FOR ALUMNI OF THE SCHOOL OF DENTISTRY FALL/WINTER 2017

What's *Love* Got to Do With It? Extraordinary teachers and why they do what they do.



Dear Colleagues,

The cover story for this issue of *Dentistry* magazine tells the story of five of our faculty members and "why they do what they do." Their passion is one that drives most of us in academic dentistry, our love for teaching. The privilege to share and connect with a student and the learning that we, as teachers, realize in often surprising ways is what makes the career of an educator among the most rewarding. I know you will enjoy reading the stories of these outstanding teachers.

Speaking of teachers, this past April it was my honor to present the School of Dentistry's *Century Club Professor of the Year Award* to my friend and long-time colleague, Dr. Stephen Shuman. Steve epitomizes the teacher ideal to which we all aspire with his knowledge of dental care for the elderly and his enthusiasm for new knowledge passed on to his students. He is most deserving of this award, which is the highest honor bestowed by the school.

I also encourage you to take the time to learn more about our three alumni honorees of the past year, Carol Dahlke, dental hygiene alumnus honored by the University of Minnesota Alumni Association with the Alumni Service Award; Lisa Ahmann as our Distinguished Dental Hygiene Alumna Award winner; and Dr. George Kinney, our Distinguished Dental Alumnus Award winner. Each of them is an exemplar of a life of service.

There have been a couple of notable transitions in the school's senior leadership team over the past few months of which you should be aware. Dr. Sven Gorr has stepped down

as associate dean for research to return to his first love, doing science in his laboratory. Those of us who have worked with Sven will miss his steady and wise counsel. Succeeding him in an interim role as associate dean for research is Dr. David Bereiter. David is a successful neuroscientist who will bring great enthusiasm and passion to leading our research endeavors. In this issue, he provides a list of faculty publications over the past year, a list impressive in both breadth and scope.

In development and alumni affairs, Fred Bertschinger, our chief development officer, has retired and will be greatly missed by all. Ms. Emily Best has been appointed interim chief development officer through this transition and I know you will enjoy working with her. In addition, Erin Elliott has just been appointed director of alumni affairs. She looks forward to working with SODAS President Mary Pariseau, our School of Dentistry Alumni Board of Directors, and all of you.

In addition, this issue provides me with a chance to share with you some of my perspectives as a long time faculty member of the School of Dentistry who suddenly found himself as the dean. Working with this outstanding faculty and staff has been nothing but a privilege for me and I look forward to our school's future!

GARY ANDERSON, DDS, MS
Interim Dean

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NewsBites

Carol Dahlke Honored by UMAA

The University of Minnesota Alumni Association (UMAA) honored Twin Cities' dental hygienist and practice management consultant **Carol Dahlke, MDH,** at a celebratory event at the McNamara Alumni Center on October 19, 2017.

Dahlke received the UMAA's prestigious *Alumni Service Award* in recognition of outstanding volunteer service to the University of Minnesota School of Dentistry.

"Carol has worked tirelessly on behalf of the School of Dentistry and generously shares and models her enthusiasm

for patient care, alumni involvement and community service," says Gary Anderson, DDS, MS, interim dean of the School of Dentistry. "She is a leader and unwavering champion of oral health care for patients with special health care needs, and proudly represents the University of Minnesota as a graduate, a volunteer and a fan of all that is maroon and gold."

Carol Dahlke graduated with a GDH in 1984. She returned to the dental school in 1998 as a guest lecturer in the Division of Dental Hygiene and, for eight years, helped to educate students about the needs and challenges of providing oral health to people with Down syndrome. In 2007, she earned her bachelor of science in dental hygiene degree and, in 2010, was the first graduate from the dental school's new Master of Dental Hygiene Program. She is currently employed as a consultant for Accelerated Practice Concepts.

Dahlke served for seven years as a member of the School of Dentistry Alumni Society (SODAS) board in positions that included president in 2010. Under her leadership, the society expanded its services and began reaching out to engage students. Additionally, she served on three School of Dentistry search committees, is a volunteer affiliate faculty member in the Division of Periodontology, and is a member of the school's Continuing Dental Education External Advisory Board (since 2014).

A lifelong member of the U-M Alumni Association, she is a regular volunteer for School of Dentistry participation in the UMAA-sponsored Day of Service and at the U-M homecoming parade. She is a member of the

University's Legislative Action Network, and is a new member of the President's Club. Recently, she established the *Stacie Kvam Carlson Memorial Scholarship* in honor of her classmate who died in January 2017.

In 2008, the School of Dentistry Alumni Society named her its Distinguished Dental

Hygiene Alumna of the Year.

Additionally, she's been involved since 1997 with Special Olympics Minnesota, serving as a clinical director and coach. She established and directs *Special Smiles* in Minnesota, a dental screening program for Special Olympics athletes, and has inspired dental students and practicing dentists to volunteer. She has had the privilege to travel to Japan and China with the *Special Smiles* program, as the only dental hygienist invited to those Special Olympic World Games.

In 2006, Carol received the *Award* of *Distinction* by Sunstar Butler/RDH magazine. This award recognizes dental hygienists who have had a profound impact on their profession and community.



Carol Dahlke



The University of Minnesota School of Dentistry helped raise more than \$118,195 for cancer research at the U-M Masonic Cancer Center. A total of 86 faculty, students and staff members rode in the University's first-ever *Chainbreaker* bicycle ride on August 11-13. They were supported by more than 30 School of Dentistry volunteers who anchored two rest stops, registration tables and helped in many other capacities throughout the weekend. All funds go to support U-M cancer research.

Research Snapshot:

A detailed look at HTLV-1, the human retrovirus that causes T-cell Leukemia.

Journal of

JVI

Virology

AMERICAN SOCIETY FOR

Retrovirus replication remains an intriguing enigma to researchers. Scientists continue to gain more insight, but the process is still poorly understood.

It is generally believed that a mature virus reproduces by injecting its genetic material into a host cell, creating virus particles that are infectious

duplicates. But a recent study by researchers in the dental school-based Institute for Molecular Virology (IMV) shows this may not always be the case.

The team studied human T-cell leukemia virus type 1 (HTLV-1), which causes T-cell leukemia. Using the cutting edge technology of cryo-electron microscopy, researchers were able to capture detailed images of

HTLV-1 particles. The researchers were surprised to find most particles were incomplete. They varied in size and structure, many even lacking the organized cores of a mature virus.

"It's surprising that a virus would primarily reproduce with structural defects," said Louis Mansky, PhD, lead author of the study, director of the IMV, and professor in the School of Dentistry. Mansky is also a Masonic Cancer Center member.

The study was recently published in the *Journal of Virology*.

RNA, which initiates virus replication, is located in the "capsid" or particle core. Particles lacking a fully-formed capsid, however, raise questions about how an

infectious virus spreads among individuals. More importantly, it suggests that interfering with capsid formation could be a promising antiviral target for blocking infectious virus formation and transmission.

That opens the door to new potential drug therapies, vaccines or other interventions.

"To fight these diseases, we need to understand how they

work," Mansky said. "Right now, we don't have effective therapies for treating HTLV-1 infection, but gaining a deeper understanding of basic viral replication should help in identifying targets for therapeutic intervention. Our findings help provide important clues to direct the next steps, and could lead us to a potential treatment or a preventive therapy for human leukemia."

Quick Takes

Centennial Anniversary of WWI

On April 6, 1917, the U.S. joined its allies— Britain, France and Russia—to fight World



War I. More than
4.7 million U.S.
servicemen were
involved worldwide,
including two-thirds of
the School of Dentistry's
graduating dental class
of 1917, whose members
entered the army.
Nearly every faculty
man was either in the

Alfred Owre, DDS (1918)

active or reserve forces. The entire 1918 class of 90 students enlisted in the Medical Reserve Corps, and many of them were summoned to training camps directly after commencement.

World War I was one of the deadliest conflicts in human history, claiming the lives of almost 7 million civilians and 10 million military personnel.

PHOTO SOURCE: A HISTORY OF THE UNIVERSITY OF MINNESOTA SCHOOL OF DENTISTRY: 1888-1988 BY MELLOR R. HOLLAND, DDS, MSD.

Celebrating a Job Well Done

On May 12, 2017, the School of Dentistry hosted its 128th Commencement Ceremony. The Honorable Louis B. Sullivan, MD, former Secretary of the U.S. Department of Health and Human Services, delivered the commencement address. A total of 184 new professionals crossed the stage to be recognized for their accomplishments, including graduates of the following programs: Doctor of Dental Surgery (107); Advanced Education in Dentistry (38); Master of Dental Therapy (8); Master of Science in Dental Hygiene (5); and Bachelor of Science in Dental Hygiene (22).

Focus on Rural

The School of Dentistry hosted its annual Rural Practice Dentistry in Minnesota workshop on October 5. The event brought together recent graduates with 106 current dental, dental therapy and dental hygiene students (and their spouses/partners) for an open discussion about life and practice in rural communities. Guest speakers were Drs. Daniel Einerson (Alexandria, Minn.) and Nathan Mork (Ogema, Minn.)

International Exchange Program

The School of Dentistry has an active exchange program with dental schools in Norway, Denmark and two dental schools in Germany. This semester, seven U-M students are studying abroad and six dental students (from Aarhus University, the University of Bergen and the University of Greifswald) joined third-year dental students in clinic for fall semester. A Meet and Greet session was held in September for everyone to get to know each other.



Dentistry Magazine: You've been interim dean for about one year. Some people might not know you. Can you tell us a little about yourself?

Interim Dean Anderson: I grew up in Aurora, Minnesota, where my grandfather was the town's first dentist in the early 1900s. My father took over the practice in 1954 and built it into a large group practice. My brother practices dentistry in Ely, my wife was a dental hygienist, her brother was a small town dentist, my sister is a dental technician at the VA, and her daughter is a recent dental graduate.

I joined the faculty in 1984 after receiving my DDS and MS degrees, and completing a residency program in prosthodontics, all from the University of Minnesota. Most recently, I directed the dental school's Cleft Palate and Craniofacial Anomalies Clinics (2007). Before that, I directed the dental curriculum in occlusion in prosthodontics. I've also worked in various capacities in the Division of TMD and Orofacial Pain, and served as a department chair under Dean Michael Till.

From 2000-2007, I was the senior associate dean in the administrations of Deans Polverini, Liljemark (interim) and Lloyd. I've also filled-in as acting academic dean, clinical dean, and served a couple of terms as an interim department chair. My career has afforded me the chance to teach, do research, and treat patients, all activities that are extremely important to me and that have kept me continually challenged and engaged in academic dentistry.

DM: Why did you accept the position?

Dr. Anderson: I accepted the position because I believe in "giving back" and I believe that the school's future is bright. I'm proud to be a School of Dentistry alumnus and am privileged to have been a faculty member in many different roles. I've been impressed my entire career at the quality of work we do here and by my faculty colleagues, staff and our students. The opportunity to continue in this tradition sealed the deal for me.

Interim Dean Gary Anderson shares insights about priorities, challenges and the future.

DM: You were the choice of many in the school to serve as interim dean. Why do you think that was?

Dr. Anderson: I think there's comfort in a known quantity. I've been around a long time in both regular faculty positions and as a member of the senior leadership team. People know me and know what I believe in.

I also know the challenge of having to consider and balance the perspectives and priorities of everyone, including that of faculty, staff and students, the University, the state and the public, the profession and even national interests. I believe that School of Dentistry leadership is here to serve and make our school more

successful and that means, within limits, supporting as best possible, the faculty, staff and student body. It's my sincere hope that the school community saw signs of that perspective and that they will continue to do so.

DM: How has your teaching, clinical care and research informed you as a dean?

Dr. Anderson: The School of Dentistry carries out the tripartite mission of the land-grant University through education, patient care and research. It is who we are as faculty and what we support as staff and school leadership. Over the years, my appreciation for the integration of these three components of the mission has grown tremendously. My clinical practice has been informed by my participation in clinical research, which has influenced what and how I teach.

DM: Can you give us an example?

Dr. Anderson: Our multi-center, collaborative TMD research group developed and validated diagnostic criteria for jaw-related headaches. Many of us had long recognized a relationship between jaw pain and headaches, but it was difficult to diagnose a headache as jaw-related with any degree of confidence and questionable treatment decisions often resulted. These new diagnostic criteria are recognized by others, including neurologists, and support a role for dentistry in the diagnosis and management of headache disorders. The effect on what and how I teach about these topics is obvious. The whole process leads to new questions for future investigation.

This is just one example of what can come of the integrated mission of a dental school in a research-intensive land-grant university and that is what we do. It's the dean's job to develop, lead and support an infrastructure that allows us to carry out this part of the mission in a sustainable way.

DM: What are your priorities for your time as interim dean?

Dr. Anderson: I was hired to address the school's budget challenge, which resulted in a depletion of our financial reserves that limits our ability to invest in the future. In addressing this shortfall, I've built upon the progress made by both Dean Leon Assael and Dr. Todd Thierer, our associate dean of clinical affairs, who served as acting dean prior to my appointment.

We've made tremendous headway this past year, thanks to efforts of the entire faculty and staff. University and Academic Health Center leaders are aware of our progress, and I'm confident the energy and efforts demonstrated, along with prudent and continued thoughtful management, will lead to a bright and sustainable financial future for our school.

My other major concern is for the culture of the institution. A tight budget is hard on morale. I believe that our work together and the resulting accomplishments have contributed to some improvement in how we all feel about our future, but this is an issue we must continue to keep in mind.

DM: Tell us more about the financial challenges.

Dr. Anderson: We have four primary sources of revenue: state support, clinical income, research grants and tuition. Each of these revenue streams is under pressure. First, state support will only continue to decline as a part of our budget. Although it is now Θ

less than 20% of our revenues, it continues to be extremely important to our overall fiscal health. Second, our clinics are challenged by public program reimbursement rates which are among the lowest in the country. Third, federal research support continues to decline and competition for these limited funds has become much greater. And fourth, there are limits to how much tuition can be charged for dental school.

DM: What are some of the difficult financial decisions.

Dr. Anderson: We always wrestle with tuition decisions. Student debt is a great concern, and it can also influence practice patterns and decisions. Several times we've chosen to limit tuition increases by freezing faculty salaries. That's an unsustainable approach.

Another example: As federal funds for research tightened, we made a difficult decision to bridge-fund some of our researchers until alternative sources of grant funding could be identified or traditional support reinstated. That was a near-term challenge but a wise long-term strategy, as nearly 95% of that outlay has been recouped and we've retained our talented scientists and innovative research programs.

DM: Have there been any surprises?

Dr. Anderson: Just before I was named interim dean, an internal budget review committee made the difficult decision to close our General Practice Residency (GPR) Program and its UMP Dental Clinic. The clinic had ongoing budget shortfalls related, primarily, to the state's low reimbursement for services to public pro-



Hallway 'meeting' with Naty Lopez, assistant dean for admissions and diversity.

gram patients. We were all surprised and gratified at the outpouring of community and University support for the clinic. We did step back from that decision and there are no current plans to close the facility. But, with no additional financial support provided, we're still exploring options to ensure the clinic's long-term financial success.

DM: Tell us about the University's plans to search for a permanent dean.

Dr. Anderson: The original plan was for us to do some work to address financial challenges and follow-up with a search for a new dean to be initiated in fall 2017.

To my best knowledge, this is still the plan. I do want to emphasize that this search will be incredibly important to the school and will require all the best efforts of the faculty, staff, and student body, along with the entire dental community of Minnesota, to find and recruit the best person for the job.

DM: You said you've been here for 30-plus years. How has the school and profession changed over that time?

Dr. Anderson: The public's perception of higher education funding has changed from that of an important public investment to an individual benefit. For us, that's resulted in steep reductions in state support. Fortunately, unlike a department of chemistry or English, we have clinics that generate revenue as a direct outcome of our education programs. We continue to work towards greater clinic efficiencies, while being mindful of the balance between the need for clinic revenue and the education that occurs within these clinical classrooms.

Another change is that our Moos Tower facilities have aged and pose significant challenges to every update and remodeling project we undertake. There will be no new dental school for the next 10-15 years, so we have to make careful decisions about how we use and update the facility.

Other changes include a more diverse patient population and student body; increased cost of dental education resulting in high tuition and student debt; increased regulation of all of our operations, especially research and clinical care; increased cost in the face of more competition for research funding; and the critical role played by technology in every aspect of our operations. In clinical education, this includes refining use of electronic records, digital 3D imaging, digital impressions, and CAD/CAM restorations.

DM: What's hasn't changed?

Dr. Anderson: The ever-growing problem of oral health disparities in our state and country, complicated by challenges in access to dental care. We all need to show a willingness to take on the difficult and often political task of developing solutions to the access challenge, both within the School of Dentistry and the community at large.

In his 2017 School of Dentistry Commencement address, Dr. Louis Sullivan, former secretary of Health and Human Services articulated the challenge as being a direct result of our national struggle to "reconcile the two competing values systems of our society...personal independence and...(determining) how much we should depend upon our fellow citizens to help us, particularly in times of need." The growing awareness of the relationship between oral health and overall health and wellness serves to remind us all about how important it is to find a solution for this problem.

DM: What role does philanthropy have for the School's future?

Dr. Anderson: It's more important than ever. Philanthropic support helps balance the impact of ongoing reductions in other funding sources. Alumni and community support for our facilities improvements, new technologies and pedagogical approaches, and for research is needed. It's our task to carefully make the case for our 'asks,' keep givers appraised, and provide information about outcomes that show how their gifts make a difference. I'd say that strong philanthropic support provides both an important tangible link with our alumni and community, and is a sign that we are on the right track and doing the right things. But we can't effectively address our mission without this support. We need to be mindful of this and never forget to be thankful for those who give.

We'll roll out a major campaign to coincide with the University's *Driven*. The University of Minnesota Campaign that will kick off in 2018. I urge you all to watch for information to come, and to carefully consider taking part as able. We will be in touch.

DM: What other challenges do you see for the School of Dentistry?

Dr. Anderson: Our human resources are critical to our future. But people costs are our most expensive resource. Attracting the best and brightest to our clinical faculty will require we be creative in

integrating practice opportunities into compensation. Investment in the best research-intensive faculty will continue to be challenging. We also need to be able to attract, develop and retain staff members who support and enable all that we do.

We also must find ways to make the necessary investment in our basic, clinical and translational research initiatives, despite increased competition for reduced federal support. Research is vital to our mission to generate new knowledge and develop critical thinkers in all of our programs. Research costs continue to rise not only in terms of related faculty and staff compensation, but in terms of start-up support and technology costs.

DM: Tell us about the curriculum, what is planned for the future?

Dr. Anderson: Dr. Keith Mays, our associate dean for academic affairs, leads an effort to revise our curriculum with four primary goals: 1) to better integrate the basic and clinical sciences; 2) to teach for overall competency rather than passing specific tests; 3) to teach how to critically assess the new technologies and clinical procedures that will be

available in the future; and 4) to provide increased flexibility in the fourth year of the curriculum to promote further refinement of clinical skills through increased patient based experiences.

DM: How might that be demonstrated?

Dr. Anderson: We're looking to do more teaching through case scenarios emphasizing the application of science and critical thinking to clinical practice, as well as a de-siloed curriculum with a more integrated approach to teaching subject matter. One goal is for an ongoing review of clinical progress to better assess students' technical skills. And our current team-based approach to patient care will include more emphasis on managing and directing the oral health care team, with a goal of seeing greater numbers of patients for students in our comprehensive care clinics, outreach settings and specific clinical disciplines in which a student has special interest.

Most important is that the development of skills in critical thinking and problem solving will prepare graduates to address clinical problems of the future, such as increased numbers of geriatric and special needs patients, all with issues reflecting the impact of oral health on patients' systemic health, and many problems not yet evident today. We cannot teach the specifics of managing problems that are yet to be encountered, but we must strive to teach how to approach and solve new problems never seen before.

DM: What do you see for the future of the School of Dentistry?

Dr. Anderson: Our school has a long proud history since its founding in 1888. It has been and continues to be a national leader in clinical care and research. We continue to generate new knowledge about biomaterials, pain mechanisms, HIV, microbiology, oral immunology, bone biology, the relationship of oral health to systemic health, and basic mechanisms that show promise in fighting cancer. We are well known for the excellence of our advanced education programs in six ADA-approved specialties, as



Summer donor recognition event.

well as oral biology, geriatrics, and TMD and orofacial pain. We have played an important national role in the development of non-patient based licensure examinations. We continue to explore more cost-effective ways of delivering care, including the use of expanded function dental assistants and dental therapists. In addition, our dental students and alumni are leaders in the profession.

Recently our oral and maxillofacial surgery faculty led by Dr. Harold Tu received national recognition for its leadership in recognizing the role dentists play in the opioid epidemic. They have instituted a clinical protocol used in all of our clinics to reduce the prescribing of opioids while effectively treating dental pain.

I have long believed that the dental community in Minnesota is unique. The relationships between the school, the Minnesota Dental Association and the practicing community are closer than those enjoyed by any other dental school of which I am aware. This provides unique opportunities not available elsewhere.

We as a faculty, staff and student body need to trust in each other and the fact that what each and every one of us does every day will make the difference. If so, we will continue to make important contributions to all aspects of the dental profession, as well as health care overall. I believe that the School of Dentistry community will respond to the challenges of the future and will play an important role in creating the future for oral health and dentistry. We bear an important responsibility and I believe we are up to it! **O**

What's Love Got to Do With It?

Extraordinary teachers and why they do what they do.

BY TERRI PETERSON SMITH

ach spring, the School of Dentistry celebrates the accomplishments of its graduating students at a formal commencement ceremony.

The orchestra strikes up "Pomp and Circumstance." The lights are dimmed. A procession of gowned faculty enters the auditorium, each member bedecked in full academic regalia in the colors, stripes and hoods of their own alma maters. As faculty take their seats on the platform, they turn to watch the steady stream of beaming graduates enter the auditorium, cross the stage to accept their diplomas, and move on to their exciting careers ahead. The entire ceremony is punctuated by cheering and applause from proud family and friends in the audience.

But that feeling of accomplishment and pride is by no means confined to graduates and their families. That's because graduation is a shared accomplishment. The promising futures of these new professionals are also reflections of faculty accomplishments.

The job of preparing and launching students requires a special blend of scientific knowledge, technical skills, empathy and humor. As complicated as it is, that 'job' derives from a love of teaching and here, a few faculty members share their thoughts about why they teach. They come from different backgrounds and disciplines, but all say the same thing—that they've found a uniquely rewarding job. And their satisfaction, they say, derives from

Second-year dental student Erin Tollefson (L) and Mercedes Porter.

Dr. Porter's positive demeanor, calming attitude and vast knowledge of dentistry makes it a pleasure to learn from her...she has a passion for teaching and her students.

HANNAH AFWERKE Fourth-year dental student

4

the talent and enthusiasm of their students, and through them, the opportunity to daily 'see the world through fresh eyes.'

The Lure of the Classroom

"I knew I wanted to be a dentist from a young age," says Mercedes Porter, clinical assistant professor in the dental school's Department of Restorative Sciences, Division of Operative Dentistry. "I just always assumed I'd be treating patients in my own dental practice."

Porter began shadowing her family's dentist in high school. As an undergrad, she was vice president of the pre-dental club. She gained early admission to the University of Minnesota's doctor of dental surgery program, graduated, and completed a general practice residency program, also at the University of Minnesota. She was eager to embark on her planned career. "Yet, sometimes our most thoroughly thought-out plans don't come to fruition," she says.

While practicing general dentistry at a community dental clinic in St. Paul for a couple of years, Porter reached out for teaching opportunities to fill her one day off each week. "That became my favorite day of the week," she says.

"I never thought I would find my true passion in educating future dentists, but I am so thankful to have found my niche."

Today, Porter teaches in the dental school's preclinical lab where students practice restorative procedures on mannequins to fine-tune the manual dexterity and eye-hand coordination skills they'll need to treat patients.

"I am lucky to say that each day I'm excited and enthusiastic to sit down at my desk at the head of a bench of 10 first- or second-year dental students. My passion for interacting with and helping people is realized each day as I give constructive feedback to students and watch the sudden bolt of comprehension and clarity flash across their faces."

Her passion for working with students is echoed by other faculty members, among them Christopher Lawther, Kristine Krafts, Joel Rudney, and Joy Osborn. All were bitten by the same teaching bug, though under different circumstances. Take Joel Rudney, for example.

Bitten by the Teaching Bug

Although it would be true to say that he'd always been interested in dentistry, Joel Rudney began his career studying really *old* teeth. An anthropologist by early training, Rudney studied the dental

students. He speaks of the joy of sharing his love of research, and finds gratification in his students' excitement at this new phase of their lives and careers. "It's a constant source of renewal and makes instructors excited to do their jobs," he says.

That kind of instructor enthusiasm can be infectious. It was, in fact, a big part of what drew Chris Lawther into teaching. Drs. Les Martens and Tony DiAngelis took him under their wings during his student years; they later became mentors and friends. "They asked me to join the dental school's inaugural General Practice

systems, all from the U-M. Over the course of her nearly 40-year affiliation with the School of Dentistry—as a student, teacher, course director, researcher and clinical faculty member—she's helped to launch the careers of hundreds of dental hygienists. Osborn now teaches courses in the Master of Science in Dental Hygiene program, most recently with students who are focusing on education or management careers. "I teach the next generation of teachers," she says.

For Rudney, Lawther, Osborn and Porter, what keeps them in the dental school's classrooms and clinics is an



Dr. Krafts is one of the great professors. She is a 'real person' who understands the demands of dental school and always wants to make our days better.

ALEJANDRO CISNEROS Third-year dental student



remains of humans in Nubia (the area that is now southern Egypt and Sudan) for clues about the health of ancient communities. By the time he came to Minnesota for further study in cariology, he had a master's degree in anthropology and a PhD in physical anthropology, both from the University of Colorado. While at the University of Minnesota, he earned a certificate in cariology and an MS in oral biology in the same year. And then he made Minnesota his home.

Today, he is a professor and assistant dean for research in the dental school's Division of Basic Sciences. An NIH-funded investigator for 31 years and with research interests in the science of oral microbiology, he's taught in the school's undergraduate and graduate programs and been a research mentor or thesis advisor for some 40 dental and oral biology students, and clinical residents. He now directs the school's Summer Research Program that's provided research experiences for more than 200 first- and second-year

Residency Program and encouraged me to provide feedback that helped shape that new program," he says. "Then Dr. Martens asked me to lead the school's Dental Auxiliary Utilization (DAU) Program." At the time, Lawther was working part-time in the North Minneapolis practice he eventually purchased. But he continued to teach in the school's patient clinics at least one day/week until his retirement. For him, teaching meant having the best of both worlds. "I liked the break from practice," he says, noting that teaching added an extra social and collegial component to his career. Since retiring, he's upped his teaching schedule to three days/week.

But instructor excitement and mentoring is not the only reason people get into teaching. Some people, like Associate Professor Joy Osborn, feel born to the profession. "I always knew I wanted to be a teacher," she says. After receiving a GDH and a BS in dental hygiene, she went on to earn a master's degree in instructional

appreciation for the importance of being able to share what they know and the opportunity to contribute to the education of the next generation of oral health professionals. The commitment, challenges, and variety that comes with working at the leading edge of their profession, are also unique motivators. Says Osborn, "I have always valued the mix of teaching, research and clinical practice and know that each area informs the other."

For the Totally Awesome Students at the School of Dentistry

Perhaps the most surprising of this group of educators is Kristine Krafts, whose career as a dental educator started in medical school. Krafts graduated from the University of Minnesota Medical School and completed a residency in pathology (also at Minnesota). Like most of her fellow residents, she planned to go into private practice. But that never happened.

"The longer I was in residency, the more I realized that what made me happiest ⊖

was learning new things and, as a corollary, helping others learn new things," she says. While a third-year medical student, she began lecturing at the Medical School in Duluth. "I added a few lectures every year, just because I loved it. It felt natural to see if there was a way to make the position an official full-time one."

Krafts lived in the Twin Cities and made weekly trips to teach at the Medical School in Duluth until about 10 years ago when the need arose for a course director for the pathology course at the dental school.

so students don't have to spend time trying to figure out how all the pieces fit together."

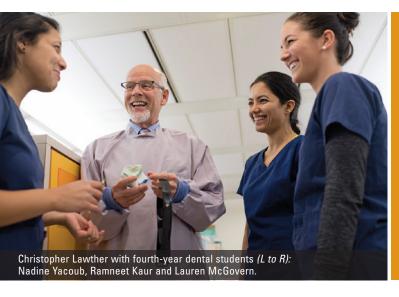
And while learning at this level naturally demands more of students, these instructors also add a dose of humor to their presentations to ease the stress and foster retention, too.

"It's almost a no-no to say that lectures should be entertaining—but why not?" says Krafts. "Some years," she says, "we do a skit in which students put on costumes (they volunteer for different roles) and act out the drama of how the immune system

learn the hand skills that are new to them. In oral anatomy, for example, they build teeth with wax, sometimes not so well.

So, while they demand excellence, faculty also make an effort to encourage students through the hard times. Says Porter, "I remember a couple of faculty members who helped when I had trouble, who built my confidence. I hope I can be that for someone."

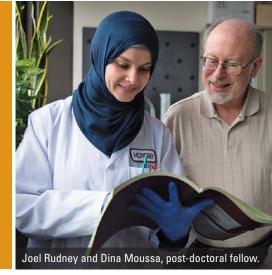
In these situations, says Osborn, students appreciate fairness, especially in grading. "I have always thought that if I can't support the score or grade that a student



I cannot imagine the University of Minnesota without Dr. Lawther. He brings excellence and joy to work everyday.

DEREK IBARRA
Fourth-year dental student





Conveying the Curriculum

There's always a particular joy in working with the best and the brightest, students whose facile minds grasp the material and question concepts and ideas. However, conveying complex subject matter to high achieving learners requires a special set of skills. These instructors strive to make difficult material easy to digest and relevant.

Krafts says, "Those of us who've been through medical or dental school have an easier time, I think, because we remember what it was like to sit in those chairs for hours and hours. I think all of us have learned by experience—you try something, and if it doesn't work, you try it a different way. Eventually—hopefully—you wind up with a teaching strategy that works for both you and your students."

She remembers that as a student she re-organized and re-wrote material from certain lectures in a way that made sense to her. "That takes a ton of time, so I try to do the organizing and simplifying,

attacks an invading organism." The weapons are unusual (for example, the cytotoxic T cell uses a Manolo Blahnik high-heeled pump), but instructive. "And sometimes, you have to use your imagination in weird ways to get stuff into your head. So we learn about MEN I and II (multiple endocrine neoplasia) by using John Cleese and Brad Pitt as examples of the world's sexiest men," she says. In November, she brought 16 dozen cookies to class (decorated to represent important diagnostic cells from hematologic diseases being studied.)

Remembering...

Mercedes Porter has a teaching style that reflects her understanding of what it's like to be a dental student. She just finished a master's degree in dental education from University of the Pacific in San Francisco, and says, "We're teaching adult learners who have gotten good grades, but learning at this level is a whole new ballgame." Though intelligent and high achieving on the academic side, they may struggle to

has earned, then I am not being fair. I believe this models the type of support or argument that students need, in general, to become critical thinkers for their careers."

That type of coaching and effort sometimes requires extra time from instructors. "I remember one student who was having difficulty pulling the instrumentation concepts together in order to progress well in the course," says Osborn. "I worked with her every Monday afternoon to improve her skills. Course faculty had doubts, but by the end of the semester she was at an ability level similar to everyone else in the course."

Says Krafts, "I remember very well what it was like for me in my first two years of medical school. Some students could just pick up material and remember it effortlessly. I was not one of them. I had to study very hard, and it took over my whole life. I know that most of my students are in that same boat. I really feel for them, and I think they know that. I want them to do well and be happy—not just in

my course, but throughout dental school. These are really hard years to get through, and having an instructor who shows care and kindness can make a big difference."

Mentoring and Modeling

Older dental professionals may remember an era when caring and kind weren't words they would use to describe their instructors. Yet, over the years, that experience is changing. "Because the learning is complex and multi-faceted, dental education will always be challenging," says Keith Mays, associate dean of academic affairs. "Therefore, we try these future dental professionals will treat their patients and colleagues. "We're here for more than just teaching skills and facts," says Lawther. For example, students learn about patient communication and ethical practice. "A student can tell a patient that they removed a crown and are going to fix a small cavity found in an adjacent tooth," he says. "But I'll suggest they pick up a mirror and show the patient where that cavity is and explain why it needs to be fixed," he says. In this way, teaching is as much about educating students to be competent practitioners as it is about

Unique Rewards

It's no wonder that as they sit at Commencement, faculty feel a huge sense of accomplishment and satisfaction. Some are given the honor of participating in the ceremony. This year—and last year—dental students selected Lawther from all four years of dental school educators, to stand with them on-stage at graduation as a hooder. "It's an honor to be selected," he says, "and to place the ceremonial hood over the shoulders of graduates just before they receive their diploma." Lawther's also been honored with teaching awards and



Dr. Rudney was 100% supportive of his students 100% of the time.

DAVID NEDRELOW DDS, MS



I will always appreciate her weekly meetings to mentor me about how to teach instrumentation. I continue to draw upon those lessons today.

BRENDA ARMSTRON(RDH, MDH Assistant Professor, Dixie State University St. George, Utah



to create a humanistic environment that is both challenging and supportive." As a result, these School of Dentistry instructors impart more subtle lessons and concepts that would be hard to measure on any test.

They agree that students need to be comfortable and feel supported. They talk with students about their social life and family. It's a relationship of mutual trust and respect. Says Osborn, "Early in the program students most need faculty to be approachable. Later on, they are more confident with their own skills and knowledge. Clinical experience, guidance in clinic, and feedback for specific patient situations are always a positive aspect.

But primarily," she says, "students need to know that faculty are present for them, will bend over backward for them, help with the on-going timely questions related to courses, projects, requirements, boards, and clinical positions after graduation."

They also need instructors whose treatment of students offers a model for the way how to respect and deserve the trust of their patients.

Other intangibles students absorb: the love of life-long learning and a sense of curiosity that will keep graduates at the peak of their profession. Joel Rudney, for example, takes pleasure in his role as a matchmaker, pairing students with leading researchers in University labs, public health and clinical research projects. Students learn to give presentations and he encourages them to submit abstracts to the American Association of Dental Research. Many also present their research findings at other national meetings. "They get something that will last their careers—an appreciation of what research entails and how new knowledge is generated," says Rudney.

He adds, "Of course there's the underlying hope that they'll get the research bug and pursue a career in academic dentistry." It's a sentiment shared by Chris Lawther. "I'd love to see some of my students teaching here."

expressions of appreciation, as have Osborn, Porter, Krafts and Rudney.

Says Krafts, "This probably goes without saying, but the best thing about teaching is the students. They make me happy every time I walk in the room. Their energy, inquisitiveness, and kindness just blows me away every year. I also like the creative work of taking a difficult subject and making it easy to understand. It's a little challenge each time and it feels so satisfying when it works out and students grasp it immediately. Of course, there are also the more practical features of academic teaching that are appealing to me (i.e., the flexibility and the fit between my job and my family life). But in the end, I think you just know when you're in the right field of work because there is a quiet sense of 'I love this' versus 'I should do this."

Says Osborn, "I love watching students grow and mature from novices into graduates, ready to take on challenges of their own. It's what makes teaching a rewarding experience." •









Celebrating Our First-Year Students

he School of Dentistry welcomed 134 incoming dental, dental therapy and dental hygiene students at orientation sessions on August 16-17, 2017. Students participated in activities and presentations to build a sense of community and learn about resources to assist them as they transition into school.

In September, all first-year students participated in the *White Coat Ceremony*. In the clinic setting, professional attire evokes the trust and respect of patients. The awarding of white coats at the beginning of each student's professional education is an experience intended to impress upon these future practitioners the significance of that trusting relationship. The event also celebrates the students' commitment to the goals of professionalism, ethical practice, scientific and technical expertise, and compassionate service to others.

School of Dentistry alumna Megan O'Connell, RDH, BDH, presented the keynote address. **⊙**

















Research Publications



David Bereiter

We recognize our colleagues for their contributions to the body of knowledge that forms the foundation for our profession.

The faculty, staff, students and research fellows of the School of Dentistry published 121 articles in scientific and professional journals between June 2016 and May 2017. These articles report on investigations—in areas of basic, clinical, and social and

behavioral sciences, and public health—by collaborating authors from all departments within the dental school and a variety of academic and scientific institutions. This breadth of scholarship is a testament to the vitality of the School of Dentistry's research programs and the extensive collaborations occurring within the school and with scientists around the world.

The publication list is organized by department and division. The publications, co-authored by collaborators in several divisions, are acknowledged in each participating division.

Sincerely,

David A. Bareiter

DAVID A. BEREITER, PHD

Associate Dean for Research

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Congratulations Paper of the Year Award Winners

The following individuals received a 2016 School of Dentistry *Paper of the Year Award* at the 13th Annual Dental Research Updates program held March 10, 2017, in Coffman Memorial Union. The award recognizes contributions made to the breadth of scholarship at the School of Dentistry in the areas of basic and clinical sciences, and in social/behavioral sciences and public health.

Basic Sciences



P.D. Bittner-Eddy and M. Costalonga

Presented to P.D. Bittner-Eddy and M. Costalonga for their paper (with co-authors L.A. Fischer, D.H. Kaplan and K. Thieu):

"Mucosal Langerhans Cells Promote Differentiation of Th17 Cells in a Murine model of Periodontitis But Are Not Required for *Porphyromonas gingivalis*-Drivel Alveolar Bone Destruction." Published in *Journal of Immunology*, 2016 August 15: 197(4):1435-46.

Clinical Sciences



Don Nixdorf

Presented to **Don Nixdorf** for his paper (with A.S. Law, K. Loindquist, G.J. Reams, E. Cole, K. Kanter, R.H.N. Nguyen, D.R. Harris, and the Naitonal Dental PBRN Collaborative Group):

"Frequency, impact and predictors of persistent pain after root canal treatment: a national dental PBRN study." Published in *PAIN*, January 2017: 157(1):159-165.

Social and Behavioral Science & Public Health



Karin Quick

Presented to Karin Quick for her paper:

"The Role of Self and Peer Assessment in Dental Students' Reflective Practice Using Standardized Patient Encounters." Published in *Journal of Dental Education*. August 2016: 80(8):924-929.

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Division of Prosthodontics

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SchoolNews

Stephen Shuman Receives Century Club Professor of the Year Award

Stephen Shuman, DDS, MS, loves to teach. Widely liked and respected, he is described by friends and colleagues as 'an intellect with a sense of humor' and someone who 'knows a ton and can laugh at himself.' He also is a man of great kindness and compassion who's devoted his career to caring for patients who are often the least able to care for themselves. In both his teaching and scholarly work, he focuses on oral health in long-term care, utilization of geriatric dental services, ethical

and legal issues with special patient populations, and medical issues affecting dental care of older adults. And he's spent the last 30 years teaching his students to do the same.

In recognition of his outstanding service and contributions to the education, research and service mission of the School of Dentistry, Dr. Stephen Shuman was named *Century Club Professor of the Year*. The award is the dental school's highest honor. Shuman accepted the award at a reception held on April 28, 2017, in conjunction with the Minnesota Dental Association's *Star of the North Meeting*.

Stephen Shuman

"Steve Shuman is deeply committed to education and to the health and wellbeing of older adults," said Gary Anderson, DDS, MS, interim dean, who presented Shuman his award before a room filled with School of Dentistry faculty, staff and alumni. "His personal philosophy, originally espoused by Hubert Humphrey, is that the moral test of a government and society is how it treats those in the dawn of life, the children; those who are in the twilight of life, the elderly; and those who are in the shadows of life, the sick, the needy and the handicapped. Steve Shuman walks that talk every day."

Shuman received his dental degree from Temple University in 1982. After a time in private practice in Philadelphia, he worked for the Peoria Health Department where he became aware of the rewards and challenges of caring for adults with special needs, including nursing home residents and the developmentally disabled. He pursued an advanced education program in geriatric dentistry at the University of Minnesota, completing his fellowship and MS degree in 1989. That same year, he joined the School of Dentistry faculty.

Today, Dr. Shuman directs the dental school's Oral Health Services for Older Adults Program and supervises the clinical experiences of dental and dental hygiene students on elective rotations at the Walker Methodist Dental Clinic. He also serves as director of that South Minneapolis clinic, and recently helped oversee a major expansion to increase its capacity for clinical education and community service. Dr. Shuman also maintains his own clinical practice at the Walker clinic. Additionally, Dr.

Shuman is director of graduate education for the dental school, director of graduate studies for the MS-Dentistry Program in the University's Graduate School, and secretary of the dental school's Council of Faculty. He was on the Board of Directors for the American Society for Geriatric Dentistry for 10 years and is a past-president of that organization. He now chairs the Gerontological Society of America's Oral Health Workgroup, and led the organization's recent efforts to produce its first report on oral health and healthy aging and white paper on interprofessional solutions for improving oral

health in older adults. He also has been active for many years on Minnesota Dental Association committees focused on barriers to care and adults with special healthcare needs.

Along the way, he's received national and international recognition by such organizations as the American Dental Association and LeadingAge, which awarded the Walker Methodist Clinic and Shuman its 2016 *Innovation Award*. LeadingAge is the national association of non-profits representing the entire field of aging services.

Recently, Shuman also received two federal pilot grants, in collaboration with a local aerospace company, to begin developing an antenna and smartphone app to help find dentures, which frequently disappear in long-term care facilities. Another pilot grant from the CDC supports work on development of a hands-free tooth-brushing system for those with oral hygiene difficulties, a device he describes as a "carwash for your mouth."

Dr. Stephen Shuman is an associate professor in the Department of Primary Dental Care at the University of Minnesota School of Dentistry. •

People

Appointed: Anna Thurmes Barigayomwe, MA, CCC-SLP as interim director, Cleft and Craniofacial Clinic.

Awarded: First-year

dental student Riley



Hanson the NCAA Top 10 Award. The award recognizes Hanson for her outstanding career as a volleyball student-Riley Hanson athlete at Concordia

University in St. Paul and her success on the field, in the classroom and in the community. Hanson will accept the award at the 2018 NCAA Convention in Indianapolis, Ind., January 16-18.

Awarded: Jorge Perdigão, DMD, MS, PhD (Restorative Sci-Operative Dentistry) the prestigious 2017 Peyton Skinner Award by the International Association of Dental



Research (IADR)-Dental Materials Group. The award is presented to one scientist annually who, throughout his/her career, has made outstanding contributions

Jorge Perdigão to innovations in dental materials. Dr. Perdigão accepted his award at the IADR meeting in San Francisco.



(L to R) Alejandro Cisneros, Hannah Afwerke and Aaron Henderson

Awarded: Fourth-year dental students Hannah Afwerke and Aaron Henderson and Alejandro Cisneros (third-year dental student) the President's Student Leadership and Service Award in recognition of their accomplishments and contributions of outstanding student leadership at the University of Minnesota-Twin Cities campus. The award is presented to

approximately one-half of one percent of the student body. Hannah Afwerke is the president and founding member of the U-M Student National Dental Association. Aaron Henderson is president of the third-year class and vice president of the American Student Dental Association. Alejandro Cisneros is a student leader of the Hispanic Dental Association.

Promoted by the Board of Regents: Brent E. Larson, DDS, MS, and Kim Mansky, PhD, from associate professor with tenure to professor with tenure. Dr. Mansky is a scientist in the dental school's bone biology research program and Dr. Larson directs the division of orthodontics. He also is the president-elect of the American Association of Orthodontists (AAO). Both Larson and Mansky are faculty members in the Department of Developmental/Surgical Sciences, Division of Orthodontics.

Retired: Chief Development Officer Fred Bertschinger, Jr. as of September 7, 2017. On staff since 2004, Bertschinger helped raise \$11 million to transform the dental school's decades-old preclinical laboratories. Under his leadership the Development Office also raised funds to support the Student Summer Research Program, remodel a conference room for the Division of Prosthodontics and the Gorlin Library and fover, endow the James Q. Swift Chairmanship in Oral and Maxillofacial Surgery, build the U-M Pediatric Dental Clinic Made Possible by Delta Dental of Minnesota, and assist many to have a positive impact through current and future gift commitments to benefit students, faculty and school programs and facilities. Until plans can be finalized, Emily Best, School of Dentistry development officer, will be the contact person for the Development Office.

Selected: Raphael Huntley (third-year dental student) and Jose Maldonado-Ortiz (fourth-year dental student) to participate in the National Institute of Dental and Craniofacial Research (NIDCR) Workshop for Dual Degree DDS/DMD-PhD Trainees, at the National Institutes

of Health campus, held September 13-14, 2017, in Bethesda, MD.

Selected: Elise Sarvas, DDS, MSD, MPH (Developmental/Surg Sci-Pediatric Dentistry) to serve a three-year term as the new diplomate representative of the College of Diplomates of the American Board of Pediatric Dentistry. She also has been awarded a Primary Care Medicine and Dentistry Clinician Educator Career Development Award from the Health Resources & Services Administration (HRSA). The award supports the development of future clinician-educator faculty, leaders in primary care and dentistry, and innovative projects that involve the transformation of health care delivery systems.





David Bereiter

Sven-Ulrik Gorr

Transitions: David Bereiter, PhD (Diagnostic/Biol Sci-Basic Sciences) assumed the position of interim associate dean in mid-September 2017. Dr. Bereiter joined the faculty in 2006 and directs a laboratory that focuses on the neurobiology of persistent ocular and orofacial pain. His research is supported by federal grants from the National Eye Institute and the National Institute for Craniofacial and Dental Research, Dr. Bereiter assumes the responsibilities of associate dean from **Sven-Ulrik Gorr**, PhD, who joined the faculty in 2008, and is returning (full-time) to pursue his research investigations. The long-term goal of his studies is to develop novel antimicrobials that can overcome bacterial resistance with low host toxicity. Using these principles, he and co-investigators developed a new anti-bacterial peptide coating for dental implants that kills bacteria on contact, preventing biofilm build-up that can cause infection and implant failure.

AlumniNews



A Letter from the President

"If you think you are too small to make a difference, try sleeping with a mosquito."

— DALAI LAMA

Here in Minnesota, most of us are experienced with the persistence of a single mosquito in our cabin or tent. While I do not appreciate being buzzed by the Minnesota state bird, I do value the message that anyone can make a difference in the world.

As alumni, we have opportunities to support the School of Dentistry, the students and our profession. This summer, alumni were invited to share a message with a new student to be placed into their white coats for the "White Coat Ceremony." This ceremony is a rite of passage for new students making the transition into life as an oral health care provider and the associated commitment to professionalism, ethical practice, scientific and technical expertise, and compassionate service to others.

I enjoyed thinking about what I wanted to share with a new student of dentistry that could encourage, guide and instill passion for the profession. I hope many of you shared an inspiring message for "Notes for Coats."

October 14, 2017, was *University of Minnesota Day of Service* and the School of Dentistry hosted activities at The Food Group, formerly Emergency Food Shelf Network. This one day of volunteering was a great opportunity to do a good thing and enjoy the camaraderie of fellow alumni.

The alumni society continues its long-standing tradition of supporting Continuing Dental Education with an annual educational grant. Recognizing our University of Minnesota graduates work in every corner of the country and throughout the world, we are partnering to bring the long-standing tradition of monthly Clinical Grand Rounds right to your desktop. In 2018, we are piloting wireless clinical grand rounds, known as *CDE Anytime*. Our new YouTube Channel will feature hour-long, continuing education, credit-based insights from idea-makers within the School of Dentistry and beyond our campus walls. To learn more, click on **smile.umn.edu**.

I had the pleasure, in July, to attend the Dental Hygiene Senior Recognition Banquet. The alumni society sponsors the *Kathleen J. Newell Dental Hygiene Student Achievement Award* which is presented to the most outstanding dental hygiene student overall on the basis of personal character, leadership and scholarship. The 2017 recipient of this award is Emily Borud.

As president of the School of Dentistry Alumni Society, I have the honor and privilege to witness the deep commitment to excellence in educating dental professionals at the University of Minnesota School of Dentistry. We can be proud of the character of our graduates. And we can be assured that our profession will continue to be held in high regard with our dedication to continual learning.

Please consider anything that you can do to "make a difference" in the world.

reunion via email, and receive Gopher spirit items and prizes for your event.

Time for a

Class Reunion?

The Alumni Office can help.

Contact Erin Strong Elliott

(612-626-6884 or

estrong@umn.edu) to request

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President, School of Dentistry Alumni Society
www.dentistry.umn.edu/alumni

P.S. As we go to press, the School of Dentistry announced Erin Elliott as the senior director of alumni relations. Welcome Erin! We look forward to working with you.

Award-Winning Alumni

Lisa Ahmann: Distinguished Dental Hygiene Alumna



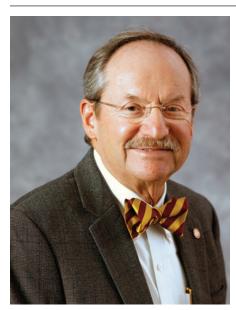
Lisa Ahmann

Lisa Ahmann, MEd, is a gifted educator. The recipient of seven *Faculty of the Year Awards* from senior and junior dental hygiene classes, she is applauded by both students and colleagues as a talented educator who is as accessible and responsive in her instruction as she is generous with her encouragement and guidance.

Ms. Ahmann joined the School of Dentistry faculty in 2000 as a part-time faculty member in the Division of Dental Hygiene and became the full-time dental hygiene clinic director in 2006. She teaches undergraduate dental hygiene students, and dental and dental therapy students, as well as three courses for the graduate program in dental hygiene. Immersed in all things clinical—from evaluations and outreach to scheduling and electronic health records—she is the Division of Dental Hygiene's tech-savvy resource who also provides technology support for all distance learning courses in the Master of Dental Hygiene Program. Her expertise in AxiUm (a comprehensive clinic management system) benefits the entire school. Additionally, she's been a valued member of a variety of division, department and schoolwide committees, including those related to quality assurance, clinical affairs, curriculum, technology, dental materials, admissions (for dental hygiene and dental therapy), and academic search committees.

Ms. Ahmann graduated from the Dental Hygiene Program at the University of Minnesota, Duluth, and completed her baccalaureate degree in dental hygiene education at the U-M Twin Cities. She began her teaching career at Normandale Community College Dental Hygiene Program and taught there for 12 years. During that time, she completed her master's degree in curriculum and instruction systems at the University of Minnesota.

George J. Kinney, Jr.: Distinguished Dental Alumnus



George J. Kinney, Jr.

George J. Kinney, Jr., DDS, is dedicated to the highest standards in dentistry as the cornerstone of his practice, as evidenced in his outstanding skills as a dentist, his leadership and mentorship of his dental team, and his lifelong commitment to public health and community service.

He's served in leadership roles at all levels of organized dentistry and in positions on state regulatory boards and clinical testing services for dental licensure. He was a member of the American Dental Association's (ADA) Council on Dental Education and Licensure (2011-12 chair), its Practice Management Initiative Advisory Group, and on the ADA Commission on Dental Accreditation task force to develop accreditation standards for dental therapy education programs. He also was, for 24 years, an examiner for the Central Regional Dental Testing Service (2006-07 president).

Closer to home, Dr. Kinney was a member for two, four-year terms of the Minnesota Board of Dentistry. He was president of the St. Paul District Dental Society (SPDDS) and a delegate to the Minnesota Dental Association, is a member of the SPDDS *Speakers' Bureau* (since 1985), and received the SPDDS *Outstanding Service Award* in 1999. He's volunteered to care for patients at the Union Gospel Mission and with *Give Kids a Smile*, and has been involved, as well, in activities of the Woodbury Lions Club, Woodbury Lutheran Church, Boy Scouts of America, and youth baseball.

He's also held leadership roles in the Minnesota Academy for Gnathology Research, Minnesota Academy for Comprehensive Dentistry, and the Minnesota Academy of General Dentistry, and has pursued advanced dental education at the L.D. Pankey Institute.

His integrity, ethics, empathy and respect for patients is evidenced in his own dental practice, which he started from scratch in 1973.

Class Notes

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

1946

Irene Orr (D.H.) died February 8, 2017. After graduation, Orr practiced in several Minneapolis dental practices before joining the University of Minnesota School of Dentistry faculty. She taught in the Division of Dental Hygiene until her retirement in 1988.

1949

Dorrance (Andy) Anderson (D.D.S.) died May 14, 2017. He was 100 years old.

Born in Blue Earth, Minn., Anderson graduated from Iowa State University with a



Dorrance Anderson

degree in dairy industry and worked for the U.S. Department of Agriculture before enlisting and receiving a commission through the V-7 Program as an Ensign (Herman Wouk and Cyrus Vance were classmates). He later was accepted to

U.S. Navy flight training, flew PB4Y-2s during WWII, and continued in the U.S. Navy Reserves until his retirement as a Captain in 1977.

After the war, he entered and graduated from dental school, then moved in 1953 to Carpinteria, Cal., where he practiced general dentistry for 52 years. For many of those years, his wife Betty was his dental assistant. Maintaining the practice in Carpinteria, they moved to Santa Barbara (1959) and to Montecito (1974) before retiring at the ages of 88 and 87.

The Andersons were generous with their time and talents. In the 1950s, they gave one free day of dental care a week to children of Latino farm workers in Carpinteria. In 1960, the family spent four months in Madagascar where they opened a dental clinic in Manambaro. Dr. Anderson traveled alone to Kathmandu, Nepal, in 1962 to open the country's first modern dental clinic.

1954

Myrtle Kettner (D.H.) died May 2, 2017. She worked at a local dental clinic during high school and for a year after graduation in preparation for college. After one year at St. Olaf College, she transferred to the U-M dental hygiene program and, after graduation, worked her entire 30-year career at the same Edina clinic caring for generations of patients. She filled her life with church activities, travel on six continents, 57 years of marriage and family, quilts, pies, and her dental hygiene career, which included 11 dental missions to Honduras.

1958

Joanne Rau (D.H.) died February 2, 2017. She practiced dental hygiene for 40 years, some of which were with Michael Babcock, D.D.S. ('69) in Prior Lake. She was a devoted mother, an avid golfer, religious volunteer, and bargain hunter who loved baked goods, travel, crafts, reading, the songs of Dean Martin, and Bradley Cooper. She retired to Sun City West, Ariz., were she remained until her death.

1959

Clayton McKinney (D.D.S.) died February 6. After graduation, he enlisted in the U.S. Air Force and was stationed in Okinawa, Japan from 1959-1961. After his military service, he opened a practice in Madison, Wisc., where he practiced for 42 years. McKinney was a life member of the Dane County Dental Society and the American Dental Association, and was president of the Dane County Dental Society in 1992. He created a volunteer dental program while in Madison, chaired the Insurance Committee for the Wisconsin Dental Association (WDA), and was secretary of the WDA Insurance Programs board of directors.

1965

Lewis Pierce (D.D.S.), Saint Paul, received the Minnesota Dental Association's (MDA) 2017 *Humanitarian Service Award*. He worked for five years with Project HOPE



Lewis Pierce

(Health Opportunities for People Everywhere), which included one year as program director in Lisbon, Portugal, and two years (as program director) in Hangzhou, China. He spent eight months in Russia developing a Humanitarian

Assistance Program, and one year as division director at HOPE headquarters in Millwood, Virginia. He also has been a Global Volunteer, establishing dental clinics in Tanzania and Ghana and, with his own funds, created

numerous scholarships to train residents at dental school in Tanzania so they can staff the clinic he started. He continues to volunteer in the Cooper Canyon region of Mexico, treating Tarahumara Indians; in Ghana, Africa; and with Operation Grace Minnesota, a mobile dental van providing free dental services throughout the state.

1967

Reunion: Forty-four classmates from as far away as California and Florida celebrated the 50th anniversary of their dental school graduation. The event on September 8, 2017, featured a dental school tour and a reception/dinner. The reunion was organized by Dr. Steve Litton.

Edward F. Kishel, Jr. (D.D.S.), St. Paul, Minn., was named the Minnesota Dental Association's (MDA) 2017 *Guest of Honor* in



Edward F. Kishel, Jr.

recognition of his five decades of service to the profession. He served as a member and chair on a variety of key committees for both the St. District Dental Society (SPDDS) and the Minnesota Dental Association, among

them the SPDDS Midwinter Meeting Planning Committee, the SPDDS Executive Council, the St. Paul Speakers' Bureau, and the MDA Dental Education Committee. As MDA committee chair, he helped develop a plan to expand existing state dental assisting schools to include dental hygiene programs, an education model that continues today. He was president of the SPDDS (1981), of the MDA (1996), and served on the board of the Minnesota Dental Foundation (1999-2016), eleven of those as chair. In 2002, he was elected to the American College of Dentists and, that same year, accepted the SPDDS *Outstanding Service Award*.

1968

John Wanio (D.D.S.), Duluth, Minn., received the Minnesota Dental Association's (MDA) 2017 *Outstanding Service Award*. In



John Wanio

addition to serving as president of both the Northeast District Dental Society (NEDDS) in 1982 and the MDA in 1983, he also was an MDA trustee for two terms that ended in 1999. He is a member of the MDA's Environment

and Safety Committee and chair of the Association's Opioid Task Force. He created the NEDDS Ad Hoc Committee on Opioid Prescription Abuse and has led the area efforts to organized a team, involve the entire district, and collaborate with local and state officials. He represented the MDA in collaboration with the medical profession to develop protocols for assessment and non-opioid and opioid pain management for medical and dental clinicians. Additionally, he's involved with the Saint Louis County Opioid Abuse Task Force, and serves on the Board of Directors for a Duluth faith-based nonprofit center for corrections and rehab from drugs and alcohol.

1972

Jeff Rossmann (D.D.S.) was elected chair of the American Board of Periodontology. He's been a board member for the past six years. Rossmann maintains a private practice in the Dallas area and is a clinical professor at Texas A&M School of Dentistry (formerly Baylor College of Dentistry) in graduate periodontics.

1974

Mike Fuchs (D.D.S. '74 and Ortho '76) was the 2017 Guest of Honor at the South Dakota Dental Association Annual Meeting. Fuchs



Mike Fuchs

is a diplomate of the American Board of Orthodontics, and a member of Omicron Kappa Upsilon Honorary Dental Society, the Pierre Fauchard Academy, the South Dakota Dental Association, the American Dental

Association, the Midwestern Society of Orthodontists, and the American Association of Orthodontists.

1975

Robert Larson (D.D.S.) retired from his general dentistry practice in Roseau, Minn. After graduating from dental school, Larson served as a captain in the U.S. Air Force for two years and then settled in Roseau, Minn., where he practiced for 25 years. Larson sold his practice to **Jon Hallie** ('15) who is a native of Roseau and renamed the practice Hallie Family Dentistry.

1978

Ralph DeLong (Ph.D. '74, M.S. '81) retired in June 2017 as a professor at the U-M School of Dentistry where he blended his unique interests in dentistry, physics and prosthodontics into a career at the forefront of technology and biomaterials research.

After earning a Ph.D. in nuclear physics, followed by a D.D.S. and a master's degree in prosthodontics (all from the University

Remembering Our Faculty

We share this news of the passing of a former faculty member. Obituaries of faculty who are alumni of the University of Minnesota School of Dentistry are included in Class Notes.



Shelley Grimes

Shelley Grimes (Ph.D.), associate professor in the Department of Diagnostic & Biological Sciences, Institute of Molecular Virology, passed away on March 20, 2017. She was 54 years old. Her

passing occurred on the first day of spring which was always her favorite day of the year.

Shelley Grimes was one of the good guys in the world. After completing her undergraduate studies at St. Olaf College where she became interested in microbiology and genetics, Shelley entered graduate school at the University of Minnesota and began working in the lab of School of Dentistry scientist Dr. Dwight Anderson who was studying a simple virus that infects soil bacteria. Shelley completed her Ph.D. in the Anderson lab before moving on to a one-year postdoctoral position in Phoenix. In 1990, she accepted a full-time

position in the School of Dentistry, working alongside her mentor and, together, they continued his study of the fundamental principles of virus assembly. When Anderson retired, he passed the torch of his 40 years of productive research to Shelley and Paul Jardine, Ph.D., who'd joined the lab in 1997.

Shelley's commitment to her investigation of how viruses assemble has done much to lay the foundation for a better understanding of how the biological world works. It is work that informs science of the basic rules for how living cells interact, assemble and function. But it was her enthusiasm for her life's work and the generosity of spirit with which she approached her work and her friendships that endears her to those who had the pleasure of knowing her. Described by her family as a woman of science and a woman of faith, a proponent of meditation and health, and strong willed, intentional, intelligent, imaginative, motivated, funny and mischievous, she was all this and more. The School of Dentistry has lost a generous colleague and dedicated friend.

of Minnesota), DeLong was appointed a research associate in the dental school's biomaterials program in 1981 and then an assistant professor in biomaterials and fixed prosthodontics (1984-88).



Ralph DeLong

An early entrant into robotics research, he co-developed ART (Artificial Resynthesis Technology), an artificial mouth capable of replicating a year of chewing in a single day that is used to develop and test dental materials. In 1983, the *Journal of Research and Development* selected ART as one of the 100 most significant new technical products of the year. That same year, DeLong and codeveloper, Dr. William H. Douglas, received the "I.R. 100 Award" for the development of a "Biomaterials Evaluation System (Oral)."

DeLong went on to develop AnSur

(Regents, Univ of MN), a software program that could utilize data from a 3D surface digitizer to measure surface changes in the oral cavity over time. The addition of an optical digitizer spurred the development of the "Virtual Dental Patient" (VDP). In 1997, DeLong received a NIH/NIDCR grant to test the hypothesis that a virtual computer rendition of a dental patient and its clinical sources are closely correlated over a wide range of clinical conditions.

DeLong directed the Minnesota Dental Research Center for Biomaterials and Biomechanics (2004-2007), twice chaired the dental school's Department of Restorative Sciences, chaired the School's Promotion and Tenure Committee, and led the school through two multi-year Strategic Planning initiates. In 2005, the U-M School of Dentistry awarded DeLong its highest honor, the Century Club Professor of the Year Award.

Mary Nell (Zingsheim) Porto (D.H.) died on May 13, 2017, at age 60.

R. David Resch (D.D.S.), Roseville, Minn., was installed as president of the Minnesota Dental Association at the association's House of Delegates Meeting in September.

1981

Brent E. Larson (D.D.S.), professor and director of the Division of Orthodontics at the University of Minnesota School of Dentistry, and a practicing orthodontist in Rochester, Minn. since 1990, was elected the 2017-18 president-elect of the American Association of Orthodontists (AAO).

1983

James Rostvold (D.D.S.), Grand Rapids, Minn., was installed as trustee of the Northeastern District Dental Society at the Minnesota Dental Association's House of Delegates Meeting in September.

Douglas Williams (D.D.S.), Bemidji, Minn., was installed as treasurer of the Minnesota Dental Association at the association's House of Delegates Meeting in September.

1985

Kevin Dens (D.D.S.), Baxter, Minn., was named to a second term as speaker of the house at the Minnesota Dental Association's House of Delegates Meeting in September.

Stephen McDonnell (D.D.S.), St. Paul, Minn., was installed as first vice president of the Minnesota Dental Association at the association's House of Delegates Meeting in September.

1992

David Andersen (D.D.S.), Park Rapids, Minn., was installed as president-elect of the Minnesota Dental Association at the association's House of Delegates Meeting in September.

1997

James Nickman (D.D.S.), North Oaks, Minn., was installed as second vice president of the Minnesota Dental Association at the association's House of Delegates Meeting in September. He also was elected president of the American Academy of Pediatric Dentistry (AAPD) at the AAPD annual meeting on May 28, 2017, in National Harbor, Md. Nickman is an associate clinical professor at the U-M School of Dentistry and is in private practice with Metropolitan Pediatric Dental Associates (four locations in the Twin Cities). He is the pediatric lead for the Minnesota Mission of Mercy and the Healthy Smiles Healthy Children Foundation Dental Home Day.

2004

Ben Knutzen (D.D.S.) has practiced dentistry in Brookings, S.D. since graduation. He recently opened the doors on a new building for Knutzen Family Dentistry, expanding its space by three times the original footprint of the existing building.

Nathan Mork (D.D.S.) is the author of an Indian Health Service (IHS) blog on "Building Early Childhood Caries Prevention into IHS Activities." Mork serves as the Indian Health Service Bemidji Area Dental Consultant as well as the deputy chief dental officer of the White Earth Health Center in Ogema, Minnesota. His work includes educating parents, community groups, teachers and daycare providers about the prevention of dental decay in American Indian children.

2006

Amber Cziok (D.D.S.) Litchfield, Minn., was installed as trustee of the West Central District Dental Society at the Minnesota Dental Association's House of Delegates Meeting in September.

2007

The D.D.S. Class of 2007 held a class reunion on April 28, 2017 at the Downtowner in St. Paul. The reunion was organized by Geoff Archibald, D.D.S. The class donated proceeds from the event to the School of Dentistry Peleton (team) for the Chainbreaker bike-athon ride which took place in August.

2008

Tracy St. Dennis (D.D.S.) opened her new general dentistry practice, Willow Lake Dental, in Vadnais Heights, Minn.. After graduation, St. Dennis spent a number of years working at a community clinic in East St. Paul before making her vision for a state-of-the-art, relaxed, inviting dental practice a reality.

2011

Adam Holder (D.D.S.) opened the first dental office in the City of Carver, Minn. the week of June 26, 2017.

2012

The D.D.S. Class of 2012 held a class reunion on April 29th at Bonfire in St. Paul with about 35 alumni attending. The reunion was organized by Drs. Jon Heezen, Melissa Lee and Stephanie Lee.



Reunion Attendees, D.D.S. Class of 2012

2015

Alex Provo (D.D.S.) joined Drs. Debra Ettel and David Resnick ('92) in their practice, Prairie Dental Centers, PA. They have four locations (Ada, Twin Valley, Mahnomen, and Fertile) in rural northwestern Minnesota.

2017

Shakeyla Barber (D.D.S.) is in a residency program in Bronx, New York, to gain more experience in a hospital setting.

Jeff Harrie (D.D.S.) joined Designer Smiles in Fargo, N.D. His areas of interest include general and cosmetic dentistry, dental implants and sedation dentistry.

2008



Reunion Planning Committee

The Class of 2008 held its 10th reunion one year early to support classmate Tessie Thompson-Sylvester, age 36, who was diagnosed with inoperable cancer just days before her husband's death at age 44 following a six-year battle with ALS. In addition to proceeds of the class reunion

and funds raised by classmates, a *gofundme* page has been created to generate support for the couple's two sons, ages 6 and 5.

For more information: www.gofundme.com/sylvesterjoyandsunshinefund.

EventsCalendar

JANUARY 2018

January 18 Alumni Association Board Meeting

January 20 Florida Minne-College (UMAA)

12:30 p.m. to 6:00 p.m. Hilton Naples, Fla.

Registration and information: z.umn.edu/mcfl18

FEBRUARY 2018

February 10 Give Kids a Smile

University of Minnesota School of Dentistry Minneapolis, Minn.

February 10 Arizona Minne-College (UMAA)

12:30 p.m. to 6:00 p.m. Marriott at McDowell Mountains Scottsdale, Ariz.

Registration and information: z.umn.edu/mcaz18

February 22 Legislative Kickoff Breakfast

7:30 a.m. to 9:00 a.m. (*Program at 8:00 a.m.*) McNamara Alumni Center

February 28 Arizona Alumni & Friends' Brunch

10:00 a.m. to Noon Palmbrook Country Club Sun City, Ariz.

MARCH 2018

March 21-24 American Association for Dental Research

Fort Lauderdale, Fla.

Reception:
March 23
7:00 p.m. to 8:30 p.m.
Hilton Marina Hotel
Fort Lauderdale, Fla.

For information: Jan Casey (612) 626-5731

APRIL 2018

April 26-28 Star of the North Meeting

Saint Paul RiverCentre Saint Paul, Minn.

For information: (612) 767-8400 (800) 950-3368

April 27 Minnesota Dentistry Reception

5:30 p.m. to 7:30 p.m. St. Paul Hotel St. Paul, Minn.

For information: Ranee Flory (612) 625-7678 chan0572Wumn.edu

April 27-28 28th Annual Daniel E. Waite Lecture

Rochester, Minn.

Speaker:
Ramon L. Ruiz, DMD, MD
Medical Director, Pediatric
Craniomaxillofacial
Surgery and the Program
Director, Craniofacial
Disorders Program
Arnold Palmer Hospital for
Children, Orlando, Fla.

Contact:

Christopher F. Viozzi, DDS, MD viozzi.christopher@mayo.edu

Kevin Arce, DMD, MD arce.kevin@mayo.edu

MAY 2018

May 3 School of Dentistry Alumni Society Board Meeting

May 4-8 American Association of Orthodontics

Washington, D.C.

Alumni Reception: May 5 7:30 p.m. to 9:00 p.m. Marriott Marquis Hotel

May 10 DDS Senior Awards Banquet

(By invitation only)

May 11 School of Dentistry Graduation

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

For information: (612) 625-8947

May 17-19 South Dakota Dental Association Annual Session

Sioux Falls, Convention Center Sioux Falls, SD

Alumni Reception: TBA

May 24-27 American Academy of Pediatric Dentistry

Honolulu, Hawaii

Alumni Reception: TBA



For more information

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

Erin Strong Elliott

Alumni Relations (612) 626-6884 estrong@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.)

*See smile.umn.edu for updates.

JANUARY 2018

Adult Oral Anxiolysis and Sedation January 12, 2018

Advanced Composite Restorations January 12 to 14, 2018

Trade Secrets 2018: Mastering New

Challenges in Dentistry January 19, 2018

Prosthetic Management of the Edentulous Mandible with a Two-implant **Overdenture**

January 20, 2018

Contemporary Endodontic Treatment Protocols for Multi-specialty Care January 26, 2018

FEBRUARY 2018

23rd Annual Ski & Learn: **Aspen Snowmass**

February 8 to 10, 2018

Winter Dental Hygiene Seminar-Exposed & **Vulnerable: Managing Dentin & Root Exposures** February 9, 2018

Interpreting Cone Beam CT Images: An Interactive Workshop February 9, 2018

Aesthetics in Your Dental Practice: Neurotoxins February 16, 2018

Approaching, Diagnosing & Treating Patients Impacted by Trauma, Violence & Acute Injury February 16, 2018

Expanding Your Practice with Facial Rejuvenation Services: Dermal Fillers & Volume Enhancers February 17, 2018

Removal of Bond Material with Rotary Instrumentation: A Hands-on Program February 22, 2018

Restorative Expanded Functions: 80-Hour Training Program Begins February 23, 2018

MARCH 2018

14th Annual Dental **Research Updates** March 2, 2018

Practical Oral Surgery for the General Dentist March 2, 2018

Exodontia Techniques Workshop March 3, 2018

Taking Sleep Apnea Beyond Oral Appliances March 9, 2018

Sleep Apnea Evaluation and Bite Registration Hands-on Workshop March 10, 2018

Getting to Yes with **Patients: Strategies** for Complex Planning, Sequencing & Payment March 16, 2018

Anterior Esthetic Techniques & Materials March 23 & 24, 2018

APRIL 2018

Streamlined, Systematic Recordkeeping April 5, 2018

Treatment Planning for Medically Complex Patients Living in the "Second Fifty" April 6, 2018

Implant Supported Prosthesis Utilizing the All-on-4™ **Treatment Concept:** A Hands-on Program April 14 & 15, 2018

Local Anesthesia April 30 to May 2, 2018

MAY 2018

Promoting Healthy Behavior with Motivational Interviewing May 4, 2018

Research Design-Postgraduate Program May 4 to 5, 2018

Mandatory & Core Training for the Dental Team May 11, 2018

For more information

For more information, to register for classes and/or to request disability accommodations, contact:

Continuing Dental Education

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

Phone:

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

Fax:

(612) 624-8159

Website:

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