Advancing Oral Health. Improving Lives.™

OUTSTANDING INNOVATOR

Mary Ann Jabra-Rizk, PhD, is honored as an MPower
Professor

NETWORKING EVENT

UMSOD, Howard University assess dental care

SCENE THIS?

Check out a snapsho of what's happening

Maental

THE MAGAZINE OF THE UNIVERSITY OF MARYLAND SCHOOL OF DENTISTRY | WINTER 2024 'MISSION' **ACCOMPLISHED UMSOD Community** Contributes to a Successful Eastern Shore Mission of Mercy



OfNote

Photo by John Consoli / UMCP

Mary Ann Jabra-Rizk, PhD, professor in the University of Maryland School of Dentistry's (UMSOD) Department of Oncology and Diagnostic Sciences, was among the 20 MPower Professors honored Oct. 4 at a luncheon held at University House at the University of Maryland, College Park (UMCP). The event recognized the professors' significant collaborations in the fields of arts and humanities, behavioral and social sciences, computer science, dentistry, engineering, medicine, nursing, pharmacy, and public health.

The professorships are awarded by the University of Maryland Strategic Partnership: MPowering the State (MPower) to select innovative researchers and outstanding leaders at the University of Maryland, Baltimore (UMB) and UMCP who pursue breakthroughs across disciplines with colleagues in an effort to speed the pace of discovery. Md

- HOLLY SELBY







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The University of Maryland School of Dentistry (UMSOD) remains a special place where the members of our community share a commitment to serving the public good. In recent months, I've been particularly impressed by the passion our faculty, staff, and students have for working together to accelerate advances in oral health care and accessibility.

Many of the articles in this issue of *Mdental* highlight the diverse ways that members of the UMSOD community use technology, research, and outreach to advance patient care. Frequently, the common thread in these efforts is collaboration.

In October, I had the pleasure of attending a ceremony that honored 20 MPower Professors from the University of Maryland, Baltimore and the University of Maryland, College Park, including Mary Ann Jabra-Rizk, PhD, professor, UMSOD's Department of Oncology and Diagnostic Sciences (ODS). These innovative researchers have shown exceptional skill in working across disciplines with colleagues to drive the pace of discovery.

More innovative teamwork is being guided by Thomas W. Oates, DMD, PhD, chair and professor, Department of Advanced Oral Sciences and Therapeutics. Dr. Oates aims to enlist students from UMSOD and Howard University College of Dentistry to explore disparities in oral health care. Funded by a National Institute of Dental and Craniofacial Research (NIDCR) grant, the project will introduce the students to clinical research and UMSOD's Maryland Practice-Based Research Network in Dentistry, through which oral health professionals gather data within their practices that inform and advance patient treatments.

This issue also contains an interview with Abraham Schneider, DDS, PhD, chair of ODS and director of the Dental Biomedical Sciences PhD Program, who has assembled a multidisciplinary team with members from UMSOD and the University of Maryland School of Pharmacy. The investigation, which also is funded by NIDCR, aims to promote bone regeneration using the anti-diabetic drug, metformin.

In this issue, you'll also find articles that reveal many other types of collaboration. One describes the volunteer efforts of our dental and dental hygiene students who donate their time throughout the year in a range of ways, from writing get-well notes for ailing children to providing dental screenings.

Another article highlights the participation of UMSOD community members at the Eastern Shore Mission of Mercy in Salisbury, Md. Led by Ramsay Koury, DMD, clinical assistant professor in the Department of Comprehensive Dentistry, UMSOD faculty members and dental students provided free dental care to about 100 patients in need.

All these efforts — in research, teaching, and patient care — show the benefits of teamwork and making collaborative efforts part of our work's fundamental architecture. We often can make faster, greater progress as a trusting community of students, educators, researchers, clinicians, staff, alumni, and patients. We are in this together.

Best regards,

Dean and Professor

Mark A. Reynolds, DDS '86, PhD



ON THE COVER

Bonsa Nemera and Riana Joseph, fourthyear dental students, treat a patient at the Eastern Shore Mission of Mercy in Salisbury, Md. Photo by Alex Likowski

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



OnTheCusp

Scene Around School

urn any corner in or near the University of Maryland School of Dentistry (UMSOD), and you never know what you might find. To be sure, there always is plenty of dental training, scientific research, and patient care going on, but at any given time, you also might find ice cream socials, club fairs, guest speakers, or even a comfort K9 (aka therapy dog). What follows is a glimpse of some of the school's recent happenings. Md

UMSOD's faculty, staff, and students were invited to the School of Dentistry's annual Ice Cream Social, held on Aug. 26 — and part of the fun was being served ice-cold, sweet treats by Mark A. Reynolds, DDS '86, PhD, UMSOD dean.





Photos by Bethany Probst

Poe, a University of Maryland, Baltimore police comfort K9, and his handler, PFC Anthony Summers, visited UMSOD on Sept. 16. Poe frequently visits students who are experiencing anxiety due to exams, faculty and staff who need a break, and any who are coping with tragedy or trauma.



About 100 students attended UMSOD's annual Club Fair on Sept. 4 to learn about opportunities to get involved in the myriad clubs and organizations at the school. Held in the first-floor lobby, the fair featured students representing organizations ranging from the Running Club to the Korean American Student Dental Association, which were on hand to invite their peers to join the fun.



UMSOD's Student National Dental Association (SNDA) earned second place in the SNDA Chapter of the Year Awards (large chapter category) for the outstanding outreach programs and events it holds each year. With this award, the national organization recognizes student groups whose members excel in leadership and accomplishments, particularly in community service. This is the 11th consecutive year that the UMSOD chapter has received national recognition, finishing first or second in its category. Here, members of SNDA's 2023-24 executive board gathered for a portrait.

Expanding a Network, Enhancing Access to Oral Health Care

UMSOD and Howard University Collaborate to Explore Disparities in Dental Care

BY HOLLY SELBY



Faculty members and students from UMSOD and the Howard University College of Dentistry met in September to enhance a practicebased research network and assess equity in oral health care.

homas W. Oates, DMD, PhD, chair and professor, Department of Advanced Oral Sciences and Therapeutics, University of Maryland School of Dentistry (UMSOD), aims to enlist students from UMSOD and Howard University College of Dentistry in explorations of disparities in oral health care.

Funded by a five-year, \$3.5 million grant from the National Institute of Dental and Craniofacial Research, the project will introduce students to UMSOD's Maryland Practice-Based Research Network in Dentistry (PBRN) through which oral health practitioners from across the state collaborate with faculty members by gathering data within their practices that inform and advance patient treatments.

Students from UMSOD and Howard will be trained in clinical research with an emphasis on equity and diversity. They then will conduct research in their clinical settings while continuing their dental training.

"This is a wonderful opportunity for students and faculty to come together across institutions to support patient-centered research founded in equity," Oates said. "Our goal is to cultivate a strong network of experienced clinician-researchers who, when they graduate, will be experienced leaders in clinical PBRN research in support of equity in oral health care."

Last year, faculty members from UMSOD and Howard initiated a clinical research study conducted in the two academic oral health centers that will examine the effects of racial bias on clinical care. On Sept. 20, 2024, students and faculty from both institutions met at the University of Maryland BioPark to explore how implicit bias affects research and patient care outcomes and to foster scientific partnerships. Participants at the daylong conference engaged in roundtable discussions on topics such as the effects of bias on scientific studies, ethical considerations in human research, and reflections upon case studies of care.

Moving forward, the PBRN team will begin enrolling students and patients in the network and continue designing research projects of importance to their patients.

"This event was very appealing to me as a budding clinician-scientist, as it served as a real launching pad for us to begin collaborating across disciplines and campuses," said UMSOD third-year Doctor of Dental Surgery student Jeremie Oliver Piña, PhD, MS, MBA, who attended the September meeting.

"My hope is that this new collaboration will foster meaningful clinical investigations that provide more innovative, impactful solutions for our patients." Msl

At the Heart of Dental Care

Community Engagement Serves the Public, Enriches Student Learning

BY BETHANY PROBST

University of Maryland School of Dentistry (UMSOD) dental and dental hygiene students engaged in myriad community service activities over the past year, including packaging and delivering groceries for neighboring Baltimore communities, stuffing teddy bears and writing get-well notes for sick children, and providing free dental screenings, education, and fluoride treatments to underserved Marvlanders.

For example, in addition to their didactic and clinical requirements, the 128 members of the Doctor of Dental Surgery (DDS) Class of 2024 donated nearly 4,000 hours of community service during their four years of training.

Although there is no mandatory service requirement, dental students are encouraged to volunteer, gaining practical experience and contributing to and learning from community partners, said Kate Noonan, PhD, MSEd, assistant dean for student affairs and clinical assistant professor, Department of Dental Public Health.

"Time is an incredibly valuable resource for students in oral health professional programs," Noonan said. "UMSOD students consistently go above and beyond the demands of their coursework, patient care, and other

Third-vear dental students **Arezou Esmaeeli and Quynh** Le assembled teddy bears and wrote cards for children as a part of the University of Maryland, Baltimore's Warm Wishes Workshop.

academic and clinical obligations to engage with their communities."

Cameron Watson, president of the DDS Class of 2026, is a member of the Student National Dental Association (SNDA) and the American Association of Public Health Dentistry's Community Outreach and Engagement group, both of which routinely sponsor community engagement events.

Noting UMSOD's commitment to expanding access to oral health care, he said, "Every day, we are granted the privilege of treating patients who represent different Maryland counties. It is a great honor to work with people who maintain the high standard of care offered by UMSOD and recognize treating patients as a privilege, not a given."

Service learning is essential for UMSOD's dental hygiene students, who complete 125 community service hours as part of their class requirements before graduating. Additionally, they complete a didactic course on the oral health disparities affecting Maryland communities.

Last year, the dental hygiene Class of 2024 completed nearly 1,800 hours

Fourth-year dental



Photo by Laura Lyu

of volunteer service as part of their requirements and outside activities.

Throughout the year, dental hygiene students receive numerous requests from both within the school and the larger community for oral health prevention services.

"We provide education, screenings, fluoride varnish, and full-scope dental hygiene services in traditional and nontraditional settings," said Lisa Bress, RDH, MS, chief and clinical associate professor, Division of Dental Hygiene.

Class of 2026 dental student Jade Weatherington, a member of SNDA and the Maryland Academy of Pediatric Dentistry's student chapter, noted the importance of including patient education during screenings.

"The greatest impact comes from teaching, hoping that patients will go home and continue practicing good oral hygiene habits and maybe even make adjustments to improve their overall health," she said. "Seeing that light-bulb moment in a patient's eyes when they understand the importance of oral care is incredibly rewarding."

Erobomhan Agbonkhese, the dental hygiene representative for UMSOD's Dental Pride Society and historian for the Class of 2025 Student American Dental Hygienists' Association chapter, shares similar sentiments.

"It's surprising how many people are excited to learn, especially when it comes to their health," she said. "Being able to teach members of the community something new and seeing their 'aha' moment draws me to take part in these events." Md



(left) and Qasim Hasan demonstrate proper tooth brushing techniques to an athlete at the 2024 Special **Olympics Maryland Summer Games.**

students Madelyn Lovett

Photo by Sheryl Syme

Recognizing Differences, Seeing Strengths

UMSOD Educator Among Speakers to Offer Words of Wisdom at UMB's Annual Faculty Convocation

BY HOLLY SELBY



Sydnee Chavis, clinical assistant professor at UMSOD, was among three professors who spoke at UMB's Faculty Convocation.





UMB faculty members enjoyed the convocation, which included an academic procession, speeches, and a luncheon.

LEFT TO RIGHT: Mark A. Reynolds, DDS '86, PhD, dean of UMSOD; Sydnee Chavis, clinical assistant professor, UMSOD; and Roger J. Ward, EdD, JD, MSL, MPA, provost and executive vice president of UMB

UMB President Bruce E. Jarrell, MD, FACS, hosted the University's 2024 Faculty Convocation on Sept. 12.

eople with disabilities are usually seen as different—and sometimes less than," said Sydnee Chavis, DMD, MS, clinical assistant professor in the Department of Oral and Maxillofacial Surgery at the University of Maryland School of Dentistry (UMSOD). "When we are able to see someone beyond their disability, we have the chance to find what truly makes people recognize-able."

Chavis was referring to her older sister Brandi, who has cerebral palsy and developmental disabilities. Her remarks were made at the University of Maryland, Baltimore's (UMB) Faculty Convocation, where UMB faculty marked the start of the 2024-25 academic year. Chavis' fellow UMB professors Andrew Coop, PhD, MA, of the School of Pharmacy, and Kimberly Lumpkins, MD, MBA, of the School of Medicine, also spoke.

UMB President Bruce E. Jarrell, MD, FACS, opened the event with recognition of UMB deans, administrators, and guests from the University of Maryland Medical System and the University System of Maryland Board of Regents.

"The excellence of our University is on full display, highlighting our scholars, educators, and researchers," Jarrell said. "You will see that UMB's commitment to this community is on full display — the commitment to our

students, to the diversity of our campus, to our patients and clients, and to the citizens of Baltimore and Maryland."

Also honored were the 2024 cohort of Distinguished University Professors, the highest appointment that can be bestowed on faculty at the University: Richard Boldt, JD, Francis King Carey School of Law; Susan G. Dorsey, PhD, RN, FAAN, School of Nursing; and Steven Kittner, MD, MPH; William Regine, MD, FACR, FACRO, FASTRO; David Weber, PhD; and E. Albert Reece, MD, PhD, MBA, all from the School of Medicine. Reece was unable to attend and will be recognized next year.

In her remarks, Chavis described how she never perceived her big sister as different until one day a child in a restaurant asked of Brandi: "What's wrong with her?"

"It was beyond me at the time, though I realize now that this girl was raised without the gift of having a Brandi as a big sister," said Chavis, who then described how her 5-yearold son perceives Brandi: as a loving aunt.

"I want you to see my sister the way my son sees her and the way my 5-year-old self saw her: as someone who is recognized as *able* by her humanity, not *diminished* by her disability," Chavis said. Mcl

- LOU CORTINA CONTRIBUTED TO THIS ARTICLE



In a significant move to improve access to dental care for vulnerable populations, the state of Maryland has provided substantial financial support to the University of Maryland School of Dentistry's (UMSOD) Oral Health of Underserved and Uninsured Children (OH-UUC) program, including \$1 million in a legislative mandate of general funds and a \$35,000, one-year grant from the Maryland Department of Health.

Led by Vineet Dhar, BDS, MDS, PhD, assistant dean of postgraduate and professional studies in dentistry and clinical professor and chair, Department of Orthodontics and Pediatric Dentistry, OH-UUC provides dental care to children who lack access to oral health services. Since its launch more than a decade ago, the program has worked with community partners to identify and refer patients, serving nearly 600 children annually.

"This impactful funding from the state of Maryland bolsters our commitment to address the critical oral health needs of underserved children in our community," Dhar said. "With

State Support Boosts UMSOD Program for Underserved and Uninsured Youths

"This impactful funding from the state of Maryland bolsters our commitment to address the critical oral health needs of underserved children in our community."

- VINEET DHAR, ASSISTANT DEAN OF POSTGRADUATE AND PROFESSIONAL STUDIES, CLINICAL PROFESSOR AND CHAIR, DEPARTMENT OF ORTHODONTICS AND PEDIATRIC DENTISTRY

these resources, we can expand our reach and provide a dental home to those who need it most, ultimately improving the overall health and wellbeing of children in Maryland."

Funding from a variety of sources has enabled the program to enhance its services. This year, UMSOD was awarded a multi-year, \$250,00 access-to-care grant from the American Academy of Pediatric Dentistry (AAPD) Foundation. The AAPD Foundation long has supported the OH-UUC program with one-year, \$20,000 grants.

In addition, the Delta Dental Community Care Foundation and Abell Foundation have supported the program with funding that includes two recent grants of \$100,000 each.

"These partnerships enable us to not only sustain our services but also innovate and enhance the quality of care we provide to at-risk children in Baltimore and beyond," Dhar said.

The services offered by the OH-UUC program include oral health education, prevention, caries management, restorative care, oral sedation, orthodontics, oral surgery, endodontics, and sedation. Treatment is offered within the School of Dentistry, which allows for improved care coordination when necessary. Md

- BETHANY PROBST



Photo by Bethany Probst

Nearly 600 children receive dental care annually through the OH-UUC program.



Photo by Holly Selby

A New Lens for Empowering Patients

Anthony Fleg, MD, MPH, associate professor in the Department of Family and Community Medicine and the College of Population Health at the University of New Mexico, presented "Using a Strengths-Based Lens to See Our Patients/Communities" last summer in an event organized by the University of Maryland School of Dentistry's Office of Equity, Diversity, and Inclusion. In his talk, Fleg said that health care providers who focus solely on patients' weaknesses (disease, addiction, poor dentition) might miss important strengths (resources, culture, language) that could inform superlative care.

Making the Connection

UMSOD Programs Introduce Young Students to the Links Between Dentistry and Research

BY HOLLY SELBY



LEFT TO RIGHT, FRONT ROW: Hening Ren, PhD, assistant professor, Department of Oncology and Diagnostic Sciences, UMSOD; Man-Kyo Chung, professor, Department of Neural and Pain Sciences, and assistant dean of research and graduate studies, UMSOD; Jennifer Webster-Cyriaque, acting director, National Institute of Dental and Craniofacial Research, and keynote speaker; and Norbert Myslinski, PhD, associate professor, Department of Neural and Pain Sciences, UMSOD, with the participants of the Dental Research Experience Program.

or Austin Ndungu, the best part of participating in the Dental Research Experience Program (D-REX) at the University of Maryland School of Dentistry (UMSOD) last summer may have been learning about the deep connections between dentistry and research or observing how the dental clinicians treated and interacted with their patients.

Or, maybe, the junior at Augusta Fells Savage Institute of Visual Arts added, it was collaborating with his mentor and the other high school and college students who took part in the program.

"In terms of the rigor of the program, this was an experience I have never had before," Ndungu said. "I didn't know there was this kind of connection between dentistry and research, and that made me more interested in research."

Ndungu was among 25 high school, college, and dental students who participated last August in UMSOD's Student Research Day. The culmination of two UMSOD summer

programs designed to foster interest and know-how in dental and craniofacial research among predoctoral and dental students, the event, held in UMB's Westminster Hall, included guest speakers, a science poster competition, and a luncheon.

Participants were drawn from the Summer Research Training Program, which offers rising predoctoral and dental students opportunities to gain hands-on biomedical research experience under faculty mentorship, and D-REX. Supported by the National Institute of Dental and Craniofacial Research (NIDCR), D-REX is designed for high school students and teachers or undergraduate college students and is aimed at building a diverse workforce in dental health care, dental and craniofacial health research, and education.

Yasin Afrida, a rising junior at Johns Hopkins University, began the summer with a question: "Is it research that I am interested in, or is it what I am researching that is affecting my interest in dentistry?"

"In terms of the rigor of the program, this was an experience I have never had before. I didn't know there was this kind of connection between dentistry and research, and that made me more interested in research."

- AUSTIN NDUNGU



Photo by Holly Selby

Austin Ndungu, an Augusta Fells Savage Institute of Visual Arts student, who participated in the D-REX Program, presents his research in the science poster competition.



LEFT TO RIGHT, BACK ROW: Jeremie Oliver Piña, Maheera Chaudhry, Kelly Zhang, Alan Gorny, Hanbin Lee, and Luke Bollinger, dental students and participants in UMSOD's Summer Research Training Program **FRONT ROW:** Nicki Mitchell, office administrator, Department of Neural and Pain Sciences; Maya Patel, Nastaran Azar, Hannah Bui, Margaret Kim, Camila Calle, and Jibreel Ali, participants in the D-REX Program; and Mary Ann Jabra-Rizk, PhD, professor, Department of Oncology and Diagnostic Sciences

The chemistry major continued: "I found that I do enjoy research, and it opened my mind to DDS/PhD degrees, something I hadn't heard about before. It is nice to hear that combination exists, and that it is at the University of Maryland."

Kelly Zhang, a second-year UMSOD dental student, was drawn to the Summer Research Training Program by a fascination with bone regeneration and grafting. Under the guidance of Tao Lowe, PhD, professor, UMSOD Department of Oral and Maxillofacial Surgery, and the Fischell Department of Bioengineering in the A. James Clark School of Engineering at the University of Maryland, College Park, Zhang learned "how to get from an idea to the specifics of what experiments to run."

Oral disease is a global challenge, affecting about 3.5 billion people and representing a \$500 billion economic burden, said keynote speaker Jennifer Webster-Cyriaque, DDS, PhD, acting director, NIDCR. "Poor oral health

left untreated can result in worsened system health, poor nutrition, and decreased academic achievement," she said.

Gesturing toward the young researchers sitting before her, Webster-Cyriaque added, "We have a lot of work to do, and we need your help to do it."

The summer programs allow seeds for a future diverse workforce to be planted, said Man-Kyo Chung, DMD, PhD, professor, Department of Neural and Pain Sciences, and assistant dean of research and graduate studies, UMSOD.

"This program had another outstanding year, due to UMSOD's support and the dedication of Hening Ren and Norbert Myslinski, co-directors of D-REX, and Mary Ann Jabra-Rizk, leading mentor of the Summer Research Training Program," Chung said. "Thanks also go to the mentors for their wholehearted support. Most of all, I am incredibly proud of our trainees who devoted their summer to an immersive experience in dental, oral, and craniofacial research."

ByTheNumbers

Introducing the DDS Class of 2028!

The statistics don't lie: The members of the University of Maryland School of Dentistry's first-year Doctor of Dental Surgery (DDS) class are remarkable. They represent less than 5 percent of the applicant pool and collectively speak 25 languages, but — let's allow the numbers* to tell the rest of the story.

2,833

completed applications

57%

come from Maryland

128

members in the class

43%

come from 15 other states

23

average age

57%

are female

25

languages spoken

9.4%

are Hispanic

21

graduated from college cum laude, magna cum laude, or summa cum laude 12.5%

are African American/Black

6

students hold a Master of Science degree

21%

come from populations underrepresented in dentistry



Multiphase Upgrades Ensure Quality Dental Training and Patient Care

BY HOLLY SELBY



New cabinetry and dental chairs are part of the upgrades to UMSOD's clinics.



The ongoing renovations are designed to provide continued support of outstanding clinical education and patient care.



State-of-the-art equipment ensures that UMSOD's students are fully prepared to be future oral health leaders.

ew simulators that provide state-of-the-art educational experiences. Dental equipment designed to be adjustable for right- and left-handed providers. Cabinetry, paint, wall protection, and flooring chosen to create a soothing ambiance.

These are a few elements of a multiphase renovation and upgrade project launched to ensure that the University of Maryland School of Dentistry's (UMSOD) facilities continue to support a superlative learning environment for students and the highest quality care for patients.

Beginning May 2024 and scheduled for completion in late summer 2025, the project was meticulously planned to minimize impact on patient care and student clinical training. During the first phase, UMSOD's Advanced Education in General Dentistry and General Practice clinics on the second floor were renovated. Additionally, its three Simulation Labs received new, state-of-the-art equipment, as well as fresh paint and flooring.

The final phase, which includes the General Practice, Orthodontics, and Pediatric Dentistry clinics on the third floor and the Endodontics, Periodontics, Prosthodontics, Special Care and Geriatrics, and Plus clinics on the fourth floor, will begin in May 2025.

"These renovations will ensure that we continue to offer superlative dental training to all of our students while providing excellent patient care," said UMSOD Dean Mark A. Reynolds, DDS '86, PhD. "As we moved ahead, a top priority was making sure that our students' educational needs were met, and that any scheduling took into consideration all required competencies."

For example, Reynolds added, the scheduled work occurred during the summer months between 4 a.m. and noon to minimize its impact. To keep everyone informed about the plan, in-person and virtual town halls were held and a webpage was created to highlight updates.

"One of the goals of the renovation was to create a warmer, more welcoming environment for our patients," said Kent Buckingham, MS, executive director, Office of Information Technology and Facilities. "From the feedback we have received, I think we met our goal." Mcl

Gaining an EDGE

New Fellowship Helps UMSOD Early Educators Hone Teaching Skills

BY VANESSA CARROLL

our University of Maryland School of Dentistry

(UMSOD) faculty members are among the inaugural cohort of a new University of Maryland, Baltimore

(UMB) fellowship aimed at bolstering the teaching skills of junior faculty by enriching their professional expertise with education fundamentals. The Educator Development for Growth and Effectiveness (EDGE) fellowship will position these faculty members for job fulfillment and advancement and as catalysts of academic excellence in classrooms, clinics, and labs.

"While I trained extensively in my specialty, I had no formal training as an educator," said Azin Parsa, DDS, MS, MSc, PhD, clinical associate professor, Department of Oncology and Diagnostic Sciences, who is among the UMSOD fellows. "I want to be a model and mentor for the students I now train. Through my participation in EDGE, I hope to identify innovative strategies for making unfamiliar information more accessible."

Other UMSOD fellows are Hwan Hee Park, DDS '17, clinical assistant professor, Division of Prosthodontics, Department of Advanced Oral Sciences and Therapeutics; Renan F. do Espirito Santo, PharmD, MS, PhD, clinical instructor, Department of Neural and Pain Sciences; and Cameron Lee, DMD, MD, assistant professor and associate program director, Oral and Maxillofacial Surgery Residency, Department of Oral and Maxillofacial Surgery.

Launched in August 2024, the 10-month fellowship boasts fellows from throughout UMB and encapsulates best and emerging practices in junior faculty development. Among other activities, participants will:

- Explore pedagogical concepts that support teaching, service on curriculum committees, and contribution to accreditation activities,
- Create and enhance instructional materials,
- Create portfolios of activities aligned with best practices, personal teaching values, and instructional styles, and
- Work with a professional development coach.

Noting that inspired educators are essential to UMSOD's rankings, enrollment, and the critical advances the school

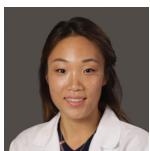


Renan F. do Espirito Santo





Cameron Lee



Hwan Hee Park

"This network will help make us a community of more complete professors who embrace possibilities for interdisciplinary learning."

- RENAN F. DO ESPIRITO SANTO

makes in oral health, Dean Mark A. Reynolds, DDS '86, PhD, said, "I am very proud of our junior faculty. Their ongoing support and success will remain a priority to the school's leadership as they advance through faculty ranks."

The chance to sharpen skills specifically for use in training health care providers was attractive to Park. "While I bring some education experience, oftentimes we are content experts — not education experts," she said. "I am eager to share the knowledge and information I acquire through EDGE."

Building connections with UMB colleagues and gaining feedback on a current project galvanized do Espirito Santo to apply to the fellowship. "This network will help make us a community of more complete professors who embrace possibilities for interdisciplinary learning," he said.

The UMSOD fellows also spoke of identifying ways to inspire the next generation of oral health clinicians and researchers who might come from varying backgrounds and employ disparate learning styles.

"I have been interested in academic dentistry since I was a student," Lee said. "I look forward to further supporting clinical decision-making by applying practical learning theories in my work with individuals with different learning and communication styles." Md

Continuing Education Courses



The University of Maryland School of Dentistry (UMSOD) is committed to lifelong dental education and offers many courses throughout the year that are open to all oral health professionals. Below is a partial listing of the upcoming classes in 2025.

The classes listed below will be offered at UMSOD

650 W. Baltimore St., Baltimore, MD 21201

- A Review of Nitrous Oxide Inhalation Sedation for Dentistry
 - Presented by Marvin Leventer, DDS Saturday, Jan. 25, 8 a.m. to 4:30 p.m.
- Nitrous Oxide Administration and Monitoring for the Dental Hygienist: Hands-On Course with Limited Seating

Presented by Deborah L. Cartee, RDH, MS Saturday, Feb. 1, 8 a.m. to 3 p.m.

 Biomimetic Approach to Direct Composite Posterior Restoration

Presented by Mary Anne Melo, DDS, MSc, PhD, FADM, FACD, and Guilherme Arossi, DDS, MSc, PhD Saturday, March 1, 8:30 a.m. to 4 p.m.

 Combined Inhalation-Enteral Conscious Sedation for the Adult Dental Patient

Presented by Marvin Leventer, DDS, and Richard L. Wynn, PhD Friday, March 28, and Saturday, March 29, 8 a.m. to 5 p.m. Scientific Writing Made Easy: A Step-by-Step Guide to Writing in the Dental Sciences

Presented by Mary Anne Melo, DDS, MSc, PhD, FADM, FACD, and Isadora Garcia, DDS, MSc, PhD Tuesday, May 27, and Wednesday, May 28, 8 a.m. to 4 p.m.

 Advanced Scientific Writing for Health Care Professionals

Presented by Mary Anne Melo, DDS, MSc, PhD, FADM, FACD, and Isadora Garcia, DDS, MSc, PhD Thursday, May 29, and Saturday, May 31, 8 a.m. to 4 p.m.

Pharmacology for Prescribing Dental Hygienists Presented by Suzanne K. Burgee, MSDH, RDH Saturday, June 14, 8 a.m. to Noon

New Drug Enforcement Administration (DEA) Continuing Education Requirement

The Consolidated Appropriations Act of 2023 enacted a new, one-time, eighthour training requirement for all DEA-registered practitioners on the treatment and management of patients with opioid or other substance use disorders.

New courses on the topic of Substance Use Disorder Management are now available through UMSOD Online Training. Participants may access UMSOD's userfriendly online platform and complete the course at their own pace.

Innovation +Discovery

Q+A

Interdisciplinary Research Team Led by UMSOD's Schneider Pursues Dental Use for Anti-Diabetic Drug

INTERVIEW BY PATRICIA FANNING

eeking a new use for an old drug, Abraham Schneider, DDS, PhD, hopes to show that the anti-diabetic drug metformin holds promise in dental and craniofacial applications. Schneider, chair of the Department of Oncology and Diagnostic Sciences and director of the Dental Biomedical Sciences PhD Program at the University of Maryland School of Dentistry (UMSOD), has won a five-year, \$1,137,500 grant from the National Institute of Dental and Craniofacial Research to pursue this research.

The co-principal investigator is Huakun Xu, PhD, MS, professor and chair of the Department of Biomaterials and Regenerative Dental Medicine at UMSOD. They seek to prove how metformin, which reduces blood sugar and improves insulin sensitivity in adult-onset diabetics, can play a different role — in bone tissue regeneration.

Schneider, who also is an associate professor at UMSOD, will lead a multidisciplinary team aiming to promote bone regeneration through novel, metformin-releasing, injectable scaffolds seeded with dental pulp stem cells.



Why have you assembled a team that draws varied expertise from within UMSOD and beyond?

Team science is key in the field of bone tissue engineering. Our team consists of experts in stem cell biology, biomaterial sciences, pharmaceutical sciences, angiogenesis research and clinical bone regeneration. Among our collaborators are UMSOD Dean Mark Reynolds, who brings clinical experience in periodontal

and bone regeneration, and Dr. Yan Shu, professor of pharmaceutical sciences at the University of Maryland School of Pharmacy, who brings expertise in the drug's pharmacological mechanisms. Multidisciplinary collaborations allow us to tackle research questions of greater complexity than a single investigator's purview.

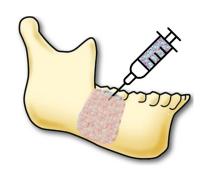
Repurposing Metformin for Craniofacial Bone Tissue Engineering

Investigators aim to promote bone regeneration in a mandible defect by locally applying an injectable metformin-releasing scaffold seeded with dental pulp stem cells.

References for adaption of graphic:

Zhu M, Z Zho, HHK Xu, Z Dai, K Yu, L Xiao, A Schneider, MD Weir, TW Oates, Y Bai, and K Zhang. Effects of metformin delivery via biomaterials on bone and dental tissue engineering. Int J Mol Sci, 23(24): 15905, 2022.

Krebsbach PH and Robey PG. Dental and skeletal stem cells: potential cellular therapeutics for craniofacial regeneration. J Dent Educ, 66(6): 766, 2002.



Why seek to repurpose a medication approved three decades ago to treat Type 2 diabetes mellitus?

Metformin is the most prescribed oral anti-diabetic drug due in part to its reliable, clinically proven effects in reducing blood sugar, affordability, and impressive safety record. In recent years, scientists have begun investigating its potential versatility in anti-aging, anti-inflammatory, and oncology applications. It was an oncology study that first attracted my attention to molecular properties that might apply to craniofacial and dental mineralized tissue regeneration and repair, including bone and dentin.

How will you deliver the drug to demonstrate bone regeneration?

Research proposed in the new grant aims to develop an injectable biomaterial that will slowly release metformin over time within large bone defects. These preclinical studies will be conducted in mandibular defects in rats. We plan to use this metformin-containing injectable scaffold in combination with stem cells taken from the dental pulp of wisdom teeth. We have found that dental pulp stem cells express in their cell membrane the transporters needed to uptake metformin into the cells.

How has observation of the uptake process informed your study's design?

Metformin is a highly hydrophilic compound. Its intracellular uptake and activity are facilitated by organic cation transporters (OCTs). This implies that to perform as a predictable osteogenic agent, metformin must first gain access into functional OCT-expressing cells. We have found that OCT1 protein levels are highly expressed and functional in human stem cells derived from dental pulp and bone marrow as well as in vascular endothelial cells. We will target not only resident OCT1-expressing cells but also transplanted dental pulp stem cells.

What is the appeal of dental pulp stem cells and how will you transplant them?

Dental pulp is an accessible source of postnatal autogenous stem cells. We found they remained viable for up to two weeks when seeded on metformin-containing calcium phosphate cement, which was reinforced with the natural biopolymer chitosan (CPCC). The combination showed a marked increase in osteogenic marker expression and mineral synthesis. We will position the combination on tiny injectable scaffolds constructed with alginate-fibrin hydrogel microfibers (MF) in the laboratory of our collaborator Dr. Xu, who is recognized internationally for his work in tissue engineering, bone regeneration, and bioactive and resorbable scaffolding.

How do you test the premise that this combination, when injected via scaffolds as described, will strengthen metformin's impact?

We plan to test the central hypothesis that when compared to cell-free metformin-containing constructs, our construct will significantly enhance tissue regeneration in critical-sized craniofacial bone defects. Three specific aims will test the following hypotheses: (1) metformin-induced osteogenic and angiogenic responses in dental pulp stem cells are OCT1-dependent; (2) an injectable, two-stage metformin delivery CPCC/MF degradable scaffold significantly increases the osteogenic potential of encapsulated OCT1-expressing dental pulp stem cells in vitro, and (3) significantly enhances vascularized tissue regeneration in a pre-clinical, critical-sized craniofacial bone defect model.

How do you foresee clinicians deploying a repurposed, locally delivered metformin-containing formulation?

We envision this innovative project leading to tissueregenerative platforms that could benefit many patients in need of craniofacial and orthopedic bone regeneration. Mcl



Nusrat Yussuf, a seventh-grade studen from Southwest Baltimore Charter School, examines a dental tooth model at one of the simulation tables.



Three Days

UMSOD's Summer Dentistry
Camp Offers Youths Oral Health
Lessons Mixed with Fun

STORY AND PHOTOS BY BETHANY PROBST



SMILEZ

s fourth-year dental student Paul Garcia-Escabi guided Karmin Bey through placing a resin-composite filling, he noted the eighth-grade student's sharp attention to detail.

"That looks fantastic," Garcia-Escabi said to Bey. "I really like how you're turning the tool and smoothing the margins to make sure there are no gaps between the material and the tooth structure. That's the best way to ensure that any filling you place is safe — and that the tooth doesn't get a cavity in the future."

Although Bey, who attends Bonnie Branch Middle School in Ellicott City, Md., has never been treated for a cavity, she completed the practice resin restoration seamlessly.

"I don't really know what I want to be when I grow up yet," she said. "But I've had a lot of fun learning about teeth."



Tamera Jackson, a seventh-grade student from Green Street Academy, places composite material into a dental stone casting.

Teaching students about teeth — and introducing them to the range of oral health professions — is the goal of the Planet Smilez Discovering Dentistry Camp, an immersive summer educational experience held annually at the University of Maryland School of Dentistry (UMSOD).

Now in its eighth year, the camp introduces students to the inextricable connection between overall health and oral health and the wide range of critical research being conducted while teaching them how to care for their own oral health.

It also falls under the auspices of the University of Maryland, Baltimore's (UMB) National Cancer Institute Continuing Umbrella of Research Experiences (CURE) Scholars Program, a year-round program that seeks to prepare middle and high school students in West Baltimore for competitive and fulfilling careers in research, health care, and other STEM-related fields.

UMSOD Dean Mark A. Reynolds, DDS '86, PhD, remarked that year after year, the scholars who attend the camp always seem deeply inquisitive and ready to learn. "It's always impressive to see the CURE Scholars immerse themselves in the hands-on opportunities to learn about oral health professions from dentistry to research," he said. "I hope that the experience will inspire our current scholars to pursue oral health care as a career path — and as a way of offering a critical service to the community."



Jessica Martin, a third-year dental student, instructs Corey Bethea, a seventh-grade student from Green Street Academy, on how to refill a composite gun with composite material.

In 2024, the schools participating in the CURE program included Green Street Academy, Mother Mary Lange Catholic School, Southwest Baltimore Charter School, and Thomas Jefferson Elementary Middle School, all in Baltimore, and St. Mark Catholic School in Catonsville, Md.

"Through experiences from attending the Planet Smilez Discovering Dentistry Camp, I hope the UMB CURE Scholars will consider becoming future oral health professionals dedicated to increasing oral health and creating brighter, healthier smiles for generations to come for the Baltimore community," said Kathryn Pawlak, DDS '19, who founded Planet Smilez as an undergraduate at Hobart and William Smith Colleges in New York.

"It's inspiring to work with the dedicated dental students, dental hygiene students, faculty, and participating alumni from UMSOD volunteering at Planet Smilez."

Now an attending clinician at University Pediatric Dentistry in New York State, she instructs predoctoral dental students and postdoctoral residents. She also treats patients at John R. Oishei Children's Hospital in Buffalo, where she works closely with the Hematology/Oncology





Benjamin Hung, a third-year dental student, oversees Vinton Moore, an eighth-grade student from Green Street Academy, as he places a wire through a set of model teeth.

"The CURE program thrives on these unique, hands-on opportunities that ignite a fire in our scholars. By directly engaging with the extraordinary dental hygiene students and UMSOD faculty, they don't just see themselves on the UMB campus — they live it."

- KATHARINA FURRS, CURE DEPUTY DIRECTOR

Department.

In recognition of her early-career efforts to influence children's dental health and advance the pediatric dentistry field, Pawlak received the 2024 Rising Dental Health Leader Award, which was presented in May at UMSOD's All-Alumni Reunion.

"It is always an honor to return to campus to work with such a dedicated group of oral health professionals," she said. "Their commitment and enthusiasm are invaluable as we introduce the UMB CURE Scholars to a possible career in dentistry and provide oral health education at the world's first dental college."

During the three-day camp in July, dental and dental hygiene volunteers guided 30 scholars through a series of hands-on activities designed to offer them a sense of what a typical day might be for oral health professionals. The schedule featured modules on dental trauma management and preventive care including dental sealants, resin composite restorations, and the treatment of soft-tissue lacerations. Students also learned about the relationship between oral and systemic health through an array of PowerPoint presentations.

"The CURE program thrives on these unique, handson opportunities that ignite a fire in our scholars," said Katharina Furrs, CURE deputy director. "By directly engaging with the extraordinary dental hygiene students and UMSOD faculty, they don't just see themselves on the UMB campus — they live it."

For fourth-year dental student Arian Emam, the program's emphasis on working with youths served as a motivation to volunteer as he follows his dream of becoming a pediatric dentist.

"Even for those not interested in pediatric dentistry, this is a great way to get involved within the community," he said. "It gives you a lot of perspective on educating young individuals and getting them interested in STEM careers." Ms

Shoring Up Oral Health



Care

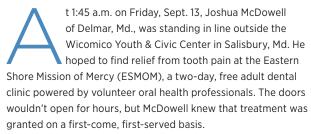
UMSOD Volunteers Provide Free Dental Treatments to Those in Need at the Eastern Shore Mission of Mercy

BY HOLLY SELBY





Photos by Alex Likowski and Holly Selby



By early afternoon, the 32-year-old was resting in a makeshift recovery area after having two teeth extracted. It wasn't the first

time he'd had teeth extracted; "genetics and poor decisions," McDowell said, had contributed to deleterious dental health. Additionally, as a subcontractor who installs floors, he rarely can afford insurance, and "generally, any kind of tooth work isn't cheap," he noted.

McDowell was one of more

than 1,000 patients who received treatment last fall during ESMOM. Part of a larger initiative aimed at providing dental care to underserved populations, the event received significant participation from the University of Maryland School of Dentistry (UMSOD). The school's team comprised 72 students and five faculty members and residents who provided free dental care to about 100 patients.

Volunteers also came from the Howard University College of Dentistry, the University of Maryland Eastern Shore's School of Pharmacy and Department of Physical Therapy, and the Salisbury University schools of nursing and health sciences, and included UMSOD alumni. Event sponsors included the Maryland State Dental Association, other health care

organizations, and corporate sponsors ranging from media to party supply companies.

"Things went extremely well. The students performed very well and treated the patients very professionally and empathically," said Ramsay Koury, DMD, clinical assistant professor in UMSOD's Department of Comprehensive Dentistry, who oversaw the school's team. "This was a testament to the excellent training the students are getting in our oral surgery department. They also gained further experience in the treatment of disadvantaged patients while witnessing how much need there

is on the Eastern Shore."

Like McDowell, hundreds of other wouldbe patients began lining up outside the civic center hours before the doors opened. Some passed the night sitting in lawn chairs or taking turns sleeping in their cars while a friend or

family member held their place in line. Those who reached the head of the line received a numbered wrist band that, although it didn't guarantee treatment, allowed them to enter the venue based on their initial arrival time.

After arriving at 3:45 p.m. on Thursday, Rocky Locates and his wife took turns holding their place in line outside the civic center. Years ago, the Millsboro, Del., resident suffered a broken jaw in a car accident and has been plagued by dental problems and struggled to find affordable oral health care.

"Three years ago, I had dental treatment, and it was \$3,500," said Locates, who had two teeth extracted at ESMOM. "I'd rather not be here but before [receiving treatment], I couldn't eat very well. Nothing cold. It was bad."

"This was my first volunteer effort as a dental student. People are so grateful. ... I learned that communicating and understanding patients and their stories makes such a difference."

- BONSA NEMERA, FOURTH-YEAR DENTAL STUDENT





"UMSOD [students] are part of the

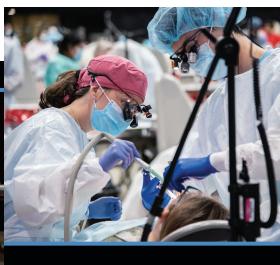
future of clinical dental care. Their

talent and service and support of 10

chairs for oral surgery extractions was

critically important. Without them, we

could not have served the number of



When their numbers were called, patients were ushered through registration, screening, X-rays, and clinical evaluations to determine what procedure would be the most beneficial on this day. They then entered the civic center's main floor, which had been transformed into a cavernous, open clinic. There, they saw dental equipment arranged into rows labeled Oral Surgery, Sterilization Area, Restorative, and Dental Hygiene. At every step of the way, ESMOM volunteers dressed in light blue T-shirts were there to guide them. After being treated, the patients rested in the recovery area, then were escorted to the checkout tables and

waiting room, where their family members or friends met them.

The UMSOD team performed extractions while other professionals provided fillings or cleanings. It included 38 fourth-year students who offered care under the guidance of faculty members, as well as 30 third-year students. Four second-

members, as well as 30 thirdyear students. Four secondyear students were on hand to assist on Day 2 of the event.

In addition to Koury, those overseeing the students included

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patients that we did."

Andrew Layton, DDS, clinical instructor in the Department of Oral and Maxillofacial Surgery; and Amir Tofighbakhsh, DDS, second-year resident; Samuel Dahhan, DDS, third-year resident; and Syed Abdul-Wasay, DDS, second-year resident, all of UMSOD's Department of Oral and Maxillofacial Surgery.

"It has been really rewarding to participate, but it also gives a view of how large the need is," Layton said. "There isn't time to address every issue, but at least we can get the patients out of pain."

Fourth-year dental student Bonsa Nemera found working at ESMOM deeply rewarding. "This was my first volunteer effort as a

dental student. People are so grateful, and now I feel that I have skills that can really benefit people," he said.

The experience heightened his awareness that "care can look different for different groups of people. I learned that communicating and understanding patients and their stories makes such a difference."

One row over, Ryan Mariner, DDS '19, who grew up in the area and volunteered at Mission of Mercy events as a dental student, worked alongside the UMSOD team. Now practicing in Ocean Pines, Md., he recalled how formative the experience had been.

"I didn't know these events happened until I went to dental school," Mariner said. "They provide a great service for the community and spread the word that there are people who may not be as well-off financially. They can be really helpful to people, and I like to be able to give back to my community."

By Saturday evening, 862 volunteers had helped provide 2,447 dental procedures with a clinical value of more than \$901,000 to 1,097 patients, according to ESMOM records. Eighty-two percent of the patients reported that they had no dental insurance, unaffordable deductibles, or inadequate dental resources near their homes.

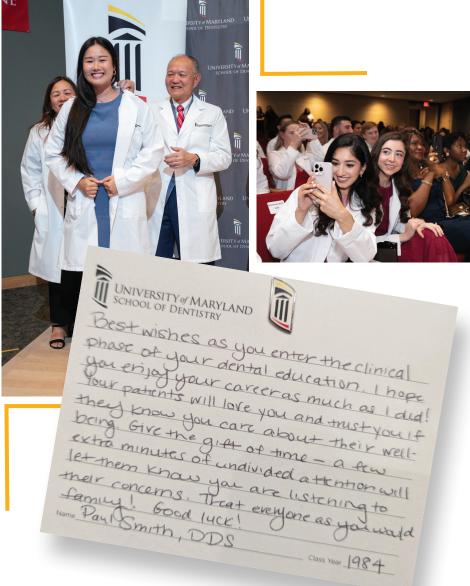
"UMSOD [students] are part of the future of clinical dental care," said Sue Simmons, community organizer for ESMOM 2024. "Their talent and service and support of 10 chairs for oral surgery extractions was critically important. Without them, we could not have served the number of patients that we did." Md



Time-Honored Tradition BY HOLLY SELBY

White Coat Ceremony Marks
UMSOD Students' Transition
from Classroom to Clinic





oting the critical connection between oral and overall health, Jordan Virden, DDS '17, PEDS '19, urged the members of the dental Class of 2026 and the dental hygiene Class of 2025 to look "past the teeth and mouth to see the person."

Her remarks were made Sept. 16 at the University of Maryland School of Dentistry's (UMSOD) White Coat Ceremony, an annual event that celebrates third-year dental and second-year dental hygiene students as they make the transition from didactic learning to clinical patient care.

"As dental professionals, you have the ability to heal, restore, and improve the life of the patient," said Virden, who was among several guest speakers. "It can be very easy to focus only on the dental problem — the root canal that needs to be done, the filling that needs to be done. Looking at your patient as a whole and working with faculty to connect dentistry to total body health is critical."

Describing the day as "very special" for the students, as well as their families and members of the faculty and staff, UMSOD Dean Mark A. Reynolds, DDS '86, PhD, said the event "marked a major achievement in the academic careers of our students and an important milestone in their journeys from classroom to clinic.

"The ceremony is widely considered the most iconic rite of passage for students in all health care professions," he said. "It symbolizes the scientific rigor and importance of clinical practice and the passion with which they will serve."







ABOVE: Guest speaker Jordan Virden



TOP AND BOTTOM:

The White Coat Ceremony marks the students' transition from class to clinic





TOP: Members of the dental Class of 2026 recite their professional oath.

BOTTOM: During the ceremony, the students ascend to the stage and receive their white coats from faculty members or colleagues in organized dentistry.

To the students, he added: "I am confident that you will wear your coat with pride and as a public symbol of your dedication to your profession."

Other speakers included Melvin F. Kushner, DDS '66, chair of UMSOD's Board of Visitors, who recognized board members who were in attendance: Barry L. Cohan, DDS '74, PEDS '76; Leslie E. Grant, DDS '86, MPSA; Betty Jeanne Howard, RDH '83; Henry Y. Lee, DDS '79; and Christopher G. Liang, DDS '98.

Congratulating the white coat recipients, Kushner said, "I am honored to serve as chair of the UMSOD Board of Visitors. You are the reason I serve in this capacity. You are the future of the profession, and I am proud to call you my colleagues."

Joanne Block Rief, DDS '86, president of UMSOD's Alumni Association Board of Directors, also offered remarks.

"By receiving your white coat today, you are pledging yourself to lifelong learning as you continue to master the art and science of clinical dentistry and dental hygiene," she said. "There is no telling what the next big thing will be in dentistry, and you will need to be ready and willing to learn and incorporate it."

During the ceremony, which was held at the University of Maryland School of Medicine's Leadership Hall, the

dental and dental hygiene students were called to the stage to receive their white coats by faculty members and colleagues in organized dentistry. Upon returning to their seats, they recited their professional oath, which included:

"The health and well-being of my patients will be my first consideration. I will uphold the highest standards of care for my patients and hold in confidence all they entrust to me. I will promote the welfare of my community by speaking out against injustice and providing unbiased service to those in need."

A note offering best wishes or words of wisdom and handwritten by alumni, family members, or friends who had sponsored a white coat could be found inside its pocket.

Some messages were succinct: "Wishing all of you much success as you embark on a new phase of your dental career!"

A second card offered advice: "Give the gift of time — a few extra minutes of undivided attention will let [patients] know you are listening to their concerns. Treat everyone as you would family!"

A third seemed to echo that thought: "Be uncomfortable as nothing is learned in your comfort zone. Be a lamplighter. Show with your actions the best of yourself. Above all, be kind — to yourself, your colleagues, and your patients." Mo

Lasting Impressions

Laures In celebration of faculty accomplishments



Simon Akerman, PhD, associate professor and vice chair, and Marcela Romero-Reyes, DDS, PhD, clinical professor and director, Brotman Facial Pain Clinic, both in the Department of Neural and Pain Sciences, were awarded a five-year, \$2.9 million grant from the National Institute of Neurological Disorders and Stroke to study the molecular basis for functional S1PR1 antagonists in the treatment of comorbid migraine and temporomandibular disorders.



Yvette Alania, DDS, MSc, PhD, clinical assistant professor, Division of Operative Dentistry and Cariology, Department of Comprehensive Dentistry, presented "Calibration of Oral Health and Caries Risk Assessment Protocol Through Collaboration - Empower Prevention" at the American Dental Education Association's Fall Meeting in October.



Md Sams Sazzad Ali. PhD. BDS. research associate and teaching faculty, Department of Neural and Pain Sciences, was among the co-authors of "Genetic Labeling of the Nucleus of Tractus Solitarius Neurons Associated with Electrical Stimulation of the Cervical or Auricular Vagus Nerve in Mice," which was published in Brain Stimulation.





Guilherme Arossi, DDS, MSc, PhD, clinical assistant professor, and Mary Anne Melo, DDS, MSc, PhD, FADM, FACD, clinical professor and chair, both in the Department of Comprehensive Dentistry, co-authored "Bioactive Resins: Going Beyond Esthetics and Functionality?" which was published in the Journal of Cosmetic Dentistry. Melo also was named a fellow for the Executive Leadership in Academic Medicine Program, becoming the first UMSOD faculty member selected for this respected fellowship.







The article "Effectiveness of Remote Simulation-Based Learning for Periodontal Instrumentation: A Non-Inferiority Study," co-authored by Christine Barnes, RDH, clinical instructor; Se-Lim Oh, DMD, MS, clinical associate professor; and Oksana Mishler, RDH, DHSc, clinical associate professor, all in the Division of Periodontics, was named one of the Journal of Dental Education's 10 most-cited papers.



Jose A. Bosio, BDS, MS, MBO, the
Alumni and Friends Endowed Clinical
Associate Professor and chief and
director, Orthodontic Program, Division of
Orthodontics, Department of Orthodontics
and Pediatric Dentistry, presented "What
Is New and What Doesn't Get Old" as the
keynote speaker at the Ortho CWB 2024
1st International Orthodontic Meeting in
Brazil in May.



James Coll, DMD, MS, clinical professor and Dean's Faculty member, was the lead author, and Vineet Dhar, BDS, PhD, clinical professor and chair, Department of Orthodontics and Pediatric Dentistry, was among the co-authors of "Primary Tooth Vital Pulp Treatment Interventions: Systematic Review and Meta-Analyses," which received the Paul P. Taylor Award for Outstanding Manuscript in Pediatric Dentistry from the American Academy of Pediatric Dentistry.



Deborah Jones

Lisa Bress, RDH, MS, clinical associate professor and division chief, Dental Hygiene Program (DHP), and Deborah Jones, DDS, director of program development and clinical assistant professor, DHP and Division of Periodontics, received an \$18,000 award from the ADEAGies Foundation to establish a statewide coalition of allied dental educators and community stakeholders to enhance oral health equity.

Sydnee E. Chavis, DMD, MS, FSCDA,



Lisa D'Affronte, DDS '12, clinical assistant professor and general practice director, Division of General Dentistry, Department of Comprehensive Dentistry, presented the poster "Poverty Simulation Exercise: Preparing Dental Students for Compassionate Patient Care" at the American Dental Education Association's Diversity, Equity, Inclusion, and Belonging Workshop in October.





clinical assistant professor, Department of Oral and Maxillofacial Surgery; Kate E. Noonan, PhD, MSEd, clinical assistant professor and assistant dean for student affairs, Department of Dental Public Health: Fotini V. Anagnostopoulos-King, DDS, FACD, PBC-RE, clinical assistant professor, Division of Operative **Dentistry and Cariology, Department** of Comprehensive Dentistry; Sheryl L. Syme, RDH, MS, FADHA, associate professor, Division of Periodontics, **Department of Advanced Oral Sciences** and Therapeutics; and Sharon Varlotta, RDH, MS, clinical associate professor, Department of Oncology and Diagnostic Sciences, were among the co-authors of "In-Person to Virtual Interprofessional **Education: Teamwork Attitudes and** Skills Among Dental and Dental Hygiene Students," which was published in the Journal of Dental Education in July.



Stephanie Dennison, DDS, FAGD, clinical assistant professor, Division of General Dentistry, Department of Comprehensive Dentistry, was a speaker at the 12th Annual Maryland Sleep Boot Camp, held at UMSOD in July.







Maria B. Doughan, DDS, MS, clinical assistant professor, Department of Orthodontics and Pediatric Dentistry, was the first author of the manuscript "Association of Endogenous Sex Hormone Levels with Tooth Loss Due to Periodontitis in Men and Post-Menopausal Women: The Multi-Ethnic Study of Atherosclerosis," which was published in the Journal of Periodontal Research in June.



Halima Karim, DDS, FAGD, director and clinical professor, Department of Comprehensive Dentistry, was selected for induction into the American College of Dentists



Mark D. Macek, DDS, DrPH, MS, FICD, professor, Department of Dental Public Health; assistant dean for curriculum innovation and scholarship; and director, Office of Instructional Evaluation, became president of the American Board of Dental Public Health in April.



Marcela Romero-Reyes, DDS, PhD, clinical professor and director, Brotman Facial Pain Clinic, Department of Neural and Pain Sciences, presented a lecture about temporomandibular disorders to the American Academy of Pain Medicine in March and the American Academy of Neurology in April. Romero also was among the co-authors of "Trigeminal Neuralgia," which was published in Nature Reviews Disease Primers in May.



Deborah Miller-Young, DDS, clinical assistant professor, Department of Comprehensive Dentistry, Special Care and Geriatrics Clinic, and her research team received a \$25,000 Interprofessional Simulation Grant from the UMB Center for Interprofessional Education to support their work in developing interprofessional clinical care at the Universities at Shady Grove.



Sheryl Syme, RDH, MS, FADHA, associate professor, Division of Periodontics, Department of Advanced Oral Sciences and Therapeutics, co-presented "Close Listening in the Community: Narrative Power and Oral Health Justice" in the Novel Approaches to Community Engagement and Community Health paper session at the Health Humanities Consortium at Creighton University-Arizona in April. Syme also was the primary author of the chapter "Child Abuse and Neglect and Family Violence" in the book "Darby and Walsh Dental Hygiene Theory and Practice, 6th Edition."



Eman Mirdamadi, MS, PhD candidate, was the first-prize recipient of UM Ventures' Graduate Translational Research Award. Mirdamadi helped to devise a method of generating 3D-printed hybrid bone implants for bone defect regeneration.



Norbert Myslinski, PhD, associate professor, Department of Neural and Pain Sciences, received the 2024 Tomasulo Lifetime Achievement Award from Canisius University in recognition of his distinguished career in biomedical sciences.



Darien Weatherspoon, DDS, MPH, assistant professor, Department of Dental Public Health, was among the co-authors of "Implant and Implant Restoration Trends Among Adults 50 Years and Older in the United States, National Health and Nutrition Examination Survey 1999-2020," which was published in the Journal of the American Dental Association.





Jeffery B. Price, DDS, MS, clinical professor, and Ahmed S. Sultan, BDS, PhD, assistant professor, both in the Department of Oncology and Diagnostic Sciences, were among the co-authors of "Performance of Al Chatbots on Controversial Topics in Oral Medicine, Pathology, and Radiology," which was published in Oral Surgery, Oral Medicine, Oral Pathology, and Oral Radiology.

Alumni

From the Alumni Association



Dear Fellow Alumni,

As many of you know, the several months since the passing of my father, Stanley Block, DDS '58, have been difficult for me. He was my first mentor in dentistry, and we worked side by side

in Annapolis for 18 years. The day after he passed away, I was to deliver a speech at the University of Maryland School of Dentistry's (UMSOD) first-year student orientation. Of course, I showed up: I knew it was exactly what my dad would have wanted. He was a past president of the Alumni Association Board of Directors, a member of the Board of Visitors, and taught as part of the UMSOD Dean's Faculty for 10 years after he retired from private practice. In my remarks, I described how my father had instilled in me a deep passion for giving back to our alma mater as well as being involved in organized dentistry.

I also was pleased to welcome the 128 members of the dental Class of 2028 — and to learn that 57 percent of them are female and 57 percent are Marylanders (with 15 other states represented).

In September, I attended the annual White Coat Ceremony, during which the dental Class of 2026 and dental hygiene Class of 2025 marked their transition from classroom to clinic. Jordan Virden, DDS '17, PEDS '19, was wonderful as this year's alumni speaker; her energy and enthusiasm for our dental school and profession were evident!

Also in September, 50 UMSOD alumni and friends attended the reception at the Chesapeake Dental Conference in Baltimore. Robert Windsor, DDS '79, FICD, director of clinical operations, Division of General Practice, represented the school in congratulating Alexandra Fitzgerald, DDS '18, for successfully serving as president of the Maryland State Dental Association and wishing Celeste Ziara, DDS '94, and Charles Doring, DDS '87, MAGD, well in their new roles as president and president-elect, respectively.

Next, I was off to New Orleans for SmileCon. UMSOD hosted a wonderful reception for alumni and friends Oct. 18, and the American Dental Association's first SmileCon tailgate was an enormous success! UMSOD participated by hosting a table where alumni could connect while grabbing swag or drink tickets and entering a raffle to win school paraphernalia. Keep your eyes open for information about the 2025 SmileCon, which will be held Oct. 23-25 in Washington, D.C.

Lastly, I'd like to mention that our next All-Alumni Reunion will be held June 13-14, 2025. UMSOD will host events Friday, and classes ending in 0 or 5 will be celebrated Saturday. It is never too late to get involved with the Alumni Association or attend an event! I hope to see you there so we can be "toothgether" again.

Joanne Block Rief, DDS '86

President | Alumni Association Board of Directors

In Memoriam

We are saddened by the loss of the following alumni, faculty, and friends. Ralph R. Asadourian, DDS '58 George E. Collins, DDS '58 Stanley A. Einhorn, DDS '67 Duane C. Erickson, DDS '79 Craig E. Gassett, DDS '77 John G. Goettee Jr., DDS '61 Jack A. Gray, DDS '54 David L. Kaiser, DDS '67 Bernard Levy, DDS, MSD Mark Mathias, DDS '89 Guy S. O'Brien Jr., DDS '58 Jeffry C. Pennington, DDS '59 Lance D. Petersen, DDS '64 Emilio E. Rivera, DDS '82 Ivan A. Rosengarden, DDS '63 Frank L. Schwartz, DDS '62 Jack D. Vandermer, DDS '67 George J. Walters Jr., DDS '89 Diane White, DDS '85

*The school learned of the passing of these alumni, faculty, and friends between March 28, 2024, and Sept. 23, 2024.

In Memoriam

STANLEY EARLE BLOCK, DDS '58



Stanley Block, who died Aug. 13, 2024, was a tireless supporter of the University of Maryland School of Dentistry (UMSOD)

and lifelong leader in the dental profession as a mentor, clinician, and advocate. He was passionate about patient care and clinical excellence.

Born Dec. 1, 1932, Block attended Baltimore City College and the University of Maryland, College Park, where he met his wife, Frances Charlow Block. After graduating from UMSOD, he served two years in the U.S. Air Force as a dentist in McAllen, Texas. In 1961, he established a dental practice in Annapolis, Md., where he worked until 2005.

Deeply committed to organized dentistry, Block was a founding member of the Anne Arundel County Dental Society and served as its president, vice president, and secretary. He also was president of the Maryland State Dental Association (MSDA) from 1995 to 1996 and was honored by MSDA with a Distinguished Service Award in 2002.

Block was a member of the North East
Regional Board of Dental Examiners for 40 years
and was appointed to the Maryland State Board
of Dental Examiners for two six-year terms. In
2005, he joined UMSOD's Dean's Faculty, donating
his time and expertise to the school for 14 years.
From 1994 to 1995, he served as president of the
school's Alumni Association Board of Directors.
Additionally, he sat on the UMSOD Board of
Visitors for more than two decades.

In 1997, Block and his wife established an endowed scholarship to support students from Maryland who enrolled at UMSOD. Colloquially known as the Block Family Scholarship, it honors members of three generations of his family who are alumni of the school: Stanley Block; Philip L. Block, DDS '33; and Joanne Block Rief, DDS '86, the current president of the UMSOD Alumni Association Board of Directors.

Stanley Block is survived by his wife; children Joanne Block Rief, Shelley Fowler, and Larry Block; six grandchildren; and many other relatives.

WILHELMA G. HASKINS GARNER-BROWN, MS



Wilhelma Garner-Brown, known to all as "Billie," died in July 2024, leaving a

significant legacy that deeply impacted the University of Maryland School of Dentistry (UMSOD) and broader community.

A diversity, equity, and inclusion pioneer, Garner-Brown served as a pivotal member of UMSOD's recruitment and retention team, fostering an environment of equity and opportunity within the school. Her tireless efforts in recruiting and supporting minority dental students not only enriched our school but also paved the way for countless individuals to pursue the profession.

Throughout her 40 years of service at the University of Maryland, Baltimore and specifically UMSOD, Garner-Brown worked diligently to create pathways for underrepresented students, ensuring that they had the resources, mentorship, and support necessary to succeed.

In 2005, the late Derek Brown, DDS '95, MS '98, ORTHO '98, a student who was influenced by Garner-Brown, led a group of alumni in donating a room named in her honor; it is located on UMSOD's eighth floor.

Garner-Brown was born and raised in Baltimore. Her mother, who was not allowed to enroll at the University of Maryland, graduated from Columbia University, and her father was a physician.

In 1962, Garner-Brown, who witnessed school desegregation, became the first Black graduate of an independent private school in the state, the Park School of Baltimore. She later enrolled and graduated from Fisk University in Nashville with a bachelor's degree in speech and drama. She also earned a master's degree in higher education administration from Johns Hopkins University.

GARY D. HACK, DDS '79



Gary Hack, who died Aug. 10, 2024, was tireless in his enthusiasm and quest for knowledge

and innovation, deeply committed to dentistry, invention, research, and

A clinical associate professor in the Division of Prosthodontics, Department of Advanced Oral Sciences and Therapeutics, Hack taught preclinical courses and conducted research at the University of Maryland School of Dentistry (UMSOD), his alma mater, for more than four decades.

Dedicated to introducing students to state-of-the-art dental technologies, he was instrumental in integrating computer-aided design and computer-aided manufacturing into the school's curriculum and served as director of the Simulation Lab.

A longtime proponent of the prevention and treatment of diabetes, he developed a Diabetes Workshop for dental students and in 2018 successfully advocated for the American Dental Association to include the glucose meter test in its publication "Codes on Dental Procedures and Nomenclature."

Hack, who graduated from the University of Maryland, Baltimore County in 1975, was awarded several patents, published many peer-reviewed articles, was a popular presenter, and won several awards at UMSOD for his impact as an educator.

In 2007, he and former colleague Leonard Litkowski, DDS, MS, won the University of Maryland, Baltimore's Founders Week Entrepreneur of the Year Award for coinventing a bioactive glass used in tooth repair. Among his many accomplishments, Hack took particular pride in identifying two previously unappreciated anatomic structures in the human body.

He is survived by his wife Leslie (DiCarlo) Hack, son Shawn Hack, and daughter Laura Hack, among other family members.

Alumni Reunion 2024

Making Meaningful Connections, Celebrating Lasting Legacies

BY HOLLY SELBY

he past and future were celebrated at the University of Maryland School of Dentistry's (UMSOD) 2024 All-Alumni Reunion, held May 31-June 1. The festivities began with the Dr. Harry W.F. Dressel Lecture featuring guest speaker George Shepley, DDS, immediate past president of the American Dental Association, who discussed the current state of dentistry and the future of the oral health profession.

At the annual awards ceremony, held June 1, UMSOD feted this year's honorees: Maj. Gen. (Ret.) Thomas Robert Tempel Jr., DDS '91, MSS, recipient of the Distinguished Achievement Alumni Award; Guy Alexander, DDS '82, Distinguished Public Service Alumni Award; Marion Manski, BSDH '88, MS '04, Linda Devore Dental Hygiene Award; and Kathryn Pawlak, DDS '19, Rising Dental Health Leader Alumni Award.

Noting that UMSOD is steeped in a deeply rich history as the first dental college in the world, Dean Mark A. Reynolds, DDS '86, PhD, said the school's "legacy continues through the leadership and impact of our graduates in oral health care and the communities they serve."

Other reunion activities included a luncheon, panel of students who shared insights about their dental school experiences, and welcome reception held at the Dr. Samuel D. Harris National Museum of Dentistry.



Kevin Barnes, DDS '21, ORTHO '24, MS '24, and Jamie Derkasch, DDS Class of 2027, share stories and thoughts about the student experience at UMSOD.



LEFT TO RIGHT: Members of UMSOD's Board of Visitors — Roy Eskow, DDS '74, vice chair; Melvin Kushner, DDS '66, chair; Barry Cohan, DDS '74, PEDS '76; and Barbara Steinberg, DDS '74 — are recognized before the start of the Alumni Awards ceremony June 1.



Edward Ginsburg, DDS '82, PEDS '84, clinical associate professor of pediatric dentistry, chats with UMSOD colleague Douglas Barnes, DDS '83, AEGD '84, MS, professor of general dentistry and chief dental officer, Faculty Practice-Clinics of Excellence.



John Leonard and Bill Leboe, both from the DDS Class of 1974, share a laugh during the festivities.



UMSOD Dean Mark Revnolds congratulates Guv Alexander. who received the Distinguished Public Service Alumni Award.



LEFT TO RIGHT: Maj. Gen. (Ret.) Thomas Robert Tempel Jr., Marion Manski, Kathryn Pawlak, and Guy Alexander were recipients of the 2024 Distinguished Alumni Awards.



Barbara Steinberg and fellow DDS Class of 1974 graduate Willie Richardson enjoy lunch while catching up at the Dr. Samuel D. Harris National Museum of Dentistry, where most of the reunion events were held in 2024.

UMSOD Welcomes New **Assistant Dean for** Development and **Alumni Relations**



Mike Buccino has more than 15 years of fundraising experience in higher education.

Mike Buccino, MA, joined the University of Maryland School of Dentistry (UMSOD) in September as assistant dean for development and alumni relations.

Buccino arrived with more than 15 years of fundraising experience in higher education, including 11 years managing major gift teams. He has a proven record of advancing fundraising efforts, having successfully secured significant donations and grants at institutions such as Johns Hopkins University; the University of Maryland, Baltimore County; and Washington College. Buccino's expertise in building strong relationships with donors, volunteers, and institutional partners has been key to his success in fostering substantial financial growth and engagement.

In his most recent role as director of development at the Johns Hopkins Carey Business School, Buccino led his team to impressive results. In addition to meeting its fundraising goal, the team secured the school's first grant from the Maryland E-Nnovation Initiative Fund, crafting a proposal that resulted in \$1 million toward a new professorship focused on digital health and artificial intelligence.

Buccino's commitment to staff development and retention, strategic approach to fundraising, diverse background, and passion for education will be invaluable as he leads UMSOD's fundraising strategies and alumni engagement.

Buccino holds a master's degree in music theory and composition from the University of Northern Colorado and a bachelor's degree in humanities from Washington College. Md



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