annual Session and Exhibition in Denver, Colo., with Agnes



Gatarayha, B.D.T., Msc.I.H. of the College of Medicine and Health Sciences at the University of Rwanda, and Dean Leon Assael (right). In 2015, Self spent three months in Rwanda as part of the Clinton Health Access Initiative to help strengthen the health workforce in Rwanda by providing strategic planning for the country's dental therapy program.

George Tysowsky (D.D.S.), East Amherst, N.Y., was promoted to senior vice president of technology and professional relations for Ivoclar Vivadent. Tysowsky joined Ivoclar Vivadent in 1985. In this new role, he will continue as head of research and development and will have a broader focus on technology and professional relations both in North America and internationally.

1988

Shanthi Madireddi (D.D.S.), Saratoga, Calif., received the *Master of Academy of General Dentistry* award at the June 2015 AGD session in San Francisco.



Loren Taple

1989

Loren Taple (D.D.S.) received the Minnesota Dental Association's (MDA) *President's Award*. He is currently president of the Minnesota chapter of the International College of Dentists. He

has served the St. Paul District Dental Society in various leadership capacities and was the 2004 recipient of the MDA's Humanitarian Service Award. Taple also served the School of Dentistry Alumni Society as a board member and as president in 2008.

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.

2000

Daniel Larscheid (D.D.S.) led a team of staff members from Woodland Family Dentistry in Duluth, Minn., on a mission trip to San Mateo, off the coast of Belize. They operated out of the San Pedro Smile Center, founded by Mark Johnson ('84).

2002

Bret Betterman (D.D.S.) died in April 2016. After graduation, Betterman attended Boston University School of Dental Medicine and Boston University Medical Center where he completed his oral and maxillofacial surgery training. He joined Twin Cities-based OMS Specialists in 2006.

2008

Sarah Magnuson (D.D.S.) received the 2016 *New Dentist Leadership Award* from the Minnesota Dental Association at its Star of



Sarah Magnuson

the North meeting in April. Magnuson is committed to serving patients who lack access to dental care, especially children and adolescents. Her role as the Donated Services and Supplies Lead for Minnesota Mission of Mercy (MOM) has

resulted in the successful operation of the large scale events. In addition to MOM, Magnuson also has volunteered for Give Kids a Smile, Team Smile, Donated Dental Services, Feed my Starving Children, and Sharing and Caring Hands dental clinic. She also created a high school mentor program for future dental professionals.

2009

Brad Anderson (D.D.S.) received the North Dakota Dental Association's *New Dentist of the Year Award*. He has a private practice in Fargo, Minn. He has been a member of the North Dakota Dental Association Board of Trustees from 2012-2015, and currently sits on the Academy of General Dentistry Council on Legislative and Grassroots Affairs. He is also a member of the American Dental Association, Academy of General Dentistry, North Dakota Dental Association, and Academy for Sports Dentistry.

Jennifer Anderson (D.D.S.), Hudson, Wisc., purchased Crestview Dental from Paul Lawton ('95). The practice, now named Crestview Family Dental, is located in Hudson. Anderson has been practicing in Madison, Wisc. and Forreston, Ill., since graduation.

2011

Ashley Turrittin (D.D.S.) joined Open Door Health Center in Mankato, Minn. Turrittin received her Certificate of Advanced Graduate Study in Pediatric Dentistry from Boston University. She performed residencies at Franciscan Hospital for Children in Brighton, Mass., East Boston Neighborhood Health Center and Boston Medical Center. Turrittin will be joining a team of six staff dentists, but she is their first and only pediatric dentist.

2012

Max Klingenstein (D.D.S.) joined the Commissioned Corps of the United States Public Health Service and works for Southcentral Foundation in Anchorage, AK.

2013

Jacob Ihle (D.D.S.) joined Northern Lakes Dental in Grand Rapids, Minn. He's practicing alongside Charles Sherman ('76), Erick Hallie ('04), and Kathryn Cargill ('09).

Events Calendar

AUGUST 2016

August 18-19 New Student Orientation

SEPTEMBER 2016

September 15-17 North Dakota Dental Association Annual Session

Radisson Hotel Renoir/Russell Room Bismarck, N.D.

Alumni Breakfast: September 16 7:00 to 8:00 a.m. Location: TBD

September 16 White Coat Ceremony

2:00 p.m. Northrop Auditorium University of Minnesota East Bank Campus Minneapolis, Minn.

For information: (612) 625-0927

September 18-23 American Association of Oral and Maxillofacial Surgeons

Las Vegas, Nev.

Alumni Reception: September 21 4:30 to 6:30 p.m. Mandalay Bay Convention Center Mandalay Bay Resort and Casino Las Vegas, Nev.

OCTOBER 2016

October 15 U of M Day of Service

9:00 to 11:00 a.m. The Food Group 8501 54th Ave. N. New Hope, Minn. 55428

October 16-22 Homecoming Week

UMAA Alumni Awards: October 20 The Commons Hotel 615 Washington Ave. S.E. Minneapolis, Minn.

Parade: October 21

Homecoming Game:
October 22
11:00 a.m.
Minnesota Gophers vs. Rutgers

October 20-24 American Dental Association Annual Session

Denver, Colo.

School of Dentistry Reception: October 21 6:45 to 8:00 p.m. Hyatt Regency, Capitol Ballroom, Salon 1

DECEMBER 2016

December 8 Senior Awards and Banquet(For dental therapy students,

(For dental therapy students, by invitation only)

FEBRUARY 2017

February 4 Give Kids a Smile

University of Minnesota School of Dentistry Minneapolis, Minn.

February 5 University of Minnesota Minne-College

Hilton Naples, Fla.

MAY 2017

May 11 Senior Awards and Banquet

(For dental students, by invitation only)

May 12 School of Dentistry Graduation

10:00 a.m. Northrop Auditorium University of Minnesota Minneapolis, Minn.



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

CDE Courses

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.)

AUGUST 2016

51st Annual Dental Assistants' Seminar August 12-13, 2016

16th Annual Oral and Maxillofacial Surgery Review August 20-21, 2016

SEPTEMBER 2016

Fall Dental Hygiene Seminar September 9, 2016

Restorative Expanded Functions: An 80-hour Training Program

September 9-11, 2016 October 7-9, 2016 November 4-6, 2016 December 2-4, 2016

10th Annual Robert J. Feigal Symposium: New Horizon's in Children's Dental Care September 16, 2016

Occlusion & Function: Evaluation and Restoration of the Worn Dentition September 16-18, 2016

Mastering Digital Full-Mouth & Panoramic Radiographic Technique: A Hands-on Program September 17, 2016

Miniresidency in Pediatric Dentistry September 23-25, 2016

Destination French Riviera: Study in CannesSeptember 24-October 1, 2016

The Adhesive Restoration: Best Materials & Techniques 2016 September 30, 2016

OCTOBER 2016

Gingival Displacement and Soft Tissue Management: A Training Program October 1, 2016

TMD and Orofacial Pain Miniresidency October 3-5, 2016

Clinical Grand Rounds for the Dental Team October 6, 2016

22nd Annual Practice Management Symposium: Improving Your Practice in Today's Economy October 7, 2016

Exposure Control, Infection Control & Health Safety in the Dental Environment October 8, 2016

Miniresidency in Nursing Home and Long-term Care for the Dental Team October 12-15, 2016

Contemporary Removable Partial Dentures: A Lecture & Hands-on Program October 14-16, 2016

Nitrous Oxide/Oxygen Inhalation Sedation: A Training Program October 21-22, 2016 Office Oral Surgery: A Guided Experience for the General Dentist October 24-25, 2016

Fall Recordkeeping Workshop for the Dental Team October 27, 2016

Oral Pathology Update 2016 October 28, 2016

Achieving Endodontic Success—Simplicity Through Efficiency: A Lecture & Hands-on Workshop October 29, 2016

NOVEMBER 2016

Clinical Grand Rounds for the Dental Team: Phase I Orthodontic Treatment November 3, 2016

Fall Core Competency Day for the Dental Team November 4, 2016

Winter Dental Assistants' Seminar November 5, 2016

Postgraduate Program in Contemporary, Esthetic & Implant Dentistry: Level I— Lecture/Laboratory Series

November 11-13, 2016 January 13-15, 2017 February 10-12, 2017 April 7-9, 2017 May 5-7, 2017

Postgraduate Program in Contemporary, Esthetic & Implant Dentistry:
Level II—The Patient Series COURSE ONE: Advanced Diagnosis, Treatment Planning & Photography
November 11-13, 2016

Optimizing Implant Treatment Planning Using Cone Beam CT Scans November 18, 2016

DECEMBER 2016

Clinical Grand Rounds for the Dental Team December 1, 2016

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

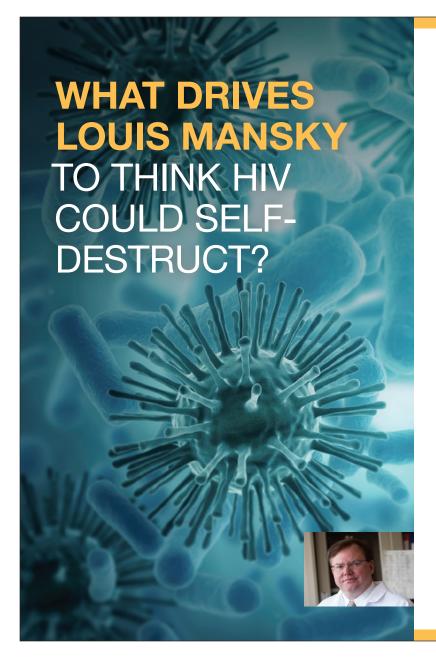
Website:

www.dentalce.umn.edu

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HIV has a secret weapon. Like other dangerous RNA viruses, it rapidly mutates and evolves to evade our immune systems and drugs. But too many mutations can be fatal to a virus. That's what drives Dr. Louis Mansky and other researchers at the University of Minnesota School of Dentistry to develop a cost-effective new HIV treatment. It actually speeds up the mutations to the point that the virus wears itself out. In effect, we can turn HIV's secret weapon against it.

dentistry.umn.edu



Crookston Duluth Morris Rochester Twin Cities

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