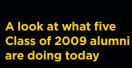
Advancing Oral Health. Improving Lives.[™] GAMING THE BOARDS Dental Hygiene alumnae show students how to play to win **'MOONSHOT' APPROACH** Rania Younis aims to advance immunotherapy **BUILDING A BETTER VACCINE** UMSOD professor receives \$6.4 million contract

THE MAGAZINE OF THE UNIVERSITY OF MARYLAND SCHOOL OF DENTISTRY | SPRING 2019







OfNote

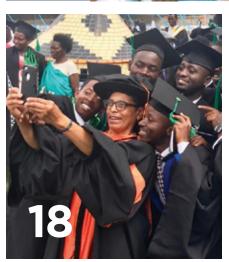
The University of Maryland School of Dentistry's chapter of the Student National Dental Association (SNDA) was named 2018 Chapter of the Year by the National Dental Association. It is the third consecutive year that the student group has received the honor. Among other initiatives, SNDA executive board members were instrumental in organizing 30 community service events, including an annual Oral Cancer Walk and a mentoring program for undergraduates interested in dentistry.



The 2017-18 SNDA executive board: top row, in teal, Vaida Saucer, Desire Renggli; second row, in dark blue, Jordan Jackson, Arielle Statham (2018-19 president), Rahimah Maina, Hafeeza Hassan; bottom row, in maroon, Kristen Millender, Alenna Monet (2017-18 president), and Jasmine Waters.

To read more about the 2018 Chapter of the Year, visit *www.dental.umaryland.edu/SNDAinterview*.

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12 CLASS OF 2009

Building a practice? Helping underserved children? Parenting? You bet. Here's what five UMSOD alumni are doing 10 years after graduation.

18 BALTIMORE AND BEYOND Recipient of UMB's 2018 Public Servant of the Year Award, Valli Meeks, clinical associate professor, launched a Baltimore clinic for patients with HIV/AIDS and helped open Rwanda's first dental school.

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29 Play to Win: Maura Ordovensky and Bianca Harris create a game that helps hygiene students pass their boards.



A lot has happened since publication of the fall issue of *Mdental*. We have updated the magazine's design and refocused its content to better engage and serve you, our alumni. Those changes, including a cleaner, crisper look, a feature highlighting the work of a member of our remarkable faculty, and more opportunities for you to offer ideas and comments, are inspired by your responses to the online reader survey we conducted last year. More details about the survey results are included later in this issue.

To expand the school's professional impact, we are planning to launch two new University of Maryland School of Dentistry (UMSOD) programs at the Universities at Shady Grove, the University of Maryland's interdisciplinary institution in Montgomery County, Md. The certificate in Oral Health Science and the BS/MS Clinical Dental Hygiene Leader Dual Degree Program are both slated for enrollment in 2020. These two academic programs will be supported by a clinic at Shady Grove, scheduled to open this fall and anticipated to serve as an educational rotation site. You can read more about these exciting new programs in this issue of the magazine.

Physical changes to our school are underway as well. Renovations, which include moving our Faculty Practice Clinics from the fourth floor to the first, began last winter. Slated for completion in June, they represent the first step toward establishing our new Center for Integrative Dentistry and Health, where multidisciplinary teams of our expert faculty will offer care to patients with complex dental and medical needs.

The dental profession, like general health care services, is rapidly changing, and these and other innovations will position us to better serve our alumni and prepare our current and prospective students to be the oral health care leaders of the future.

At UMSOD, developing novel solutions to complex problems remains a priority as we strive constantly to enhance our ability to offer superlative diagnoses and treatments and to advance oral health care.

I am pleased to report that Robert K. "Bob" Ernst, PhD, vice chair of the Department of Microbial Pathogenesis, last fall received a five-year, \$6.4 million contract from the National Institutes of Health's National Institute of Allergy and Infectious Diseases to develop and test new adjuvants for use in future vaccines.

Another member of our faculty, Valli Meeks, DDS '88, MS '98, RDH, clinical associate professor in the Department of Oncology and Diagnostic Sciences, was named the University of Maryland, Baltimore's Public Servant of the Year in recognition of her work in Maryland and Rwanda.

Additionally, the Division of Pediatric Dentistry developed and launched a new assessment tool that allows its residents to analyze their clinical performance on a daily basis as well as receive evidence-based feedback from professors.

I hope you will enjoy reading the articles about these and other new initiatives at UMSOD in our newly redesigned magazine.

Warm regards,

ash Keynolds

Mark A. Reynolds, DDS '86, PhD Dean and Professor



ON THE COVER

Yearbook photos from *The Mirror*, 2009. For identifications, see p. 17.

Photo illustration by B. Creative Group

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Find Mdental online at www.dental.umaryland.edu/Mdental/.





New UMSOD Research Network Bolsters Faculty Research

BY SCOTT HESEL

A new practice-based research network

launched by the University of Maryland School of Dentistry (UMSOD) is growing rapidly with a strong response in its initial surveys.

Called the Maryland Practice-Based Research Network in Dentistry (MPResD), the network of oral health practitioners who gather patient and practice data to answer important clinical questions has grown to include more than 190 members since it began last June.

Two surveys, conducted last summer by MPResD, investigated practitioners' interest in tobacco cessation counseling and pulp vitality testing. Both drew a greater than 50 percent response rate.

"These early MPResD surveys give researchers important information in terms of their investigations' clinical relevance to practitioners, and that is really at the heart of what practice-based research is about," says Thomas W. Oates, DMD, PhD, chair of UMSOD's Department of Advanced Oral Sciences and Therapeutics and MPResD director. The data indicated a high level of interest among practitioners in supporting tobacco cessation efforts. For example, when asked whether dentists and dental hygienists should routinely provide one-on-one tobacco cessation counseling within their practices, 70 percent of respondents agreed or strongly agreed.

In addition, 63 percent of respondents expressed interest in participating in a project that would involve dentists and dental hygienists referring patients to a tobacco cessation program in their area and then tracking the effectiveness of the referral program over time.

These data will form a foundation for grant applications to the National Institutes of Health (NIH) in support of implementing a cessation program among participating practitioners. "One of the elements critical for submitting an NIH grant is having preliminary data to support the research question being posed," Oates says.

While MPResD is composed primarily of UMSOD alumni, membership is open to non-alumni. "The beauty of this system is that clinicians are providing the guiding force to researchers," Oates says.

For more information or to register for MPResD, visit *www.dental.umaryland.edu/MPresD*. Md

ByTheNumbers

UMSOD Clinics

The University of Maryland School of Dentistry (UMSOD) is unique among the six professional schools at the University of Maryland, Baltimore in that it is the only school to house patient clinics. Its 23 clinics include those focusing on general dentistry, urgent care, pediatric dentistry, special needs, dental hygiene, and advanced specialties among others. The clinics also include the Oral Maxillofacial Surgery, Brotman Facial Pain Clinic, and the PLUS Clinic, which serves Ryan White-eligible patients.

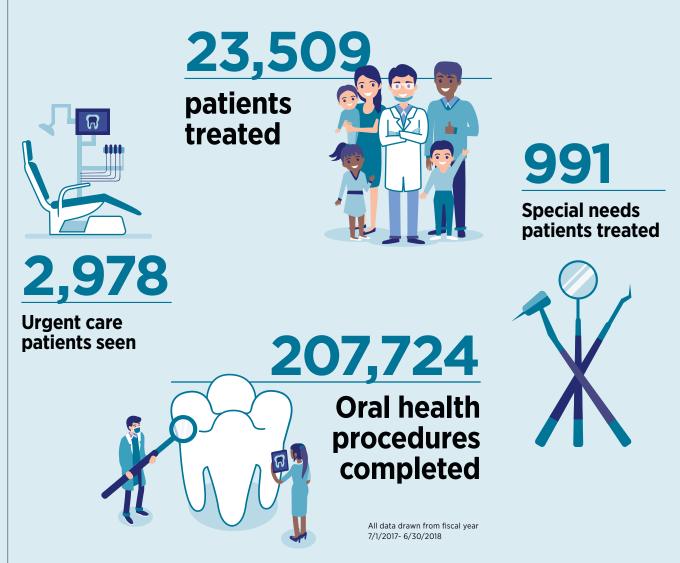
Patients who come to UMSOD are offered a full range of high-quality dental care for adults and children as well as for individuals with more complex dental needs,

COMPILED BY ALLISON LANGE, MARC ALLEN, KATHY MARTIN

including endodontics, periodontics, prosthodontics, oral-maxillofacial surgery and orthodontics.

Nearly 300 dental and dental hygiene students, more than 75 postdoctoral residents, and more than 200 faculty members provided oral health care and education in the clinics last year. Additionally, more than 200 colleagues from the community volunteer their time as members of the Dean's Faculty.

Here is a numerical snapshot of these remarkable patient care clinics, where faculty, staff, students, and professional volunteers work daily to fulfill the school's purpose: *Advancing Oral Health. Improving Lives.*TM





UMSOD Adding Innovative Programs at Shady Grove

The University of Maryland School of Dentistry (UMSOD) will launch two new, innovative programs at the Universities at Shady Grove, an interdisciplinary institution in Montgomery County, Md. These programs will be supported by a clinic at Shady Grove, scheduled to open this fall and anticipated to serve as an educational rotation site.

The certificate in Oral Health Science is geared toward non-dental health care professionals, such as nurses and physician assistants, who wish to develop a strong foundation in oral health. Professionals who complete the program will be better prepared to assess the oral health of patients and to make dental referrals, when appropriate, for patients in settings such as hospitals or extended-care facilities. The program's online coursework, accompanied by clinical time at Shady Grove, makes it a convenient option for students who already are in the workforce.

The BS/MS Clinical Dental Hygiene Leader Dual Degree Program (CDHL) offers a hybrid curriculum much like the Oral Health Science certificate. Most classes of the two-year CDHL program will be online, allowing students to access Baltimore-based lectures while gaining clinical experience at the Shady Grove facility. The dual-degree program also will prepare students for leadership roles in integrative health care settings, such as hospitals and extended-care facilities. Both new programs are slated to begin enrollment in 2020.

Shady Grove, an innovative partnership among nine institutions of the University System of Maryland, offers easy access to the Washington, D.C., metropolitan area and administers more than 80 degree and certificate programs in a variety of flexible formats. Mcl

- JOEL KABOT AND HOLLY SELBY

Redesign: You Commented, We Listened

About a year ago, we decided to give *Mdental* a makeover. After all, five years had passed since its last redesign, and magazines, like much else in life, typically benefit from a revamp every so often.

After conducting a readership survey and a series of interviews with key community stakeholders, we learned that what readers liked best about the magazine were articles and stories that appeal to a wide range of readers, show the school's high regard for both the Maryland and global community, recognize the successes of University of Maryland School of Dentistry faculty and students, and provide news about innovations and new technologies.

As one respondent commented, "It showcases the faculty and staff accomplishments. People are proud of what's going on in the school, and the more the magazine showcases this, the more it increases our pride."

Readers also offered suggestions of things they'd like to see more of in the magazine, including coverage that encompasses a wider range of community members, content that showcases new research and new concepts being introduced by the school, and great photos and other visual elements that engage alumni of all ages.

We asked Baltimore-based design firm B. Creative Group to translate visually our readers' ideas and input. We hope you like *Mdental's* new look and design. **Md**

- HOLLY SELBY

Tell Us What You Think

We'd love to know what you think about the redesigned magazine. Send us your comments — or news and information you'd like to share — by emailing hselby@umaryland.edu.



UMSOD Dean Mark A. Reynolds (second from left), UMB President Jay A. Perman (center), and UMB Executive Vice President and Provost Bruce Jarrell (in back) tour CareCapital's flagship dental clinic in Shanghai.



Dean Reynolds greets Zhang Baosheng, honorary dean of the Institute of Evidence Law and Forensic Science at the China University of Political Science and Law in Beijing.

Visit to Asia Opens Doors to Opportunities

University of Maryland, Baltimore (UMB) President Jay A. Perman, MD; University of Maryland School of Dentistry (UMSOD) Dean Mark A. Reynolds, DDS '86, PhD; and other UMB leaders traveled last fall to four Asian cities, bolstering existing relationships and building new ones with a goal of expanding research, educational, and economic opportunities.

"This trip allowed us to share details about cutting-edge research being conducted at the University as well as the remarkable learning opportunities available to students," Reynolds said. "Additionally, we strengthened friendships and formed new relationships in ways that will lead to important new opportunities."

UMB leaders visited academic institutions as well as global research and biomedical companies in Beijing and Shanghai, China; Seoul, South Korea; and Tokyo, Japan. In Shanghai, for example, the group toured the flagship orthodontic dental clinic at CareCapital, the No. 1 distributor of global dental products within China and a global investor in digital dental technologies that advance clinical care and education. The facility boasts state-of-the-art clinical and digital technologies and family-friendly features, such as activity-filled waiting areas and low-mounted rinsing sinks for children with colorful porcelain faucets designed in the shape of animals.

Reynolds spoke to CareCapital administrators about UMSOD's research, clinical care, and educational programs, including its groundbreaking work in biomaterials and tissue engineering, neural and pain science, oncology, and infectious diseases — exploring potential opportunities for future collaboration. Mcl

- ALEX LIKOWSKI AND HOLLY SELBY

Accolades



▲ Kathryn Pawlak, fourth-year DDS student, received a scholarship from the Dental Trade Alliance Foundation recognizing her commitment to community service.



▲ William F. Hoffman Jr., MAS, department research administrator, Office of the Dean, received the 2018 Excellence Award from the Society of Research Administrators International at its annual meeting held Oct. 19-23 in Orlando, Fla.



▲ In observance of International Central Service Week, the University of Maryland School of Dentistry's **Division of Central Materials Services** last October received a proclamation of appreciation and support from Baltimore Mayor Catherine E. Pugh.

'Ni Hao' to New Ideas

BY GWEN FARISS NEWMAN

Three fourth-year University of Maryland School of Dentistry (UMSOD) students spent 14 days last October at Xi'an Jiaotong University College of Stomatology (XJTU COS) in China. Their visit was part of an international partnership forged in February 2018 when seven XJTU COS students visited the school in Baltimore.

The international exchange reflects UMSOD's commitment to graduating exemplary oral health professionals whose interpersonal skills, ability to work effectively on a team, and adaptability in a global society are honed by a diverse set of realworld experiences. A second Chinese student contingent visited UMSOD in January 2019.

The UMSOD students spent much of their time observing the XJTU COS clinics and interacting with the cohort of students who came to UMSOD last winter. One difference between the two institutions, they noted, is the size and scope of their respective patient populations. The XJTU COS oral and maxillofacial surgery clinic alone treats 53,000 patients annually. In contrast, more than 23,000 patients are treated each year in all UMSOD clinics.

In addition to their time in the clinical setting, the UMSOD students enjoyed Chinese culture, tasted local cuisine, and got to know their XJTU COS colleagues at events including a birthday celebration for a XJTU COS student. Md







1. UMSOD student Angela Choi hones digital dentistry skills by practicing with a 3D dental hand piece simulator. 2. Scott Swank, DDS, MS, MBA, FACS, curator of UMSOD's Dr. Samuel D. Harris National Museum of Dentistry, meets in Xi'an with experts from the Air Force Medical University School of Stomatology Dental History Museum, the largest dental history museum in Asia. **3.** The trip included time for social interaction including a birthday celebration for one of the Chinese students.

4. UMSOD students Angela Choi, Ricky Lim, and Hannah Fong in front of Xi'an Jiaotong University College of Stomatology Dental Hospital

DENTAL.UMARYLAND.EDU

New to the School

The University of Maryland School of Dentistry welcomes these faculty members:



▲ Suzanne K. Burgee, RDH, non-adjunct faculty, Division of Dental Hygiene



▲ Som Chatterjee, MS, PhD, assistant professor, Department of Microbial Pathogenesis and the Institute of Marine and Environmental Technology



▲ Eve Desai, DDS, clinical instructor, Department of General Dentistry



▲ Matthew Frykenberg, DDS, clinical instructor, Department of Oral and Maxillofacial Surgery



▲ Herbert Mendelson, DDS, FAGD, FAAID, clinical instructor, Implantology Continuum C.E. Course



▲ Carl Oppenheim, DDS, clinical instructor, Department of General Dentistry

▲ Kevin G. Schwartz, DMD,

▲ Robert R. Windsor, DDS,

Department of General

Dentistry

director of clinical operations,

of Oral and Maxillofacial

Surgerv

clinical instructor, Department



▲ Kwanrak Wongse-Sanit, DMD, clinical instructor, Department of General Dentistry



▲ Yifan Zhang, MBBS, PhD, research associate, Department of Microbial Pathogenesis

(Faculty members arrived at the school between May 2018 and January 2019.)

U.S. Public Health Service's Chief Dental Officer Visits UMSOD

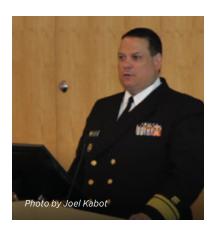
Conducting medical and dental histories and discussing responsible use and disposal of prescription opioids with patients are among steps that dentists should take before prescribing opioids, says Rear Adm. Timothy L. Ricks, DMD, MPH, chief dental officer of the U.S. Public Health Service (USPHS).

His remarks, made Nov. 29, 2018, to dental and dental hygiene students at the University of Maryland School of Dentistry, laid out oral health priorities established by Jerome Adams, MD, MPH, surgeon general of the USPHS.

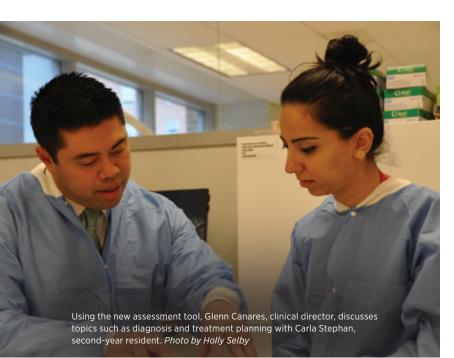
Ricks was speaking to members of a Principles of Scientific Evidence course taught by Mark D. Macek, DDS, DrPH, and Mary Ann Jabra-Rizk, PhD.

Ricks also discussed tobacco use and oral health disparities in the United States. Changing perceptions so that oral health is viewed as an integral part of general health, he says, will help create greater access to oral health care. MC

- HOLLY SELBY



Innovation +Discovery



Novel Assessment Tool Offers Continuous, Constructive Dialogue

BY HOLLY SELBY

A new assessment tool developed by the University of Maryland School of Dentistry's (UMSOD) Division of Pediatric Dentistry allows pediatric residents to analyze their clinical performance on a daily basis as well as receive frequent, evidence-based feedback from professors.

Called the Progressive Assessment Tool (P.A.T.), the copyrighted system offers residents a channel — in addition to all evaluations required by the Commission on Dental Accreditation through which to gain critiques and insights about their work. Already the Tufts University School of Dental Medicine and the University of Illinois at Chicago College of Dentistry have expressed interest in using the P.A.T.

"It is really a platform for continuous, open, constructive dialogue between residents and faculty," says Glenn Canares, DDS, MSD, clinical director. "We [in the program] already meet all requirements of an accredited program so the P.A.T. is not part of formal evaluation criteria but is highly encouraged."

For example, residents interested in honing a particular skill set — such as restorative work — may ask several different faculty members to assess their work, Canares says.

The idea for P.A.T. came from Vineet Dhar, BDS, MDS, PhD, chair of the Department of Orthodontics and Pediatric Dentistry. "We have a diverse faculty — full-time, part-time, and Dean's Faculty [composed of practitioners who volunteer to teach in UMSOD's clinics], and I thought, 'How do I make sure instruction is calibrated?""

Dhar drew up an outline of his idea and presented it at the department's twice-annual, all-faculty meeting. Faculty offered suggestions and enhancements over a period of about 18 months, and in 2016, the P.A.T. was piloted.

After treating a patient, residents are able to assess their own performance in areas including diagnosis and treatment planning, pulp therapy, and sedation. Faculty members are able to add comments or observations.

Carving out time to use the assessment tool in the middle of a busy day in the clinic can be difficult, but is worth the effort, says Carla Stephan, DDS, MSD, a second-year resident. "It does help me a lot to go over it with faculty and talk about the things that need improvement. They not only indicate things I can improve on, but also my strengths. I've definitely improved my skills in restorative treatment, extractions, and treatment planning." Md

Microbial Pathogenesis Professor Awarded NIH Vaccine Contract

BY JOEL KABOT



In October, Robert K. "Bob" Ernst, PhD, professor and vice chair of the Department of Microbial Pathogenesis at the University of Maryland School of Dentistry (UMSOD), was awarded a five-year, \$6.4 million contract with the National Institutes of Health's National Institute of Allergy and Infectious Diseases to develop and test a new adjuvant for vaccines

against microbial infections.

Adjuvants are substances included in vaccines to bolster immune response, improving resistance to infection. Simply put, as the Centers for Disease Control and Prevention notes, "Adjuvants make vaccines work better."

However, the adjuvants currently used in vaccines, such as aluminum salts and oil-inwater emulsions, have notable shortcomings. For instance, both require repeated appli-

"Microbial infections are still a leading cause of mortality worldwide. There is an urgent need to find a better, higherquality adjuvant for vaccines."

– ROBERT K. ERNST

cations — which, for the patient, mean multiple trips to the doctor.

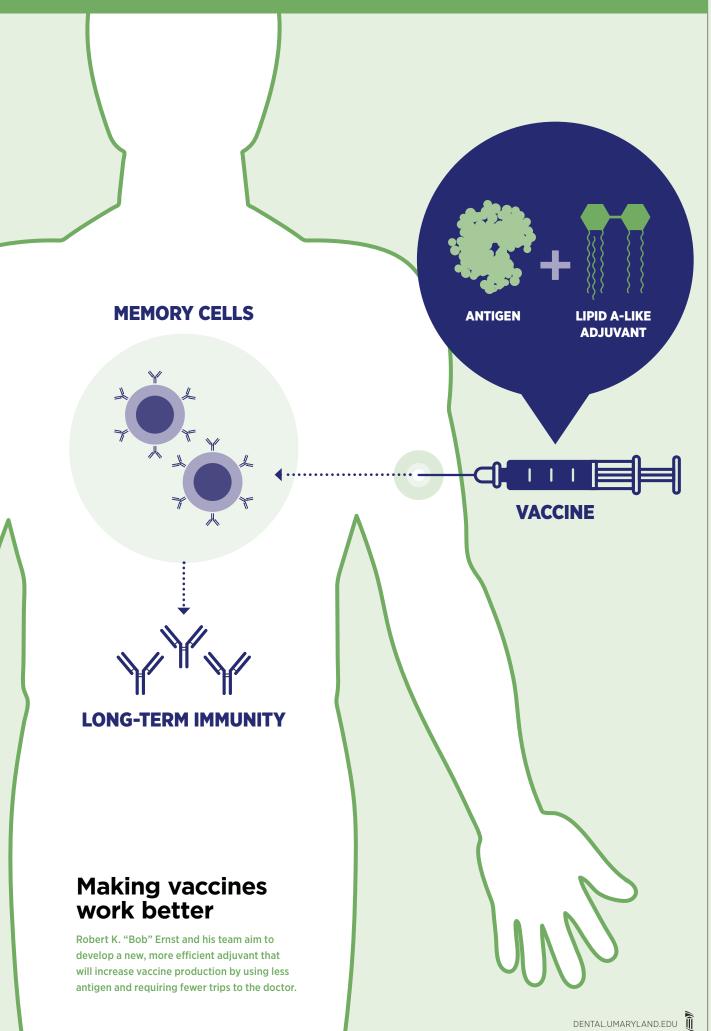
"To overcome these limitations, future vaccines will require novel, rationally designed adjuvants," Ernst says.

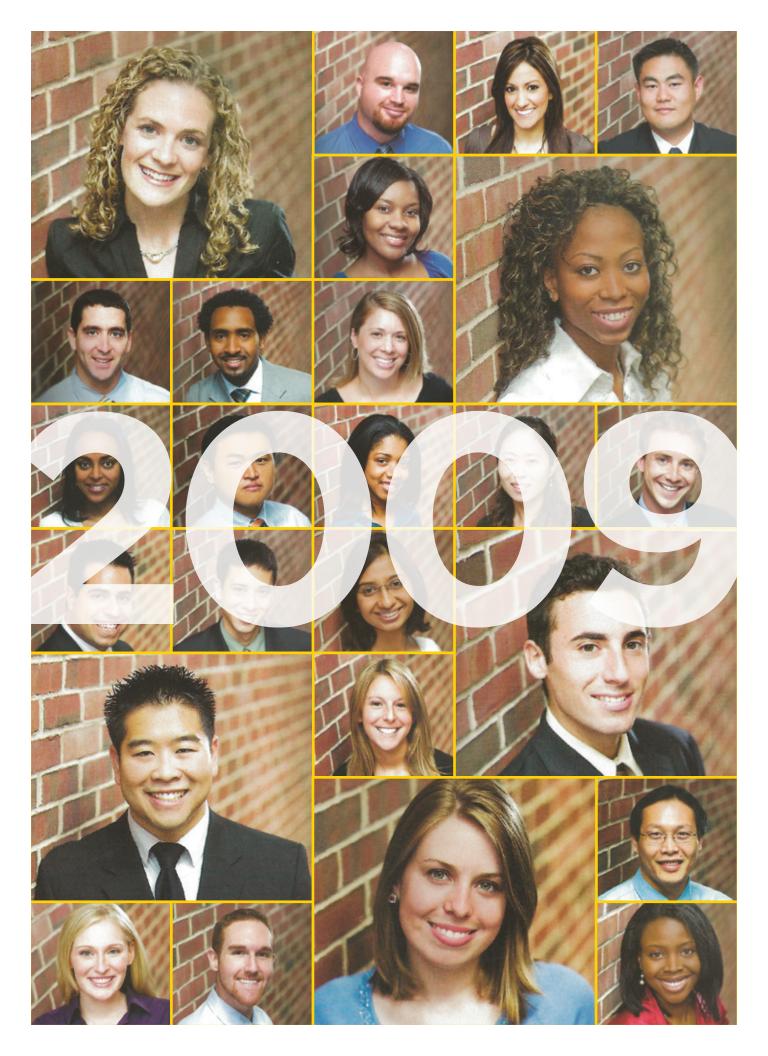
As program director of the contract, working with co-investigators from the University of Kansas and two industry consultants, Ernst aims to bring forth an alternative adjuvant that is both antigen- and dose-sparing. That would mean increasing vaccine production with a limited amount of antigen — that is, getting more doses out of each batch — and creating vaccines that require fewer follow-up visits, so patients are more likely to adhere to vaccination schedules.

As opposed to the normal trial-anderror approach that categorized previous development of adjuvants, Ernst and his team will use bacterial enzymatic combinatorial chemistry (BECC) to manufacture BECC438, an engineered, lipid A-like ligand (a molecule or ion that attaches to another molecule). They will test its adjuvant potential with two established vaccine antigens: *Y. pestis*, which causes the plague, and *Shigella*, which causes the disease shigellosis.

"Microbial infections are still a leading cause of mortality worldwide," Ernst notes. "There is an urgent need to find a better, higher-quality adjuvant for vaccines."

Using UMSOD's state-of-the-art laboratory facilities, Ernst and his team will strive to do just that, making sure it's easier and less complicated to get vaccines to the people who need them. Mcl







HOW DO YOU DEFINE PROFESSIONAL GROWTH?

Or the maturation of skills? For many, it's building a financially successful practice. For others, it's developing sustained fluency with dental procedures. For some, it's the latitude not only to practice dentistry but also to give back to the world. Here, we speak with five members of the University of Maryland School of Dentistry's (UMSOD) Class of 2009 about how they've spent the decade since earning their DDS degrees.





"PROVIDING THIS CARE WAS SOMETHING WE COULD DO BEST AND MOST EFFICIENTLY WITH THE RESOURCES WE ALREADY HAVE."

BEN FISHBEIN

SEIZING OPPORTUNITY

There's little doubt that being born without lateral incisors guaranteed that Ben Fishbein was introduced to dentistry at an early age. Having an uncle who was an orthodontist also gave him an early familiarity with the profession. But, he says, hard work and an ability to identify opportunity also may have fueled his success.

After graduating from UMSOD, the Pikesville, Md., native completed a threeyear residency at Jacksonville University School of Orthodontics in Florida. In 2013, he opened Fishbein Orthodontics in Pensacola, Fla., with a team of five. Today, Fishbein operates six offices, employs a staff of 50-plus, and treats more than 2,000 patients annually. In his spare time, he serves as the official "smile provider" of the Pensacola Blue Wahoos, a minor league baseball affiliate of the Minnesota Twins; sits on the board of the Escambia-Santa Rosa County Dental Society; and has been included on the "best orthodontist" lists of the *Pensacola News Journal* and *Pensacola Independent News*. He and his wife, Leah, have a 1-year-old daughter.

In 2017, he launched Fishbein Fundamentals, a company that offers in-office training in management, marketing, and running a practice to oral health professionals. The idea for the business came to Fishbein after scores of practitioners contacted him to ask for business and management advice. As his business ventures grew, Fishbein began exploring ways to give back to his community.

In 2017, he established the Fishbein Foundation, a nonprofit dedicated to helping youths who are bullied because of their appearance. Fishbein's five-year goal is to offer more than \$1 million worth of free orthodontic care to an estimated 200 youths.

"I was affected as a youth by missing teeth and felt very self-conscious about my appearance," Fishbein says. "Providing this care was something we could do best and most efficiently with the resources we already have. Opportunities are all around. You just have to look."

LYNDSAY BATES

Kids' Dentistry



"I'M PROUD THAT I'M ABLE TO GIVE BACK, BLESSED WITH A SKILL NOT EVERYONE HAS, AND ABLE TO USE THAT SKILL TO HELP OTHERS."



TIME WELL SPENT

Growing up in Apple Valley, Minn., Lyndsay Bates remembers playing doctor as a 6-yearold, "healing" stuffed animals or bandaging make-believe injuries for her younger brother.

Today, as a pediatric dentist, Bates channels that same passion into treating young patients and working to extend care to disenfranchised communities.

"We are one of the few pediatric dental specialists in our area seeing patients with government-subsidized insurance," says Bates, one of six owners of a practice comprising three associates and more than 70 employees at four sites in the Twin Cities, Minn., area. "Our state has one of the lowest government reimbursement rates, so most providers are no longer seeing these children. That's always been a part of our mission and our motivation."

While a UMSOD student, Bates spent two weeks working in Vietnam for Operation Smile, a global, nonprofit organization aimed at providing cleft lip and palate surgery to those in need. "We spent time in Hanoi working in a newly established community dental clinic doing a full gamut of treatment, including oral health education, cleanings, sealants, fillings, root canals, extractions, and crowns," she recalls. "Each day, the community would get together to make us a large lunch to share, and it became one of the most humbling and inspirational few weeks of my life."

Today, Bates volunteers in the American Dental Association's Give Kids a Smile program, which provides free oral health services to underserved children and gives presentations at local schools that stress the importance of oral health. She also has written articles on topics such as oral health for infants for the Journal of Pediatric Dentistry and Pregnancy & Newborn magazine, where she has been dubbed the "tooth sleuth."

All of which has been time well spent, Bates says. "I'm proud that I'm able to give back, blessed with a skill not everyone has, and able to use that skill to help others."

LYNDSAY BATES

VALERIE OKEHIE

RELIEF EFFORTS



Born in Enugu, Nigeria, Valerie Okehie came to the United States in 1995 when she was 18. The move produced a bit of culture shock. Among other things, as a teenager with "a severe overjet and a lot of gaps" between her teeth, she suddenly became very self-conscious about her smile.

"Even when I lived in Nigeria, I never really liked my teeth, and I always smiled with my lips closed," she says.

Okehie begged her parents, both educators, to let her get braces. During the four years that she wore braces, "I went back [to the orthodontist] very frequently, and we engaged in conversations about how dentistry could be an excellent opportunity for me."

She was convinced. As a student working in UMSOD's clinics, Okehie cared for a broad range of patients, some of whom arrived in great pain. "You get them out of pain, whether by root canal or emergency treatment, and that's just the most rewarding feeling ever," she says. After earning her DDS, Okehie specialized in a field she thought would allow her to give the greatest amount of relief to the greatest number of patients: In 2016, she became a boardcertified endodontist.

Last November, just months after giving birth to a daughter, Okehie opened a practice, Elite Root Canal in Greenbelt, Md. Now her goals include, in addition to being a wonderful mother, cultivating her practice, continuing professional development, and mentoring young people.

"Moving to the United States was a welcoming experience," she says. "I really appreciate everyone who's supported me along the way. I felt UMSOD faculty cared about us as students and as individuals, and it inspired me to be better, take advantage of opportunities, and, hopefully, do the same for someone else."

VANESSA BENAVENT

DENTISTRY IS HER LEGACY



Vanessa Benavent, a third-generation UMSOD alumna, grew up knowing she wanted to be immersed in health care. "It's in my blood," she says.

She had watched her father, Harry Benavent, DDS '81, practice the art and craft of dentistry, as well as her grandfather, Arturo Benavent, DDS '45. Her younger brother, Harry H. "Herb" Benavent, DDS '12, also joined the profession.

Benavent now is one of a few dentists nationwide specializing in orofacial pain as well as one of the youngest to have served as president of the Maryland State Dental Association. She completed her 2017-2018 term last June. "I went headfirst, and it's an honor to have been tapped early in my career." Last year, she was recognized by the American Dental Association's 10 under 10 awards, which honor dentists making significant contributions to the field within the first 10 years of graduation.

Still, Benavent takes the most pride in offering hands-on care, working with patients who are suffering from facial pain caused by periodontal disease or postoperative care, for example, as well as cancerous tumors, neurological conditions, and musculoskeletal pain.

"Every day, I'm able to make someone's life a little better. It's amazing. Being able to change people's lives and taking away pain is at the root of what we do." THANH LAM

PRACTICE MAKES PERFECT

About 15 years ago, Thanh Lam, then a biomedical engineer conducting stem cell research at the University of Pennsylvania School of Dental Medicine, realized that he was tired of being cooped up in a lab. Instead, he yearned to develop treatment plans, use his hands, and interact with patients. "At that point, sitting in a lab by myself, I got tired of academia," he recalls.

Initially it had seemed as if a career in research was perfect for Lam. Known for his intellect, he was class valedictorian at Albert Einstein High School in Kensington, Md., holds two bachelor's degrees from Johns Hopkins University and a master's degree in engineering from the University of Pittsburgh, and is a fellow in the Academy of General Dentistry. At UMSOD, he served as class president as a junior, president of the Student Dental Association as a senior, and spoke at the Class of 2009 honors convocation.

But after defending his thesis, he was ready for a change. He worked for several years at practices owned by others, and, in 2015, he bought his own: North Rockville Dental.

One of the first lessons Lam learned as a new business owner was "how it's not that hard to be a dentist, but it is hard to learn the business side, deal with insurance billing, and work through the red tape." These days, he is his own boss, spending time with patients, offering discounts when real need arises, and parenting his 4-year-old son and 1-year-old daughter. "I like having time to do the best job possible while getting to know [my patients], hearing what they have to say, and answering any questions they have," Lam says.

What's next? "Paying off my student loans, taking continuing education courses, and adapting to new technology." And, he adds, "I hope to retire early and teach at the school someday." Mcl



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WHO'S WHO?

These photos and names of members of the Class of 2009 appeared in *The Mirror*:

- 1. Lyndsay Bates
- Nicholas Bennett
 Seema Ahmed
- 4. Alexander Cho
- 5. Roxanne Clarke
- 6. Valerie Okehie
- 7. Thomas Davenport
- 8. Daniel Dufera
- 9. Kimberly Fields
- 10. Liya Goitom
- 11. Joshua Han
- 12. Eijah Holness
- 13. Eun Sun Hwang

- 14. Geoffrey Jackson
- 15. Babak Joobbani
- 16. Bryan Kitahara
- 17. Ekta Laheri
- 18. Ben Fishbein
- 19. Thanh Lam
- 20. Julia Lipps Joachim
- 21. Katie Macken
- 22. John McDaniel
- 23. Vanessa Benavent
- 24. Zhuozhao Mei
- 25. Onyinye Onyewuchi







hen she was young, Valli Meeks, DDS '88, MS '98, RDH, had an uncle who told her to never miss an opportunity to travel. She has taken him up on that — and then some.

Meeks, a faculty member of the University of Maryland School of Dentistry (UMSOD) since 1989 and the 2018 recipient of the University of Maryland, Baltimore (UMB) Founders Week Public Servant Award, has helped Rwanda address its oral health care crisis through the creation of its first dental school. She makes the 20-hour flight (including layovers) to the African nation to assist with the dental school's curriculum, teach, mentor, and bring donated dental equipment that she and her students and faculty colleagues procure.

Back home in Baltimore, Meeks directs the state's first dental clinic for Marylanders with HIV/AIDS and no insurance, which she established in 1989.

Rwanda isn't the only place she visits. As an international expert on people living with HIV, the Pennsylvania native also has given presentations in Brazil (her favorite country), Nigeria, Germany, Trinidad, and England just to name a few.

"I always knew I wanted to be 'hands-on' working with patients. But I never thought I would have the opportunity to travel to all the different countries I have to lecture and exchange ideas," Meeks says. "I will always be grateful to UMSOD for allowing me the opportunity to travel."

Colleagues say it is they who should be thanking her.

"Both in Rwanda and in Maryland she is dedicated to her students," says Jane Barrow, MS, associate dean, Harvard School of Dental Medicine. "She sets an excellent example. They

Recipient of the 2018 UMB Public Servant Award BY CHRIS ZANG







"She sets an excellent example. They see her passion, empathy, and commitment to research, patient care, and teaching, and are inspired. She is never too busy to help."

 JANE BARROW, MS, ASSOCIATE DEAN, HARVARD SCHOOL OF DENTAL MEDICINE

see her passion, empathy, and commitment to research, patient care, and teaching, and are inspired. She is never too busy to help."

A humble woman who calls the 2018 UMB Public Servant Award "quite unexpected" despite previous honors including the 2016 University System of Maryland Regents' Faculty Award for Public Service, Meeks says she could do more if she could ever get the hang of scheduling.

"I never seem to be able to stick to a schedule. I'll stay up late to do work or I'll take a power nap and wake up at 3 a.m. and work," says Meeks, who is single with no children but enjoys spoiling her niece and grand-niece.

The PLUS Clinic, which is still Baltimore's primary facility to provide comprehensive oral health services to uninsured and underinsured people living with HIV/ AIDS, has made major gains under Meeks' direction. In 2013, Meeks partnered with the University of Maryland School of Medicine's Institute of Human Virology's JACQUES Initiative to reduce new HIV infections by providing HIV testing in UMSOD clinics. In 2017, 293 HIV rapid tests were administered at the PLUS Clinic, a 165 percent increase from 2016. She also proudly points out that a new fourth-generation HIV rapid test reveals results four weeks after a possible exposure instead of 12 weeks as in the past.

Thanks to her efforts to secure city and state funding, almost 98 percent of PLUS Clinic patients receive care at no cost. "I am fortunate to have a great staff working with me in the PLUS Clinic," she says. "They enjoy participating in health fairs with community-based organizations to promote not only the importance of oral health, but we really serve as ambassadors for the dental school."

UMSOD Dean Mark A. Reynolds, DDS '86, PhD, says the need for quality oral health care among those diagnosed with HIV/AIDS is great. "With weakened immune systems, they are at greater risk for ailments such as oral warts, oral fungal infections, and periodontal disease," Reynolds says. "Yet this population frequently has difficulty finding dental care due to the stigma associated with the transmission of HIV disease."

Despite the praise, Meeks says the PLUS Clinic can't "rest on our laurels."

"There is always something that the HIV/AIDS community is involved with," says Meeks. "Now it's the opioid crisis and young adults becoming infected with HIV. But in addition to that, there are still cohorts of people living with HIV disease who are not receiving oral health care. I still want to target them, e.g., women of color and Native Americans."

Aside from the new dental school in Rwanda, Meeks also has teamed with American Arlene Brown and the nonprofit Hope Made Real to make the Urukundo Learning Center a reality there. It began as an orphanage for children displaced by the genocide of 1994 and now provides children up to age 21 with an education.

Meeks, who enjoys reading and going to the beach in her rare down time, isn't done contributing. Asked her proudest accomplishment, Meeks says, "I hope it hasn't happened yet. I don't want to think I've done it all and start singing 'I Did It My Way' just yet." Mcl

1. Valli Meeks takes a selfie with graduates of the University of Rwanda School of Dentistry. 2 and 5. Meeks treats patients in UMSOD's PLUS Clinic. 3. Meeks with Donna Hackley, faculty, Harvard School of Dental Medicine and the University of Rwanda School of Dentistry 4. Meeks instructs dental students at the University of Rwanda School of Dentistry. 7. (left to right) UMSOD Dean Mark A. Reynolds, Meeks, and UMB President Jay A. Perman at the 2018 Founders Week Gala ceremony. 8. The University of Rwanda's first class of dentists graduated in November 2018.

Lasting Impressions



FocalPoint

The Impact of Mentoring

BY HOWARD E. STRASSLER, DMD I am constantly struck by the growing importance of mentors in our profession. Students not only are facing rapid changes in technology and dentistry, but also myriad tough choices about postgraduate programs, practice opportunities, dental licensure, and service. While my focus is teaching and academics, I have noticed that today's students increasingly benefit from one-on-one advice on a range of topics. Many might display a laser-like focus on their coursework, but come the summer between their third and fourth years, they are pondering the question, "What do I do next?"

Last summer, a fourth-year student came to me for advice. She was weighing whether to

pursue private practice, join a corporate dental service organization practice — both of which would allow her to begin paying back loans or pursue a residency, which would allow her to further her clinical training. As a willing mentor, I spent the better part of an hour asking questions aimed at helping her create a sheet of the pluses and minuses of each option. She had questions for me, as well. In the end, she applied to several Advanced Education in General Dentistry programs.

When I teach our future dentists the principles and intricacies of restorative dentistry, I am increasingly aware that I also need to provide insights about communicating with patients. Like others of their generation, University of Maryland School of Dentistry (UMSOD) students conduct most of their conversations via keyboard, whether on a smartphone or computer. One-on-one conversations — in which the person in the chair may be making important oral health decisions — are very different from our students' other interactions. For me, a vital piece of dental education is developing a comprehensive "philosophy of dental practice."

Frequently, students ask how I know what to say to patients. I tell them I converse with patients using a hybrid of all that I learned from my teachers and colleagues. At UMSOD, students have many opportunities to soak up knowledge, whether from the school's remarkable faculty or members of the Dean's Faculty, who volunteer their time teaching in the clinics.

I appreciate how lucky I was to have had those who came before me serve as my mentors. One of the brightest parts of any day is when UMSOD alumni thank me for being part of their dental education. You, too, can make a difference by sharing insights with a beginning dentist at your practice or volunteering as a Dean's Faculty member. **Md**

FocalPoint is a recurring feature written by a UMSOD faculty member about an area of research, education, or clinical patient care.

CommunityOutreach

The Mission? Build an Army of Volunteers

INTERVIEW BY GWEN FARISS NEWMAN

After spending 24 years in private practice, Ramsay Koury, DMD, joined the University of Maryland School of Dentistry's (UMSOD) Dean's Faculty Program in 2011. Named general practice director of the school's Department of General Dentistry six years ago, the clinical assistant professor supervises operative, prosthodontic, periodontal, and treatment planning procedures. Here, the graduate of Juniata College and the University of Pittsburgh School of Dental Medicine, both in Pennsylvania, talks about his efforts to create a culture of volunteerism among dental and dental hygiene students and the effect he hopes the students will have in the future.



Ramsay Koury consults with faculty members Lisa D'Affronte, DDS '12, and Aleah Cho, DDS '15, at the 2017 Baltimore Mission of Mercy.

The Mission of Mercy (MOM) is an annual event organized by United Way of Central Maryland and other community groups to serve the oral health needs of the homeless and underserved. Have you always been interested in volunteerism or did MOM inspire you?

Actually, it was the reverse. I got into dentistry by going on a "missions trip" to the Dominican Republic sponsored by Medical Group Missions. I had the opportunity to participate with a cousin who is a dentist, and, after I saw the difference it made, that annual trip became my favorite part of the year and inspired me to go into dentistry.

How did you initially get involved in MOM — and was it what you expected?

I was asked to spearhead the school's participation because of my experience in Central America. It surprised me how similar MOM is, and it amazes me how much unmet dental need we have in Maryland. I have seen worse dental problems here in Maryland than in South America. The problem isn't lack of access to care: It's that patients lack the income to do anything other than emergency care.

How has the MOM event evolved over time? In the summer of 2016, we set up 65 patient chairs and treated 701 patients. Patients lined up for the opportunity — not surprising since oral health care has been identified as the No. 1 problem for the homeless and underserved in our community. Meanwhile, UMSOD students performed 90 percent of the care and required far less faculty oversight than we had anticipated. We've since become more efficient; the number of chairs has grown to 100, and the number of patients has increased by 33 percent.

Q The event continues to grow, is that correct? **A** Yes, on Feb 28 and March 1, we held a Baltimore Mission of Mercy. Over two days, 200 dental and dental hygiene students volunteered their time and treated more than 600 people during 715 patient visits. Of course, they were joined by supervising faculty members, dozens of UMSOD staff members, and volunteers from UMB and supporting organizations.

How many volunteers has UMSOD sent to MOM thus far?

So far, more than 700 students, more than 100 faculty, and about 75 sterilization staff members have volunteered at MOM.

What was your initial vision for UMSOD's participation in MOM? Has it met your expectations?

Originally, I didn't have a vision. But I am delighted to be involved, and the vision now is to continue building the program until all UMSOD students are able to participate. It's an amazing experience, and if we generate an army of volunteers, it is a lasting legacy for our school. These students are at the beginning of their careers — and they have the potential to do amazing things. Md

Laurels



▲ Vineet Dhar, BDS, MDS, PhD, clinical professor and chair, Department of Orthodontics and Pediatric Dentistry, was the 2018 recipient of the Evidence-Based Dentistry Mid-Career Faculty Award from the American Dental Association (ADA). The award was presented in October during the ADA annual meeting in Honolulu.



▲ Jacquelyn Fried, RDH, MS, retired associate professor, co-presented a session titled "The Nuts and Bolts of Interprofessional Education," at the International Dental Hygiene Educators' Forum on June 19 in Columbus, Ohio.



▲ Joel Greenspan, PhD, chair, Department of Neural and Pain Sciences, and co-director, University of Maryland Center

to Advance Chronic Pain Research, in May was elected vice chair of the Maryland State Anatomy Board.



▲ Gary Hack, DDS '79, MS, clinical associate professor, Department of Advanced Oral Sciences and Therapeutics, gave a poster presentation titled "An Interprofessional Collaboration to Implement and Evaluate Adult Diabetes Screening in a Dental School (UMSOD) Clinic," at the American Association of Diabetes Educators' Annual Conference held Aug. 17-20 in Baltimore.

Surya Joseph, DDS, MBA, second-year resident, Division of Orthodontics, received the Charles J. Burstone Research Aid Award of \$5,000 from the American Association of Orthodontics for a one-year project titled "Use of Temporary Anchorage Devices for Ridge Preservation after Tooth Extraction."



▲ Radi Masri, DDS, MS, PhD, associate professor and direc-

tor, Division of Prosthodontics, received the American College of Prosthodontists (ACP) 2018 Distinguished Service Award. The award was presented in November at the ACP's annual session in Baltimore.

Mary Anne Melo, DDS, MSc, PhD, associate professor and director, Division of Operative Dentistry; Michael Weir, PhD, research assistant professor, Division of Biomaterials and Tissue Engineering; and Huakun Xu, PhD, MS, professor and director, Division of Biomaterials and Tissue Engineering; were among the co-authors of the paper "Tuning Nano-Amorphous Calcium Phosphate Content in Novel **Rechargeable Antibacterial** Dental Sealant," which was published in August in the journal Materials.



▲ Thomas W. Oates, DMD, PhD, professor and chair, Department of Advanced Oral Sciences and Therapeutics, in July received a \$50,000 grant from Straumann USA, LLC, for support of education and training for the 2018-2019 academic year.

Jin Y. Ro, PhD, professor, Department of Neural and Pain Sciences, in September received a two-year grant of \$424,875 from the National Institute of Dental and Craniofacial Research.

Abraham Schneider, DDS,

PhD, associate professor, Department of Oncology and Diagnostic Sciences, was among the co-authors of a manuscript titled "Nicotine Induces Oral Dysplastic Keratinocyte Migration via Fatty Acid Synthase-Dependent Epidermal Growth Factor Receptor Activation," which was published in *Experimental Cell Research* in June.

Harlan J. Shiau, DDS, DMedSc, associate professor and director, postgraduate program, Division of Periodontics, gave a lecture titled "Biological Basis for Oral and Systemic Health Interactions: A Critical Appraisal" during the Chesapeake Dental Conference held Sept. 20-22 in Ocean City, Md.



▲ Vivek Thumbigere-Math, BDS, PhD, assistant professor, Division of Periodontics, received the 2018 American Academy of Periodontology (AAP) Teaching Fellowship at the AAP annual conference held Oct. 27-31 in Orlando, Fla.

Object Lesson

Scalers with handles fashioned from mother-of-pearl and adorned with finely detailed, silver-gilt crowns were used by Sir Edwin Saunders to ensure the oral health of Queen Victoria. These two belong to a set of six on display in the Dr. Samuel D. Harris National Museum of Dentistry and bear the 1846 hallmark of Charles Rawlings and William Summers, London. MC

PHOTO BY TRACEY BROWN

Agents OfChange



Shashank Joshi and Malek Alshehri are 2018-19 Nobel Fellows

BY HOLLY SELBY

On any given day, Shashank Joshi, BDS, MBA, MS '18, may design a treatment plan for a patient with multiple failing implants — or oversee predoctoral students in the clinic, or work side-byside with a senior faculty member highly trained in both Periodontics and Prosthodontics.

"Some days I am completing straightforward surgeries. Other days, I am teaching our predoctoral students," said Joshi, one of two 2018-19 recipients of the Nobel Biocare Periodontic/ Prosthodontic Fellowship for Implant Dentistry at the University of Maryland School of Dentistry (UMSOD). "I've trained as a specialist in Periodontics and now I can spend a year studying Prosthodontics." The program, made feasible by a recent grant of \$1 million from Nobel Biocare, enables two rising oral health professionals to extend their three-year postgraduate training in Periodontics and Prosthodontics with an additional year of interdisciplinary study during which they will work with outstanding faculty mentors, teach, and conduct research.

The grant also provides dental componentry for use in the UMSOD clinics, which allows dental students a chance to hone their skills, as well as lowers costs and expands access to care for patients in need.

"Nobel Biocare has long been committed to promoting improved patient care and advancing dental treatment through research, education, and training, and we are pleased to be able to provide the School of Dentistry this support," said Dianne Cusati-DeMatto, key account manager, specialty markets at Nobel Biocare.

"We also are very pleased that the grant will support the study of leading-edge patient solutions involving dental implants and prosthetics by postgraduate specialty students."

Noting that the gift marks 13 consecutive years of support for the School of Dentistry by Nobel Biocare, Mark A. Reynolds, DDS '86, PhD, UMSOD dean and professor, said, "Nobel Biocare has shown its understanding of the importance of developing new oral health leaders. With this year of cross-training, these fellows will gain an invaluable understanding and appreciation of these highly inter-related specialties — and emerge well-prepared to resolve highly complex patient needs."

Malek Alshehri, who is also a Nobel Fellow, completed a Prosthodontic residency at UMSOD and chose to continue his training specifically to explore the periodontic specialty. "Without the support of the Nobel Fellowship, I would not have the chance to participate in the program," he said. He hopes one day to work in health administration in his home country of Saudi Arabia, he said. "The training I get here will prepare me for leading positions in hospitals." Mcl

Knowing Where You Come From

Although Teebok Daesung Choe, DDS '18, has fond memories of visiting his father's dental practice as a child, goofing around with the gross anatomy skull and making the typodont clatter, he initially had no interest in dentistry.

His father, three uncles, and two cousins are dentists, and he was determined to carve out his own professional path.

"For a long time, I didn't want to be a dentist," says Choe, who earned a bachelor's degree in biology from the University of North Carolina at Chapel Hill. "I looked into law and social services, then I gradually realized that dentistry had everything I wanted. I wanted to work with my hands. I was good at sciences. I wanted to help people."

Once he came to that conclusion, choosing to attend the University of Maryland School of Dentistry (UMSOD) was relatively easy. After all, he is among seven family members (including five Choes) to attend the school. He is preceded by his father, Mike W. Choe, DDS '88, a general dentist in Fayetteville, N.C.; and uncles Mark C. Choe, DDS '96, a general dentist in Fairfax, Va.; and Kyong S. Choe, DDS '02, a periodontist in Towson, Md., and a UMSOD Dean's Faculty member. His cousins, Belinda Wong, DDS '09, and Richard Wong, DDS '10, practice in Waldorf, Md., and Huntingdon, Pa., respectively. His sister, Suzie Choe, is a secondyear UMSOD student. A third uncle attended the Arthur A. Dugoni School of Dentistry-University of the Pacific in San Francisco.

"[UMSOD] just seemed like the right choice," Teebok says.

He has not regretted his decision. Choe thrived as a student, serving four years as president of the Class of 2018 and co-founding the Practice Management Club. He also belonged to the Student National Dental Association and the Korean American Student Dental Association and volunteered at the Baltimore Mission of Mercy.

These days, he is chief resident in the Advanced Education in General Dentistry program at UMSOD and, just months after graduating, became a donor to the school. The experience of being a resident thus far has been eye-opening, he says. "I get to observe



and practice some of the most cuttingedge dentistry — like digital dentistry — being done every day, and there are many experts I can learn from here."

He was inspired to give back to the school by a sense of gratitude, he says. His father, too, provided an example in 2016 by establishing the Choe Family Scholarship Endowment in the Periodontics Graduate Program.

"The school has given me so much. It has given me a career. It is a place I call home, so giving back to where I came from makes sense," Choe says.

"They say you should always know where you come from, and this is where I started." Mcl

- HOLLY SELBY

Honoring the Legacy Circle

More than 30 University of Maryland School of Dentistry (UMSOD) alumni, faculty, and staff gathered Dec. 5 to celebrate the school's successes — and the formation of the Legacy Circle. The newly formed group comprises those who have made a gift provision for the School of Dentistry as part of their estate plans.

Remarks were given by Melvin F. Kushner, DDS '66, chair of the UMSOD Board of Visitors; Vineet Dhar, BDS, MDS, PhD, clinical professor and chair of the Department of Orthodontics and Pediatric Dentistry; and Mark A. Reynolds, DDS '86, PhD, UMSOD dean and professor, at the luncheon — held at the Dr. Samuel D. Harris National Museum of Dentistry. Md



The Future Has Begun

Progress is underway at the University of Maryland School of Dentistry (UMSOD). Renovations, which include moving the Faculty Practice Clinics from the fourth floor to the first, began last winter. These physical changes to the school, slated for completion in June 2019, represent the first phase in establishing our new Center for Integrative Dentistry and Health, where multidisciplinary teams of UMSOD's expert faculty will offer care to patients with complex dental and medical needs.

The new facility will provide evidence-based, patient-centered diagnosis and treatment to individuals requiring advanced oral health care. It also will reflect a medical model of education, with faculty as primary providers of care, building on the school's tradition of state-of-the-art clinical care and teaching.

"I am pleased that the renovations have begun," said Mark A. Reynolds, DDS '86, PhD, dean and professor. "These and other innovations will position the school to provide highly coordinated, team-based care for patients with challenging health care needs, including those requiring special care and sedation, with cleft palate/craniofacial disorders, or chronic orofacial pain." Md



- HOLLY SELBY



CATALYST

A person who causes action | An agent of change A stimulus, spark, or incitement

YOU & UMSOD

For more than 175 years, UMSOD has worked to advance oral health and improve lives. Your support of our capital campaign will allow us to:

- Support our students through scholarships and fellowships,
- Make groundbreaking research possible,
- Leverage technology to enhance the student experience,
- > Endow chairs and professorships,
- Create unique centers of integrative care where faculty specialists treat patients with complex oral health care needs.

For information about how you can be a catalyst, please contact us: *Catalyst.umaryland.edu* or 410-706-7146.

Alumni



From the Alumni Association

I look forward to seeing you very soon at the All-Alumni Reunion Weekend! The event, scheduled for April 12-13, offers us an opportunity to reconnect with old friends, learn about changes at our school, and celebrate our fellow UMSOD graduates.

Festivities will begin Friday with the Opening Reception and Distinguished Alumni awards ceremony. On Saturday, we are all invited to attend the Grand Class Luncheon.

Of course, current students also will be leading tours of the school on Saturday. The tours are a great way to hear from students about what's new and interesting at the school. Every time I take one, I am reminded of how proud I am of my alma mater.

Did you know, for example, that 100 percent of the Class of 2018 passed their board exams before graduation? Or that Robert K. "Bob" Ernst, PhD, professor and vice chair in the Department of Microbial Pathogenesis, last fall was awarded a \$6.4 million contract from the National Institutes of Health's National Institute of Allergy and Infectious Diseases? His work in developing a new type of adjuvant has great potential to increase the efficacy of vaccines. One of the Alumni Association's goals is to strengthen the relationship between you, our alumni, and our school. We hope that Reunion Weekend will begin that process. Additionally, in the future, you'll be seeing representatives from the school at more local meetings and events — ready to share up-to-date news and opportunities for alumni to get involved and support the school.

Photo by Holly Selby

FIRST DENTAL COLLEGE

We're also working to build a stronger network between alumni and current students. Our aim is to offer alumni more opportunities to mentor students as they prepare to choose residencies and career paths. These kinds of relationships will form the foundation of the strong alumni engagement so critical to our school's future success.

Best regards, Mary Ziomek, DDS '85 President | Alumni Association Board of Directors

For more information about the

Alumni Association or events, please contact Jamie Myers, director of annual giving and alumni engagement, at 410-706-3663 or *jamiemyers@umaryland.edu*.

ClassNotes

Catrise L. Austin, DDS

Catrise L. Austin, DDS '96, was profiled in August by the online publication *Electronic Urban Report*, which explored her path to becoming a dentist for celebrities such as Cardi B and Paula Abdul.

Tarek El Badawy, DDS

Tarek El Badawy, DDS '13, received an Academy of General Dentistry (AGD) fellowship during the AGD's Annual Meeting on June 9 in New Orleans.

Michael Everett, DDS

Michael Everett, DDS '90, received the Lifelong Learning and Service Recognition Award from the AGD in June.

Christine Ferrell, DDS, and Ellen Im, DDS

Christine Ferrell, DDS '05, and Ellen Im, DDS '06, were spotlighted in *Incisal Edge's* "40 Under 40" list, the magazine's eighth annual celebration of 40 of the finest dental clinicians age 40 and under.

> If you have news to share, please send it to hselby@umaryland.edu





Inventions: We Asked, You Answered

In the last issue of *Mdental*, we asked alumni to share news of any recent inventions. Mark Hanson, DDS '83, wrote in about his patented product Fantastic Floss Picks, an inexpensive disposable floss pick and the only one manufactured with screw threads in the handle, which allows for "powered" flossing, he wrote. "This enables the pick to be threaded onto a number of different handles, including a Sonic brush head like Sonicare and a pulsating brush head like the Pulsar brush by Oral B." Hanson, a member of the Omicron Kappa Upsilon Dental Honor Society, practices in Punta Gorda, Fla. **Md**





Are you ready for the National Board Dental Hygiene Examination?

Test yourself:

1 The pharmacological abbreviation "qid" means:

2 A malignancy of tissue that originates from mesenchyme is a ______.

True or false: Vertical bone loss occurs in a plane parallel to the CEJ of the adjacent.

'It's Hygienic' Board Game Produces Big Wins

BY GWEN FARISS NEWMAN

In 2015, as Maura Ordovensky, BS '99, RDH, watched her daughter, Kylie, then a student at Howard Community College in Columbia, Md., juggle classwork and preparation for the National Board Dental Hygiene Examination (NBDHE), inspiration struck.

"She and her classmates were preparing for the NBDHE, struggling under the stress of the program — and the pressure was mounting," recalls Ordovensky, who works at Columbia Smiles Family Dentistry. "That inspired the idea to create a team-building competition to help students prepare."

Ordovensky turned to classmate Bianca Harris, BS '99, MS '05, RDH, to flesh out the concept. "Early on, Bianca and I felt that most students would respond to a lighthearted, game-based format to counter the intense stress of completing a hygiene program," Ordovensky says. "Gameifying the study of board exams is not common practice."

Ordovensky and Harris, who practices with her husband at Harris Dental Group in Ellicott City, Md., created Board Games, LLC. They chose the TV show *It's Academic* as a template, and adapted it to fit the content related to the field of dental hygiene. Called *It's Hygienic*, the contest, which debuted in 2017, was a hit.

This year, *It's Hygienic* competitions are scheduled in nine locations throughout the country, from Delaware to California. There is no cost for hygiene students to play, and participants are invited to apply for \$400 scholarships, provided by Board Games, LLC.

"One team mentor in our Philadelphia region competition told us that last year was the first year all of her students passed their boards, and the only thing they changed was coming to our competition," Ordovensky says. "That made all the long hours of work and days of travel worth it."

For more information about *It's Hygienic*, visit *itshygienic.com* Md

"Early on, Bianca and I felt that most students would respond to a lighthearted, game-based format to counter the intense stress of completing a hygiene program."

- MAURA ORDOVENSKY, BS '99, RDH

InMemoriam

Bryan P. Fitzgerald, DDS '90

Bryan P. Fitzgerald, DDS '90, a specialist in implants and periodontal surgery, died Nov. 20, 2018, from esophageal cancer. He was 55.

A partner at Feldman, Fitzgerald, & Choe in Towson, Md., for more than 20 years, Fitzgerald also served during that period as a part-time faculty member at the University of Maryland School of Dentistry (UMSOD). His responsibilities included oversight of the periodontal implant curriculum in the Advanced Education in General Dentistry Program (AEGD) and the Implant Periodontal Prosthodontics Program.

"He was a superb clinician and a wonderful person," said Douglas M. Barnes, DDS '83, MS, professor in the Department of General Dentistry, who recruited Fitzgerald to the AEGD in 1996. "He had great rapport with

patients and students." Born in Alexandria, Va., and raised in Baltimore County, Md., Fitzgerald earned a bachelor's degree from Towson University in 1986 before graduating magna cum laude from UMSOD. He completed a residency in 1991 at the Baltimore Veterans Affairs Medical Center, where he served as chief resident from 1992-93. For the next two years, he served as a clinical

instructor in restorative dentistry at UMSOD and, in 1997, received certification in periodontics, also from UMSOD. A diplomate of the American Academy of Periodontics and a member of the American Academy of Periodontology and the Academy of Osseointegration, Fitzgerald was the recipient of numerous awards and distinctions throughout his career, including the Harry B. Schwartz Award, the American Academy of Periodontology Award, the Alexander H.

Patterson Medal, and the Nathan Gold Memorial Award. In addition, he was a member of the American Dental Society, Baltimore County Dental Society, Omicron Kappa Upsilon Honor Society, Gorgas

Odontological Honorary Society, and Gamma Pi Delta Honor Society. A gifted athlete, Fitzgerald was a skier, marathoner, and triathlete who also coached youth athletic teams and loved the competitiveness and camaraderie of sports such as lacrosse, football, tennis, and paddle tennis.

He is survived by his wife, the former Elizabeth M. Kaplan; daughters Sarah K. Fitzgerald Sacco of Jersey City, N.J., and Hailey Joy Fitzgerald of Towson; and many other family members. He was the son of Paul Fitzgerald, president of Ratner, Schweitzer & Robbins, a road construction company, and Kay Ward Fitzgerald, an artist. Mc



Obituaries

We are saddened by the loss of the following alumni and friends:

Norman M. Bevan Jr., DDS '70 Charles L. Brandenburg Jr., **DDS '54** Neil R. Bryson Jr., DDS '68 Dominic M. Gioffre, DDS '69 Gary K. Gold, DDS '64 Herbert W. Grambow Jr., DDS '56 William E. Landefeld Jr., DDS '57 John M. Moffitt, DDS '69 Angela P. Moss, DDS '95 Eugene M. Sadd, DDS '56 Kenneth P. Simmons, DDS '81 Douglas G. Spink Jr., DDS '64 Edward Jack Taggart Jr., DDS '68 Donald M. Tilghman, DDS '61 Savas Tsakiris, DDS '80

*The school learned of the passing of these alumni between June 1, 2018, and Nov. 30, 2018.

If you have news to share, please send it to hselby@umaryland.edu





Mark E. Shirtliff, PhD, Professor

Researcher and entrepreneur Mark E. Shirtliff, PhD, died July 12 while rafting in the Yellowstone River near Gardiner, Mont. A professor in the Department of Microbial Pathogenesis at the University of Maryland School of Dentistry (UMSOD), he held a secondary appointment as professor in the Department of Microbiology and Immunology at the University of Maryland School of Medicine (UMSOM). He was 49.

Shirtliff was the lead inventor of a vaccine technology that the University of Maryland, Baltimore (UMB) last year licensed to Serenta Biotechnology, LLC, a Gaithersburg, Md.based startup for which he was a co-founder and chief scientific officer. The license is based on technology co-owned by UMB and another university that is the basis for a multivalent vaccine against infections caused by *Staphylococcus aureus*, a bacterial strain often resistant to antibiotics.

His most recent work was aimed at developing a hand-held technology that would be adept at identifying six of the most virulent kinds of bacteria, including *Staph aureus*.

"He contributed in so many ways, as a teacher and mentor, a researcher, and an active member of the University community."

- JAMES B. KAPER, CHAIR OF THE DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY AT UMSOM

"Mark was a brilliant scientist and professor who pursued innovation and knowledge with seemingly unstoppable energy and enthusiasm," said Mark A. Reynolds, DDS '86, PhD, dean and professor of UMSOD. "His groundbreaking work in developing a novel way to speed the diagnosis of some of the most virulent kinds of bacteria has great potential to save many lives. Moreover, Mark was a remarkably generous colleague who, whether asked to sit on a committee, collaborate on a project, or launch a new research initiative, could be counted on to give his all."

A leading expert in the field of biofilm, Shirtliff authored more than 120 peer-reviewed scientific papers and book chapters on pathogenic microbes in which he explored their biofilm mode of growth and the chronic diseases they cause. He was known for his collaboration with colleagues in multidisciplinary research, his entrepreneurism, and his mentorship. In fact, at his UMB memorial service, many former students spoke of how his mentorship had transformed their lives.

"Mark was a highly valued member of the microbiology and immunology community at UMB. He contributed in so many ways, as a teacher and mentor, a researcher, and an active member of the University community," said James B. Kaper, PhD, chair of the Department of Microbiology and Immunology at UMSOM. "He was a dedicated teacher and mentor who helped and inspired many of his students to become scientists themselves. He was a good and generous person who was a dear friend to many of us. His tragic death is a heartbreaking loss in so many ways."

Shirtliff lived in Ellicott City, Md., with his wife, Birthe Kjellerup, PhD, MSc, assistant professor in the Department of Civil and Environmental Engineering at the University of Maryland, College Park. He is also survived by four children. Md

CONTINUING EDUCATION COURSES

 Local Anesthesia for the Dental Hygienist

Presented by Marion C. Manski, RDH '88, MS '04

Thursday-Saturday, April 11-13 8 a.m. to 5 p.m.

Orthodontics Team Approach for Interdisciplinary Dentistry

Presented by Jose A. Bosio, DDS, MS

Saturday, April 13 8 a.m. to 3:30 p.m.

Combined Inhalation-Enteral Conscious Sedation for the Adult Dental Patient

Presented by Marvin Leventer, DDS '90, and Richard L. Wynn, PhD

Thursday-Saturday, April 25-27 8 a.m. to 5 p.m.

Combined Inhalation-Enteral Conscious Sedation / Update of Pharmacology and Review of Airway Management and Emergencies

Presented by Marvin Leventer, DDS '90, and Richard L. Wynn, PhD

Friday-Saturday, April 26-27 8 a.m. to 4:30 p.m.

Three-Dimensional (3D) Endodontic Instrumentation and Obturation

Presented by Bradley Trattner, DDS '88

Saturday, May 4 8 a.m. to 3 p.m.



Nitrous Oxide Administration and Monitoring for the Practicing Dental Hygienist

Presented by Deborah Cartee, RDH '02, MS

Saturday, May 4 8 a.m. to 3 p.m.

Infection Control is Not Optional / Proper Pharmacologic Prescribing and Disposal/Scope of Abuse

Presented by Louis DePaola, DDS '75, MS; Christine Wisnom, RN, BSN; and Richard L. Wynn, PhD

Saturday, May 18 8 a.m. to 4 p.m. Local Anesthesia for the Dental Hygienist

Presented by Marion C. Manski, RDH '88, MS '04

Tuesday-Thursday, July 9–11 8 a.m. to 5 p.m.

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GameChanger

Taking a Shot at Cancer

BY HOLLY SELBY

Photo by Scott Hesel

As a practicing dentist, Rania Younis, BDS, MDS, PhD, assistant professor in the Department of Oncology and Diagnostic Sciences at the University of Maryland School of Dentistry (UMSOD), learned the critical importance of recognizing the early signs of squamous cell carcinoma. That awareness, and an interest in basic science research, spurred her to specialize in oral pathology focusing on head and neck squamous cell carcinoma (HNSCC).

Younis, who heads a UMSOD research lab investigating the immunology of HNSCC, now is part of an international, multidisciplinary team of health professionals fasttracking possible solutions to a pressing question in immunotherapy.

Describing the project as a "moonshot," Younis says that the team will conduct a clinical trial to define and implement guidelines for the duration and cessation of immunotherapy. A board-certified pathologist, Younis will serve as the team's histopathologist.

The effort is part of Sparkathon, an international competition organized by the Society for Immunotherapy of Cancer. In its second year, the competition identifies "early career" researchers and provides funding for work addressing a critical issue in immunotherapy within a condensed time frame. Younis was part of a team that was awarded \$200,000 last fall to study how to increase the safety margin for cancer immunotherapy patients.

Immunotherapy is a cancer treatment that boosts the body's natural defenses to fight cancer. In recent decades, it has become an area of intense interest to researchers.

In immunotherapy, white blood cells called cytotoxic T cells have the ability to kill malignant cells even in very advanced stages of cancer, says Younis. Under normal conditions, however, these T cells are "under continuous suppression through checkpoints and suppressor cells."

Typically, it takes about two decades for research to be translated into clinical practice, but the Sparkathon team has roughly one year to execute its project. Its findings will be considered for publication in the *Journal of ImmunoTherapy of Cancer* and for presentation at the society's 2019 conference.

"It is exciting to be part of this project — I am working with leading 'early career' multidisciplinary experts from all over the world who have an interest in immunotherapy," says Younis, who was born in Egypt. "Exciting, but as they say, the devil is in the details. We hope and we think we are all up to the task!" Md



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