

**Advancing Oral Health.
Improving Lives.™**

GOING GLOBAL

UMSOD fellows study ways to enrich curriculum with international awareness.

NEW LEADERSHIP

Bruce E. Jarrell, MD, FACS, named UMB president.

WINNING STREAK

UMSOD's SNDA earns national recognition for seventh year in a row.

Mdental

THE MAGAZINE OF THE UNIVERSITY OF MARYLAND SCHOOL OF DENTISTRY | WINTER 2020



BACK TO THE FUTURE



Despite the challenges of COVID-19, UMSOD faculty and students are glad to return to the clinics.



OfNote

Like seniors everywhere, the members of the University of Maryland School of Dentistry's (UMSOD) Doctor of Dental Surgery Class of 2020 saw their final months before graduation turned upside down by COVID-19. In a matter of days, in-person classes were transformed into online-only modules; final interactions with patients were canceled; face-to-face meetings with faculty mentors shifted to Zoom; and celebrations such as the Honors Convocation — the culmination of four years of intense study — became virtual.

With aplomb, members of the DDS Class of 2020 refocused, pulled together, and, aided by supportive faculty, rescheduled and completed necessary clinic hours and sat for dental board exams. They also voted to donate their class treasury to the UMSOD Emergency Student Assistance Fund. Created last spring to help students experiencing financial difficulties from the pandemic, the fund offered a lifeline to those facing budget shortfalls. The donation was cited by the University of Maryland, Baltimore (UMB) when it honored the class with a Catalyst for Excellence Award during UMB's Founders Week celebration in October. **Md**

— HOLLY SELBY

Contents



Features

16 BOUNCING BACK

Despite the challenges of COVID-19, UMSOD faculty and students have returned to the clinics and are finding the “new normal” offers some advantages.

20 WHAT'S IN A NAME?

Warmth and generosity, apparently. Both flowed during a virtual ceremony held to officially name the Dr. Barry and Mrs. Adele Cohan Pediatric Dental Clinic.

23 BEE HAPPY

UMSOD's Norbert Myslinski, PhD, is honored for his commitment to introducing youths to neuroscience by founding the International Brain Bee.

2 MESSAGE FROM THE DEAN

ON THE CUSP

- 5 **New Chapters:** UMSOD faculty members contribute to textbook on risk assessment for peri-implant disease.
- 6 **Street Art:** Creations by UMSOD artists are on display at UMB's new, open-air Pearl Gallery.
- 8 **Life Goes Online:** The fall semester bustled with virtual events.

INNOVATION + DISCOVERY

- 14 **AI and Dental Caries:** UMSOD partners with startup to develop groundbreaking program.
- 15 **Old Drugs, New Uses:** Robert K. Ernst, PhD, is among researchers investigating approved drugs for efficacy against COVID-19.

LASTING IMPRESSIONS

- 29 **FocalPoint:** Louis G. DePaola, DDS, MS, discusses how UMSOD ensures its clinics are safe.

ALUMNI

- 31 **Class Notes:** Michael Meyers, DDS '54, is featured in the *Carroll County Times*.

GAME CHANGER

- 33 **Thinking Outside the Box:** Mark D. Macek, DDS, DrPh, is named inaugural assistant dean for curriculum innovation and scholarship.



The past year has presented many challenges for the University of Maryland School of Dentistry (UMSOD) — and for our families and communities. In the face of many unexpected and unprecedented hardships, we have been flexible, innovative, and persistent in finding new ways of caring for patients, teaching and learning, and moving forward in our daily lives and work.

In the months ahead, we will need to remain vigilant against the risks posed by the COVID-19 pandemic to our public health systems and society. Our core values of accountability, civility, collaboration, diversity, excellence, knowledge, and leadership will serve us well and describe who we are as professionals and as a community.

Since the start of the pandemic, I have witnessed inventiveness, creativity, determination, and collaboration on the part of UMSOD's faculty, staff, students, and alumni. These efforts, some of which are written about in this issue of *Mdental*, reflect our values as we go about our everyday work — whatever the circumstances.

Last summer, many of our clinical faculty began early and worked late each day to implement new protocols aimed at ensuring the safety of the UMSOD's community and enabling our students to continue receiving clinical education (page 16). Dr. Louis G. DePaola, associate dean of clinical affairs, outlines the many steps taken at the school to ensure the safety of our community members (page 29).

Despite the recent uncertainties and challenges, I have seen great adaptability and generosity. Amid disruptions to clinic sessions and board exams, members of the Doctor of Dental Surgery Class of 2020 remained steadfast in their commitment to one another, donating their treasury to the UMSOD Emergency Student Assistance Fund (inside cover).

And in July, more than 200 alumni, friends, and family members came together in a virtual ceremony to toast philanthropists Barry and Adele Cohan — and the naming of the school's pediatric dental clinic in their honor (page 20).

I would like to express my appreciation to each of you for your invaluable support of and efforts to advance our profession and our school during these difficult months. Your continued support, engagement, and time are critical to our success — thank you.

Best regards,

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

Mdental

ON THE COVER

Top right: Fourth-year student Kathryn Howland. Bottom left: Vivek Thumbigere Math, BDS, PhD, assistant professor in UMSOD's Division of Periodontics, and fourth-year student Sarah Mahammad.

Photos by Holly Selby

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OnTheCusp

Expanding UMSOD's Global Reach

Faculty and Staff Named Fellows of UMB International Program

BY JOEL KABOT

Four members of the University of Maryland School of Dentistry (UMSOD) community have been selected as 2020-21 GLOBALtimore fellows. They will serve alongside six fellows from the University of Maryland, Baltimore's (UMB) Graduate School, School of Medicine, and School of Social Work.

The program, an initiative of UMB's Center for Global Engagement, awards a stipend to fellows who are integrating global content into new or existing academic courses. Over the next year, fellows will meet in small groups and attend lectures to learn how best to incorporate global education in their classes.

Kate Noonan, PhD, MSED, senior director, special projects for the dean, and Fotini V. Anagnostopoulos-King, DMD, clinical assistant professor in the Department of General Dentistry, teach Ethical Reasoning in Dentistry-Profession and Professionalism, a course offered to first- and third-year dental students. Noonan and Anagnostopoulos-King both teach the first-year students, who study health care issues that commonly arise in professional settings. Anagnostopoulos-King teaches the third-year students, who focus on the legal aspects of clinical practice and ethical decision-making.

As GLOBALtimore fellows, Noonan and Anagnostopoulos-King intend to introduce modules on global health in future academic years. "It makes sense strategically to offer students this type

of exposure in their coursework, particularly since global awareness is an increasingly important part of how patient care is offered to a wide range of populations," Noonan says.

Another fellow, Isabel Rambob, DDS, clinical assistant professor in UMSOD's Department of Neural and Pain Sciences, will lead a virtual exchange between students at UMB and the Bahiana School of Medicine and Public Health in Brazil. In the course, Intercultural Leadership Competencies for Global Collaboration, students will study building international relationships and explore different perspectives on health care.

Additionally, Eve Desai, DDS, clinical instructor and lead general practice director in the Department of General Dentistry, intends to develop Introduction to Global Health in Dentistry, a new elective course that will look at international trends in oral health through a Baltimore-based lens.

"It's exciting because we're taking active steps to expand existing content in the curriculum and develop new, innovative educational opportunities to further our commitment to local and global partnerships and outreach," Noonan says. **ME**

Top to bottom: Kate Noonan, senior director, special projects for the dean; Fotini V. Anagnostopoulos-King, clinical assistant professor, Department of General Dentistry; Isabel Rambob, clinical assistant professor, Department of Neural and Pain Sciences; and Eve Desai, clinical instructor and lead general practice director in the Department of General Dentistry



Veteran Leader Jarrell Named UMB President

BY LOU CORTINA



Photos by Matthew D'Agostino / UMB

UMB President Bruce Jarrell is participating in a COVID-19 vaccine trial at the University of Maryland School of Medicine's Center for Vaccine Development and Global Health.

Bruce E. Jarrell, MD, FACS, who has steered the University of Maryland, Baltimore's (UMB) response to the COVID-19 pandemic, was selected as UMB's seventh president by the University System of Maryland (USM) Board of Regents on Sept 10.

"He has already served the University so well in leading its academic and research offices, and his effective stewardship as interim president was seamless during an important and transitional time for USM," said Linda R. Gooden, USM board chair, noting that Jarrell became interim president in January when Jay A. Perman, MD, left UMB to become USM chancellor.

"Our University will not be an island within a city, but an integral part of our community."

— BRUCE JARRELL, UMB PRESIDENT

"Dr. Jarrell has been a critical part of the system's planning and response to the COVID-19 pandemic, and we are delighted that he will remain in this key leadership role."

In accepting the job, Jarrell noted that the core of his professional life has been centered at UMB, where he arrived in 1997 as chair of the School of Medicine's Department of Surgery.

"I have been so proud to guide the University during these months of staggering challenge due to COVID-19, with UMB on the forefront of medical and societal advances," he said. "Our University will not be an island within a city, but an integral part of our community that houses our institution. I am privileged to continue that vision for UMB."

The appointment as president was the latest upward move by Jarrell at UMB, where he has served as chief academic and research officer, senior vice president, executive vice president, and dean of the Graduate School. **MD**

UMSOD Scientist Develops Experimental Staph Vaccine

A University of Maryland School of Dentistry (UMSOD) researcher has developed an experimental vaccine that protects up to 80 percent of mice against *Staphylococcus aureus* (*S. aureus*), the bacterium that accounts for one-third of deadly health care-acquired infections (HIAs) – which are often acquired after people undergo surgical procedures.

Janette Harro, PhD, a research assistant professor with UMSOD's Department of Microbial Pathogenesis, and colleagues published their findings in *Infection and Immunity*, a journal of the American Society for Microbiology.

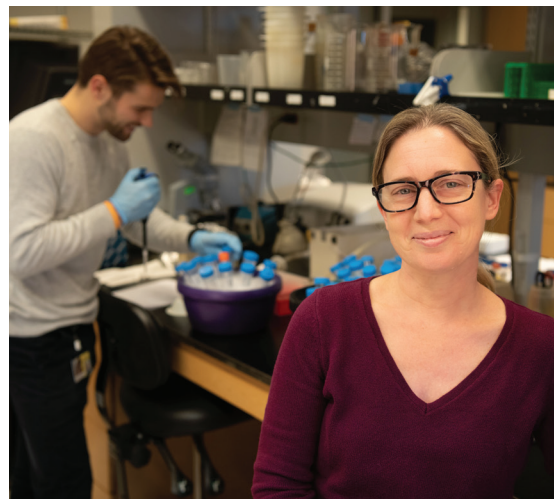
The vaccine has proven effective not only in mice but also in 66 percent of rabbits infected with *S. aureus*, the deadliest Staph bacterium. And, though tested so far only in animals, the vaccine has demonstrated the potential to drastically reduce the number of patients who succumb to *S. aureus* infections postsurgery — a time when their immune systems already are compromised.

“This vaccine could prove hugely beneficial especially for orthopedic and cardiovascular patients, for example, where medical structures or devices are implanted,” says

Harro, a scientist who specializes in the study of biofilms. She and her laboratory colleagues and collaborators elsewhere are carrying out the work on biofilms started by Mark E. Shirtliff, PhD, a professor in the department who published extensively in the field prior to his death in July 2018. He is among the eight co-authors of the published study, which also includes Devon Allison, DDS, PhD, a resident in periodontics at UMSOD.

According to the Centers for Disease Control and Prevention, the *S. aureus* bacterium costs the U.S. health care system \$10 billion annually. “*S. aureus* is difficult to eradicate because it so readily forms biofilms at the surgical site,” Harro says. Biofilms are a thin, slimy film of bacteria that adheres to a surface, such as the site of incision or on implanted devices such as surgical rods, artificial knees and hips, and pacemakers.

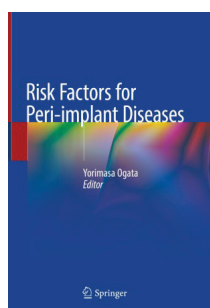
“Preliminary results are very promising, and we are hopeful that



this vaccine will prove protective in humans as well,” says Mark A. Reynolds, DDS '86, PhD, dean and professor at UMSOD. “Dr. Harro and colleagues' innovative research offers the potential of significantly reducing the risk of life-threatening *S. aureus* infections following surgery.”

Next steps for the experimental *S. aureus* vaccine involve testing in a wider range of animal models and analyzing its effectiveness across various strains of the bacterium as well as with multiple conditions such as skin and soft tissue infections, bone and joint infections, bloodstream infections, pneumonia, and septic shock. **Md**

— GWEN FARISS NEWMAN



Team Effort

Several members of the University of Maryland School of Dentistry

(UMSOD) community contributed to *Risk Factors for Peri-implant Diseases*, edited by Yorimasa Ogata, DDS, PhD, professor and chair of the Department of Periodontology at Nihon University School of Dentistry in Japan. The 2020 textbook includes contributions from “leading experts from around the world [who] present the latest knowledge

on the risk factors for peri-implant diseases,” according to Springer Publishing Company of New York.

UMSOD contributors include Mark A. Reynolds, DDS '86, PhD, dean and professor; Harlan J. Shiau, DDS, DMSc, clinical associate professor and director of postgraduate periodontics, Division of Prosthodontics; Radi Masri, DDS, MS, PhD, professor, division director, and director of postgraduate prosthodontics, and Hanae Saito, DDS, MS, clinical associate professor and director of predoctoral periodontal education,

both in the Division of Prosthodontics, Department of Advanced Oral Sciences and Therapeutics; Thomas W. Oates, DMD, PhD, professor and chair, Department of Advanced Oral Sciences and Therapeutics; Anmar A. Kensara, BDS, MS, doctoral student, Dental Biomedical Sciences program; and Alyssa Dierkes, DDS, and Katherine Ni, DMD, both residents in the Division of Periodontics. **Md**

— HOLLY SELBY

UMSOD Artists' Gems Shine at UMB Pearl Gallery

BY HOLLY SELBY

The lustrous interior of an oyster captured in watercolors, a poem about coping with mental illness, and a vivid abstract painting are just a few of the striking artworks unveiled Aug. 12 along the wall of an underpass on the University of Maryland, Baltimore's (UMB) campus.

Displayed at what's now known as UMB Pearl Gallery, the exhibit was drawn from the spring 2019 issue of *1807*, a fine arts journal that showcases previously unpublished works submitted by university students, faculty, staff, and community members. The work of 73 artists appears in print; of those, reproductions of 28 are represented at the new outdoor gallery, which is adjacent to the Pearl Street Garage between Fayette and Lexington streets.

Works by fourth-year dental student Sahar Nesvaderani, MS, and Dina Stappert, DDS, clinical assistant professor in the Department of Orthodontics and Pediatric Dentistry, are included in the display. The exhibit is part of a UMB Council for the Arts & Culture initiative aimed at promoting artists in the UMB community and engaging West Baltimore community members.

Speaking about the works showcased by the new gallery and the arts journal, UMB President Bruce E. Jarrell, MD, FACS, an artist himself, said, "I am in awe of the creative talent that is evident in our University community, our alumni community, and the greater UMB community. While our community and world face daunting challenges during the pandemic, it is gratifying to celebrate art at UMB in such a public way." **MD**

View *1807: An Art & Literary Journal* at www.umaryland.edu/arts/journal/.



1. Dental student Sahar Nesvaderani finds solace when creating art such as "Never, Again.," an oil-on-canvas work on view at the outdoor UMB Pearl Gallery.

2. Current issue of *1807: An Art & Literary Journal*

3. "Salem Water Lilies I" by Dina Stappert is on view at the UMB Pearl Gallery. Photos by Holly Selby

Service-Minded

Whether handing out water during a 5K held on behalf of 9/11 survivors and responders or mentoring a middle school student as part of the University of Maryland, Baltimore's CURE Scholars Program, Katherine Ong, DDS '20, loves the feeling of being part of something bigger than herself.

"Ever since high school, I have enjoyed community service. It's the sense of being with people who have the same goal — to help other people, whether cleaning the park or providing dental care to people in need — that makes it fun," Ong says.

Now a resident with ChristianaCare Health System in Wilmington, Del., Ong received a 2020 Student Leadership Award presented by the Delta Dental Community Care Foundation.

The honor recognizes students who have demonstrated leadership skills, commitment to public service, and outstanding service or accomplishments in the field of dentistry. Ong and her fellow award recipients each received \$10,000 from the foundation with the hope that they will continue to serve their communities.

While a student at the University of Maryland School of Dentistry (UMSOD), "Dr. Ong showed a commitment to helping educate, mentor, and provide oral health care for the underserved that was



Courtesy of Katherine Ong

exemplary," said Mark A. Reynolds, DDS '86, PhD, dean and professor. "I am very pleased and appreciative that she has been selected by Delta Dental for this prestigious honor."

Ong's volunteer activities included working at Mission of Mercy events, which provide free oral health care to underserved populations; providing oral health screenings or instruction to underserved populations through UMSOD's Chinese Student Association and Korean American Student Dental Association; preparing dinners for the homeless through Helping Up Mission, which aids those struggling with addiction and homelessness; and running the neuroanatomy practical for high school students at the U.S. National Brain Bee, a competition for high school students aimed at inspiring them to pursue careers in neuroscience.

Born with a cleft lip and palate, Ong, who attended high school in Springfield, Va., was inspired to pursue a career in oral health, in part, by her "long journey as a patient," she says. "I really appreciated the help that my dental team gave me while improving both function and aesthetics."

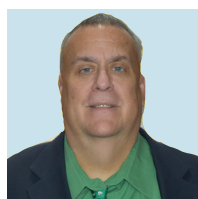
Ong hopes to build a career working in a community dental clinic that she describes as "the type of setting where you treat patients who may not be financially stable, but you are able to help them receive treatment."

The Delta Dental award will help her pursue that goal, she adds. "To be recognized as a Delta Dental student leader is an honor, and there are no words to accurately describe the depths of my appreciation." **MD**

— HOLLY SELBY

Accolades

Celebrating student and staff achievements



◀ **William F. Hoffman Jr., MAS**, research administrator in the Dean's Office, was a co-speaker at the webinar "Investigator/Faculty Onboarding: Facilitating the Transfer of Your New Principal Investigator," which was presented at the Society of Research

Administrators' International Southern/Western Combined Sections Meeting, held virtually July 23.



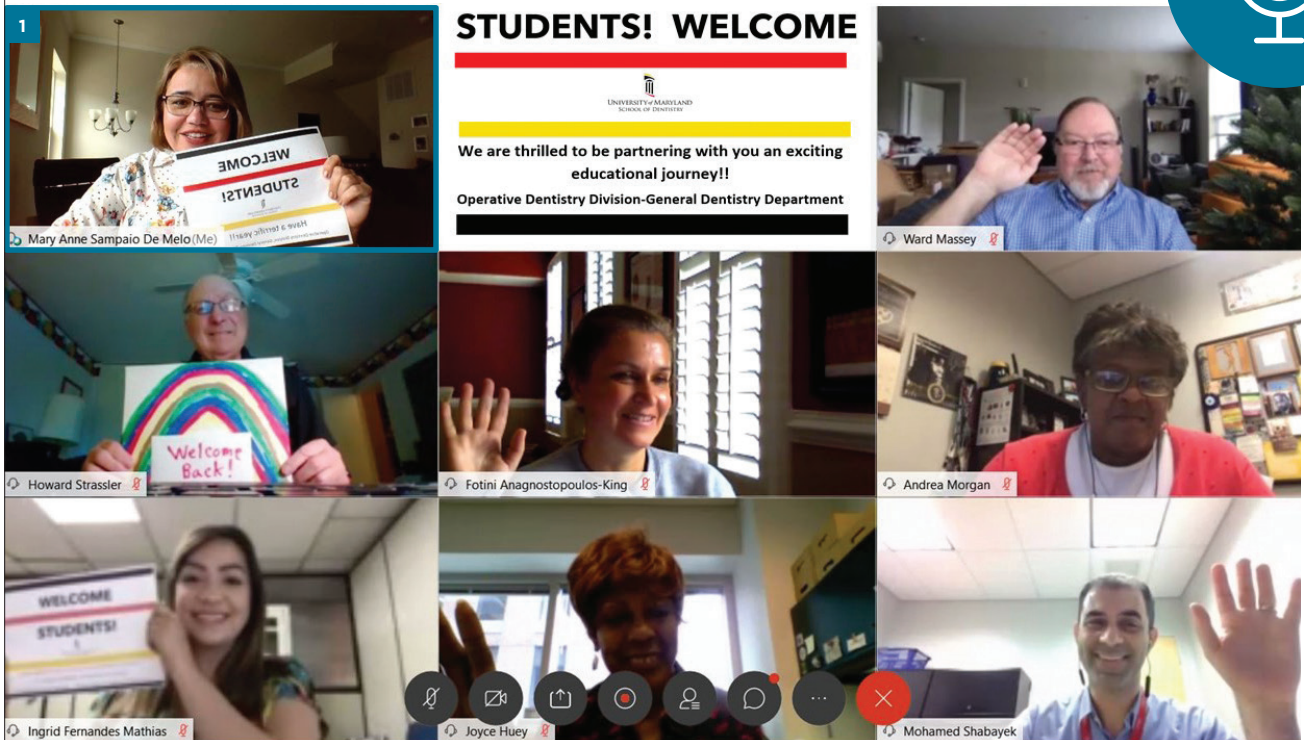
◀ **Kalli Robertson**, president of the dental hygiene Class of 2021, was awarded a University of Maryland Alumni Association-International, Inc., scholarship for the 2020-2021 academic year. Selection was based on having a GPA of 3.25 or higher, leadership involvement,

and contributions to the University of Maryland, Baltimore (UMB) community and beyond. Only two undergraduate students from UMB were selected for the award.

Virtual Vitality

Online Events Offer Surprising Benefits as UMSOD Springs Back to Life

BY HOLLY SELBY



Day-to-day activity at 650 W. Baltimore St. — like just about everywhere else — has been radically altered by the COVID-19 pandemic. Hallway greetings are muffled by face coverings. Student-organized bake sales in the lobby are a thing of the past. Digital forehead thermometers and hand sanitizer are *de rigueur*.

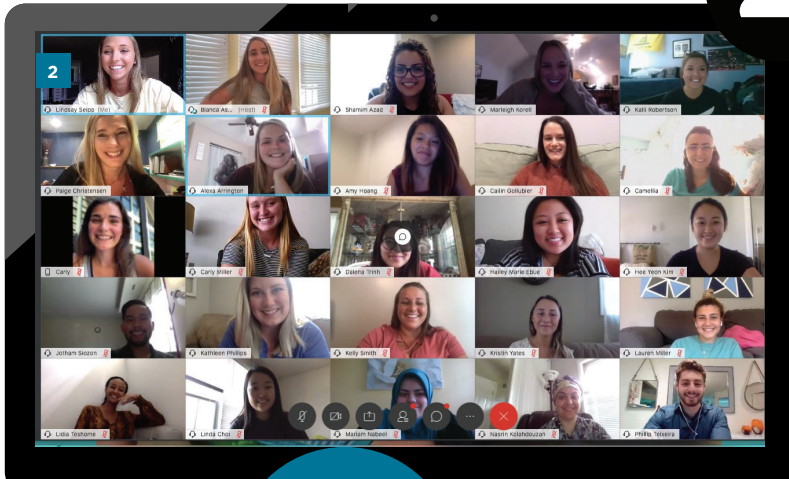
Nonetheless, the University of Maryland School of Dentistry (UMSOD) was bustling this fall as classes met remotely and in hybrid models, research moved forward, and patient care was offered — while all university, state, and national safety guidelines were strictly followed.

And virtual events — the speakers series, club meetings, receptions, and ceremonies that make a university a hub of intellectual and social interaction — dotted lunch hours, late afternoons, and evenings.

The semester's online happenings included *A Night of Stars*, a celebration of the University of Maryland, Baltimore's Founders Week, complete with performances

by Broadway star Norm Lewis. At UMSOD, Mark A. Reynolds, DDS '86, PhD, dean and professor, hosted virtual town halls to share updates and answer questions. And the Office of Development and Alumni Relations hosted events via Zoom teleconferencing, including Alumni Association board meetings and new member orientations, receptions, and an unveiling of the newly named Dr. Barry and Mrs. Adele Cohan Pediatric Dental Clinic.

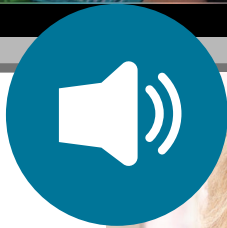
“Our new, more virtual environment has the effect of making the world seem much smaller,” says Nicole Nash, assistant director of alumni relations. Noting that a continuing education course, Calamity, Catastrophe, and COVID-19, led by Kimberly Harms, DDS '81, drew more than 100 participants from around the country, she added: “Alumni who typically couldn't attend events due to geography or work schedules are reconnecting with their school and classmates from their living rooms.”



1. Members of the Operative Dentistry Program in the Department of General Dentistry were among those who welcomed UMSOD students back to school with friendly virtual messages. *Courtesy of Melissa Echalar*

2. Dental hygiene students gathered for a session of the Student American Dental Hygienists' Association, during which incoming juniors were introduced to the seniors. *Courtesy of Kathleen Fabian*

3. A virtual continuing education class led by alumna Kimberly Harms and organized by the Office of Development and Alumni Relations drew more than 100 participants from around the country.



Kimberly Harms, DDS
 30 Years of Dental, Grief, Conflict and Transition Management Experience

3

Orientation, organized each August by the Office of Admissions to welcome first-year students, typically includes alumni speakers, a luncheon, and informational sessions. This year, it was a hybrid event, offering a mix of virtual meetings and small gatherings of appropriately distanced students garbed in masks. Additionally, the Office of Student Affairs invited UMSOD community members to contribute welcome greetings to the first-year students.

“We received video messages from across the UMSOD community: researchers, faculty, clinic staff. It was a nice touch, and we hope our students enjoyed them,” said Kate Noonan, PhD, MSED, senior director, special projects for the dean, who, along with Melissa Echalar, events coordinator, Student Affairs and Development and Alumni Relations, has scheduled myriad virtual events, from awards ceremonies to UMSOD’s White Coat Ceremony.

Online events offer unforeseen benefits. The virtual elections for first-year class leaders drew 121 students, substantially more than usual, says Sahar Nesvaderani, MS, president of UMSOD’s Student Government Association (SGA), which organizes the elections.

“Every year, we gather in G205 at lunch and whoever shows up gets to vote. Typically, about 40 people come,” she says. “This year, the first-year class really had a say in who their executive board is.”

SGA also organizes an annual club fair — a noisy event that involves throngs of students mingling, free food, and raffles. This year, students were invited to visit the websites of 27 clubs to chat with club leaders during a two-hour window. “It’s a chance, especially for first-years, to learn about all the groups on campus,” Nesvaderani says. “We didn’t want to let COVID take away the excitement of their involvement. We did our best to make it worthwhile.”

Dental hygiene students traditionally kick off the academic year with a cookout to introduce junior class members to the seniors, who then act as their mentors. This year, the online event included an informal question-and-answer period after introductions. “This semester has been an adjustment for everyone, but the virtual meetings have proven to be very useful and a little more manageable schedule-wise,” says Kathleen Fabian, president of the Student American Dental Hygienists’ Association. “Everyone has been very open-minded and flexible.” **MD**

New UMSOD Program Offers Fast Track to Leadership

BY GWEN FARISS NEWMAN

Sometimes the right program appears at just the right time.

So it was with the University of Maryland School of Dentistry's (UMSOD) new BS/MS Clinical Dental Hygiene Leader (CDHL) track, which launched in June with four enrollees. (Eight applicants vied for admission, and several others plan to apply for six additional slots that will open in June 2021.)

"The timing worked out perfectly and confirmed that this was the right path for me," says Phuong Hoang, who graduated in 2017 from the University of Maryland, Baltimore County. The biochemistry major worked as a dental assistant at Children's Dentistry in Ellicott City for three years but felt drawn to do more.

"I noticed a lot of people on Medicare and Medicaid don't have the best information, and I wanted to do something to help increase education and awareness," she says. "The CDHL track gives me the ability to do that."

As the first dual-degree clinical dental hygiene and graduate program in the country, UMSOD's CDHL track is designed for professionals like Hoang who possess a bachelor's degree, have aptitude and passion for health care and the sciences, and want to become leaders focused on improving oral care in ways that benefit practitioners and patients. Many are attracted by the track's fast pace, which allows them to earn a second bachelor's degree and a master's in two years.

"The CDHL track is a unique offering that prepares exceptional students to become leaders in the oral health delivery system," says Sheryl Syme, RDH, MS, associate professor and director, dental hygiene program, and director, dual-degree BS/MS CDHL track.

"It's geared toward students with a science background who have decided to specialize in dental hygiene and want a primary health care role in the oral health profession. The CDHL track will produce dental hygienists who can work interprofessionally and assume key leadership roles as members of interdisciplinary teams in hospitals, public health departments, community clinics, long-term care facilities, and educational and research institutions."

Courses are delivered online with hands-on clinical instruction offered at UMSOD's new state-of-the-art community clinic located on the campus of the Universities at Shady Grove in Montgomery County.

"Undergraduate courses combine the outstanding baccalaureate education already provided at UMSOD with graduate-

level coursework," Syme says. "A strong emphasis is placed on research, scholarly writing, and understanding the scientific literature, so that graduates are not only competent clinicians, but also prepared to review the latest findings in oral health and apply them in making evidence-based decisions about patient care."

That approach appeals to participants like Hoang.

"When I started looking for a job, I was curious about the field," she says, adding that several family members are oral health professionals. In the end, however, the experiences of working in a dental office and volunteering at Mission of Mercy events, which provide free dental care to the underserved, cemented her love of the profession and interest in being an advocate.

"I like getting to know the patients more intimately. That's what I really enjoy," Hoang says. **MD**

"I wanted to do something to help increase education and awareness. The CDHL track gives me the ability to do that."

— PHUONG HOANG



1. MaryAnn T. Schneiderman, RDH, MS, clinical assistant professor and Shady Grove dental hygiene director, right, discusses coursework with CDHL student Carly Miller.

2. Phuong Hoang earned a BS degree in biochemistry at the University of Maryland, Baltimore County before pursuing a dual degree at UMSOD.

3. Left to right: Paige Christensen, Carly Miller, Phuong Hoang, Nasrin Kolahdouzan, members of the inaugural class of UMSOD's new BS/MS track in dental hygiene; MaryAnn T. Schneiderman, clinical assistant professor and Shady Grove clinical hygiene director; and Sheryl Syme, associate professor and dental hygiene program director and director, BS/MS clinical dental hygiene leader track



ByTheNumbers

Introducing UMSOD's First-Year Dental and Dental Hygiene Classes

The University of Maryland School of Dentistry (UMSOD) welcomed new students late last summer in ways that were exactly the same as preceding years but also completely different.

This year at orientation, new students arrived wearing face coverings and entered the building in small groups at staggered times to allow for physical distancing. They also listened to the welcoming remarks from two lecture halls rather than en masse. Nonetheless, some things

remained the same: Opening remarks were presented by Mark A. Reynolds, DDS '86, PhD, dean and professor, as well as other members of the administration; returning students were on hand to assist and offer tips; and, as always, the excitement of the first-year students was palpable.

Here is a numerical snapshot of the Doctor of Dental Surgery Class of 2024 and the entering dental hygiene class:

DDS Class of 2024

136 students

63 men, 73 women

17 states & 2 countries

(Canada and China) are represented

21% drawn from under-represented minority populations

5 students

hold master's degrees



Entering Dental Hygiene Class*

15 students

13 women, 2 men

6 students

hold bachelor's degrees

15 students

are Maryland residents



4 students

are enrolled in USMOD's new Bachelor of Science/ Master of Science Clinical Dental Hygiene Leader track at the Universities at Shady Grove

10 students

are enrolled in the Bachelor of Science-only program

1 student

is enrolled in the Bachelor of Science Degree Completion Program

*Dental hygiene students are earning a range of degrees and will have different graduation years.

Collaboration, Enthusiasm Make Winning Combination

UMSOD Student Group Wins Two National Awards

BY HOLLY SELBY



Focusing on collaboration, fine-tuning successful programs, and capitalizing on great enthusiasm were again a winning combination for the University of Maryland School of Dentistry's (UMSOD) Student National Dental Association (SNDA).

The group was named SNDA's 2020 Chapter of the Year (large chapter category) in recognition of its exemplary fundraising, community service, and outreach — an honor that marks the seventh consecutive year it has won first or second place in the national competition. The chapter also won the Colgate Bright Smiles, Bright Futures Award, which recognizes outstanding contributions and community outreach. Both awards were presented at SNDA's annual convention, held virtually this year July 6-11.

"We wanted to be sure we were inclusive and collaborative. And, I have to say, this year we had a lot of [first-year students] who were really enthusiastic," says Vaida Saucer, a fourth-year student and the 2019-20 president.

The Chapter of the Year competition is based upon how successful a chapter is in raising funds, performing community service, and launching new initiatives. Additionally, each chapter is assessed on how it executes three standing national programs: Impressions Day, in which pre-dental undergraduate students visit dental schools to learn about the dental school experience; a holiday toy drive; and an oral cancer walk.

But the annual programs are just the beginning, points out Andrea Morgan, DDS '90, MS, clinical assistant

professor, Division of Operative Dentistry, and director, Student Advocacy and Cultural Affairs. "The chapters are recognized for these three standing annual programs as well as the many other programs they plan and organize on their own. It is really great that [UMSOD chapter members] continue to rise above and get noticed by their peers."

In January, the UMSOD chapter hosted a regional conference for SNDA chapters that drew participants from dental schools including Howard University, Virginia Commonwealth University, East Carolina University, and the University of Florida. Programing included oral health speakers such as Catrice Austin, DDS '96; a financial advice segment; and a community service component.

UMSOD's SNDA has a history of launching high-impact initiatives. One, called Generation NeXT, provides opportunities for dental students to mentor high school students who are training to be dental assistants at Baltimore's Vivien T. Thomas Medical Arts Academy. In the mentoring program, which was launched in 2017, dental students work to inspire the younger students to pursue DDS or dental hygiene degrees.

Each year, the chapter aims not just to sustain its programs but also to enhance them, notes Saucer. "Our focus [overall] is community service and trying to encourage the presence of minorities in the dental field," she says. **Md**

Above: Members of SNDA's 2019-20 executive board

Innovation + Discovery



Courtesy of Jeffery Price

Artificial Intelligence May Soon Come to a Dental Office Near You

UMSOD partners with local startup to develop a groundbreaking program to diagnose dental caries.

BY JOEL KABOT

It all began with a conversation between two brothers.

When Dan Lee was taking a graduate computer vision course at the University of Maryland, Baltimore County (UMBC), he asked his older brother, David Lee, DDS '17, then a student at the University of Maryland School of Dentistry (UMSOD), to name one area in which dentists could make their workflow more efficient.

The answer? The diagnosing of dental caries using X-rays.

Fast-forward a few years, and throw in a first-place finish in UMBC's Cangialosi Business Innovation Competition, and Dan Lee is now

the founding CEO of Baltimore-based Dentuit Imaging — and collaborating with Jeffery Price, DDS, MS, director of oral radiology and clinical professor in UMSOD's Department of Oncology and Diagnostic Sciences.

The CEO, whose company recently received a National Science Foundation grant, aims to create an artificial intelligence program that can offer dentists a second opinion in real time.

"This will be a consensus-based approach that removes individual bias from the equation," Dan Lee says. "Patients would no longer be relying on the diagnosis of just one expert."

Led by Price, UMSOD faculty members, residents, and fourth-year student are remotely reviewing some 8,000 anonymized radiographs to identify caries and then rate them on the International Caries Detection and Assessment System scale. By doing so, the artificial intelligence program essentially learns from the experts and starts diagnosing caries by itself.

That doesn't mean dentists still won't have an important role to play once such technology makes its way to their offices. According to Price, with the introduction of computer-assisted diagnosis in chest X-rays or mammography, radiologists in those fields are busier than ever.

"The human side of it is to verify what is there," says Price. "This technology will help us look at cases even more closely than before."

And that means better patient outcomes, he adds, raising the trust levels between dentists and those they treat.

For Dan Lee, helping dentists and their patients is not just good business, of course. It's also a family affair, especially since his middle brother, Samuel, is now a third-year student at UMSOD.

"I'm fortunate enough to have unfiltered access to dentists who can give me honest feedback on our technology," Lee says. **MD**

Top: Dan Lee, CEO of Dentuit Imaging

Bottom: Jeffery Price, UMSOD's director of oral radiology and clinical professor, Department of Oncology and Diagnostic Sciences

UMSOD Researchers Contribute to UMB Effort to Develop COVID-19 Therapies

BY GWEN FARISS NEWMAN

Robert K. Ernst, PhD, professor and vice chair of the Department of Microbial Pathogenesis at the University of Maryland School of Dentistry (UMSOD), is one of four University of Maryland, Baltimore (UMB) researchers awarded a \$3.6 million Defense Advanced Research Projects Agency (DARPA) contract to rapidly test approved and marketed therapeutics to see whether any can be repurposed to prevent or treat COVID-19.

The collaboration includes lead investigator and coronavirus expert Matthew Frieman, PhD, and William Jackson, PhD, both associate professors of microbiology and immunology at the University of Maryland School of Medicine (UMSOM), and David Rasko, PhD, professor of microbiology and immunology at UMSOM's Institute for Genome Sciences. The Frieman and Jackson laboratories will use sophisticated organ-on-a-chip technologies to infect human lung cells with the SARS-CoV-2 virus to elucidate the unique cellular response after infection and to evaluate effective therapies. Preliminary findings revealed that of 20 Food and Drug Administration (FDA)-approved drugs tested, 17 showed promise in blocking the virus that causes COVID-19, as well as the deadly SARS-CoV-1 (2003) and MERS-CoV (2012) coronaviruses.

The funding from DARPA, which falls under the U.S. Department of Defense, is part of a \$16 million contract awarded to the Wyss



Robert K. Ernst, professor and vice chair of the Department of Microbial Pathogenesis, says interdisciplinary research provides “unique opportunities to synthesize efforts to rapidly advance science.”

Institute for Biologically Inspired Engineering at Harvard University. The Wyss Institute created the organ-on-a-chip technologies consisting of cell cultures that replicate the function of full-size organs. The team's research will entail infecting lung cells, for example, to study the host response.

“This type of interdisciplinary research demonstrates that while we each have our own specialties, there are unique opportunities to synthesize efforts to rapidly advance science,” Ernst says.

As part of this DARPA funding, the Ernst laboratory was awarded \$1.1 million to fund the first Bruker timsTOF FleX mass spectrometer operating inside a biosafety level-3 biocontainment laboratory in the United States. This instrument will

allow for the proteomic analysis of SARS-CoV-2-infected cells to determine the efficacy of previously FDA-approved drugs to alter viral replication. This instrument also will be utilized for biomarker discovery as well as to more precisely investigate the molecular response of specific tissue regions during infection. The timsTOF FleX technology will enable UMSOD researchers, including Alison Scott, PhD, a research assistant professor in the Department of Microbial Pathogenesis, to conduct SARS2 research; define unique molecular signatures of disease states including infections, pain, and cancer; and define and refine therapeutic approaches based on a deeper understanding of the molecular interaction network. **MB**

COVID-19 Alters Clinical Protocols,
But UMSOD's Focus on Patient Care
Remains the Same



**BACK
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STORY AND PHOTOS BY HOLLY SELBY

Last year, Vaida Saucer and her University of Maryland School of Dentistry (UMSOD) classmates often lingered in the hallways outside the school's clinics — trading stories about dental procedures they'd just completed, discussing upcoming deadlines, and hoping to observe or be asked to assist an ongoing procedure.

Not anymore. These days, new protocols aimed at ensuring patient and clinician safety during the COVID-19 pandemic, including wearing face masks and maintaining physical distancing, preclude most hallway chatter.

Nonetheless, when the UMSOD clinics, which in March had closed to all but emergency care, began gradually reopening in May, students and faculty welcomed the opportunity to return to clinical training and patient care.

"Being in the clinics was definitely a different experience last year," says Saucer, a fourth-year dental student. "There used to be more waiting around, and that meant more conversations. Sometimes you'd be reminded about assignments or a deadline for a competency exam. Now we're just glad to be back — and we're finding other ways [like meeting up virtually] to stay current and keep up with everyone."

ABOVE: Barry Edland, DDS, observes as fourth-year dental student Samantha Bordener, RDH, treats a patient.

TOP LEFT: Fourth-year dental student Adam Hariri prepares dentures to be sent to the lab for final fabrication.

BOTTOM LEFT: Fourth-year student Anna Green discusses a treatment plan with Negar Homayounfar, DDS, MS, assistant professor in the Division of Prosthodontics.



LEFT TO RIGHT: Hal Levy, DMD, assistant general practice director; Ramsay Koury, DMD, clinical assistant professor; and Barry Edland, DDS, clinical instructor in the Department of General Dentistry

“Because we now have a lower student-to-faculty ratio, faculty members do have greater opportunities to sit and get involved with the treatments and really teach.”

— EVE DESAI, UMSOD’S LEAD GENERAL PRACTICE DIRECTOR

At UMSOD, the COVID-19 prevention measures begin at the front door: Patients are screened before entering the school and must wear face coverings (except during procedures). Dental care providers must wear personal protection equipment (PPE), including a gown, gloves, a fit-tested N-95 or elastomeric respirator, face shield, and head cover when treating patients. Once clinicians don PPE, they may not leave the operatory without taking it off and putting it all back on before re-entry.

Patient scheduling has been significantly modified. To allow space for physical distancing and time for operatories to be thoroughly disinfected between visits, appointments are scheduled for shorter periods. To help compensate for the shorter sessions, the student-to-faculty ratio has been lowered to 4-to-1.

Air-purifying devices also have been strategically placed throughout the clinics (the clinics were designed to have an air exchange rate of 15 room exchanges per hour). High-volume extra-oral suction devices, called evacuators, are used chairside to limit the aerosol produced by certain dental aerosolizing procedures.

“After safety, our main concern was how easily the students could acclimate to the changes,” says Robert Windsor, DDS, director of clinical operations, adding that UMSOD’s protocols exceed those mandated by state and federal guidelines.

“I often walk through the clinics just to see how things are going, and it is really evident that the students, especially the fourth-year students, are adjusting to the changes and following protocols.”

Still, Windsor notes a downside to wearing PPE: “We all sound like Darth Vader.”

Sahar Nadimi, a fourth-year dental student, concurs. “Talking is definitely a challenge, and the PPE can make it hard to move or make you feel dehydrated. But there are good reasons for doing all this, so I try to speak clearly and make sure to hydrate.”

There are a few unforeseen benefits to the new protocols. “At first, we were a little skeptical about scheduling the shorter clinic sessions,” says Eve Desai, DDS, clinical instructor and lead general practice director in the Department of General Dentistry. “But because we now have a lower student-to-faculty ratio, faculty members do have greater opportunities to sit and get involved with the treatments and really teach.”

Some students also report unexpected advantages to the so-called new normal. Fourth-year dental student Erin White finds himself preparing better in advance of his clinical sessions and, once there, working more efficiently.

“You’d think that with less time to work with your patient, you wouldn’t get as much done, but it makes you focus and plan more,” White says. “The better student-to-faculty ratio allows us to get more done, and we wind up having a closer relationship.” **MI**

From Student to Dentist: Last Chapter

ADA News has followed three University of Maryland School of Dentistry (UMSOD) Class of 2021 members for three years as they make the journey from student to dentist, a quest that's nearing its rewarding conclusion. The "Becoming a Dentist" series is written by Jennifer Garvin and unfolds in quarterly installments in *ADA News*, a publication of the American Dental Association (ADA).

When readers met the students in 2017, they were new to UMSOD and eager to immerse themselves in all aspects of dentistry. Dan Yang aims to help people through oral health care. LaShonda Shepherd, a public health advocate, dreams of improving access to dental care in her hometown. And Ben Horn, a father and former naval aviator, wants to continue serving in the U.S. Navy as a dentist.

They are in their fourth and final year of dental school. Readers have followed their progress as they experienced their first human anatomy classes, learned their way around the



The Class of 2021's Ben Horn, LaShonda Shepherd, and Dan Yang, shown here as first-year students, are the subjects of a series of articles published in *ADA News*.

simulation lab, studied for exams, and discovered what it's like to administer anesthesia for the first time.

"Being [a fourth-year student] is a great feeling," Horn says. "It's a nice feeling to know that with a lot of hard work in the next nine months, we will be graduating."

Read *ADA News*' "Becoming a Dentist" series by visiting www.dental.umaryland.edu/BecomingaDentist. **Md**

— HOLLY SELBY

UMSOD Continuing Education Courses

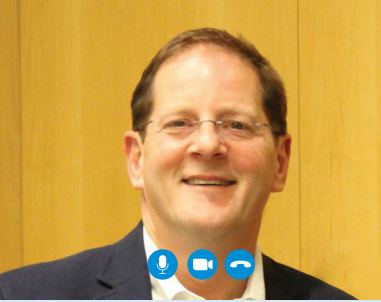


Due to the COVID-19 pandemic, there will be no in-person courses offered between now and February 2021. Please visit our website for information about our new webinar courses here:

www.dental.umaryland.edu/ce or call 410-706-2282.

DON'T MISS: UMSOD IMPLANTOLOGY CONTINUUM COURSE

Two-year, hands-on continuing education program aimed at preparing practicing dentists to perform implants. Beginning August 2021; registration is limited.



In Virtual Celebration, Pediatric Clinic Named for Philanthropists Barry and Adele Cohan

BY HOLLY SELBY



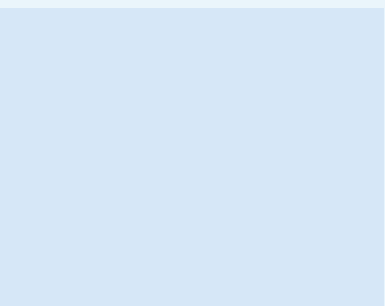
 Barry & Adele Cohan





“WE ARE HERE TONIGHT TO SALUTE THE GENEROSITY AND CONTRIBUTIONS OF TWO OF THE MOST STEADFAST AND LOYAL SUPPORTERS OF THE SCHOOL.”

—Mark A. Reynolds, UMSOD dean and professor



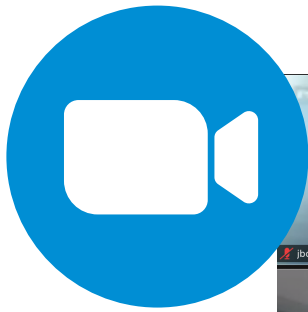
Describing **Barry L. Cohan, DDS '74, and Adele Cohan** as “true philanthropists,” Mark A. Reynolds, DDS '86, PhD, dean and professor of the University of Maryland School of Dentistry (UMSOD), announced the naming of the school’s pediatric clinic in the couple’s honor.

“We are here tonight to salute the generosity and contributions of two of the most steadfast and loyal supporters of the school,” Reynolds said.

“The timing couldn’t be much better,” he added. “Not only does the University of Maryland School of Dentistry mark its 180th anniversary this year, but the Division of Pediatric Dentistry itself was founded just over 50 years ago. So it seems fitting that tonight we have gathered to dedicate the pediatric clinic as the Dr. Barry and Mrs. Adele Cohan Pediatric Dental Clinic.”

Reynolds’ comments were part of an online event held July 7 that included a virtual reception, video, and remarks that, due to the COVID-19 pandemic, were recorded earlier at a small on-campus ceremony. In addition to the Cohans and Reynolds, the on-campus event was attended by Vineet Dhar, BDS, MDS, PhD, clinical professor and chair, Orthodontics and Pediatric Dentistry, and graduate program director, Division of Pediatrics; and Janet Wiley, assistant dean, Development and Alumni Relations.

The virtual event drew about 200 participants including Bruce E. Jarrell, MD, FACS, president of the University of Maryland, Baltimore, and many friends, colleagues, and relatives of the Cohans from as close as Baltimore County to as far away as the Netherlands.



“I THANK DEAN REYNOLDS, MY DEPARTMENT, MY UNIVERSITY, MY STUDENTS, AND MOST OF ALL MY RESIDENTS FOR THE WONDERFUL OPPORTUNITY TO HAVE THE PLEASURE, ENJOYMENT, AND FULFILLMENT THAT I EXPERIENCE BY BEING PART OF THIS INSTITUTION.”

— Barry Cohan

PAGE 20, clockwise beginning top left: Top row: Bradley Trattner, DDS '88; Linda Powers, DDS '19; Melvin F. Kushner, DDS '66, chair of the UMSOD Board of Visitors; Leslie Grant, DDS '86, MSPA; Barry Cohan, DDS '74; Adele Cohan; Janet Wiley, assistant dean of Development and Alumni Relations; Norman Tinanoff, DDS '71, MS.

THIS PAGE, at center: Mark A. Reynolds, dean and professor, was among the nearly 200 alumni, faculty, friends, and family members who attended the virtual celebration.

In a video, Jay A. Perman, MD, chancellor of the University System of Maryland, noted that as a pediatric sub-specialist, he understands the challenge of providing superb dental care to children with special needs, and he described the clinic as “absolutely inspiring and terrific.”

He added: “To have it named after people of whom I am very fond — the Cohans — boy, that sounds just right to me.”

Barry Cohan expressed appreciation for the practice he ran for 40 years, his patients, his family, and the school. “It is truly gratifying and humbling to be honored by the University of Maryland School of Dentistry. I thank Dean Reynolds, my department, my university, my students, and most of all my residents for the wonderful opportunity to have the pleasure, enjoyment, and fulfillment that I experience by being part of this institution,” he said.

“The generation before us gave of themselves to allow us to be successful in dentistry, and our legacy is to give the next generation the same.”

After graduating from UMSOD, Cohan completed a fellowship in the Department of Surgery at the John F. Kennedy Institute of Johns Hopkins Hospital and a two-year program in facial pain and temporomandibular joint disorders at the University of Medicine and Dentistry of New Jersey.

A past president of the school’s Alumni Association Board of Directors, he serves on UMSOD’s Board of Visitors (BOV) and volunteers as an assistant professor on

the Dean’s Faculty. He is serving in his seventh year on the Maryland State Board of Dental Examiners.

Cohan also is a member of the Psi Chi National Honor Society in Psychology and the Gamma Pi Delta Honor Society in Prosthetic Dentistry, among others. He additionally is a member of the nonprofit Pierre Fauchard Academy and a fellow in the American College of Dentists and the International College of Dentists.

In 2017, Cohan received UMSOD’s inaugural Alumnus of the Year Distinguished Public Service Award in honor of his contributions to the oral health field, the school, and the residents of Maryland.

“It is with great pleasure that I would like to thank the Cohans tonight for all they have done for the school and to enthusiastically congratulate them on the naming of this state-of-the-art pediatric dentistry clinic,” Reynolds said.

Indeed, Barry and Adele Cohan are well-known throughout the school and the Baltimore community — a fact borne out by the many warm congratulations, toasts, memories, and anecdotes that were offered throughout the virtual celebration.

Saying that he and Barry Cohan shared many things including the “Board of Visitors, power boats, and a deep love for our school,” Melvin F. Kushner, DDS '66, chair of UMSOD’s BOV, toasted the couple and wished them health and happiness.

To view the virtual ceremony and reception, visit www.dental.umaryland.edu/CohanNamingCeremony. Mdi

EXPANDING YOUNG MINDS

UMSOD Professor Recognized
for Launching Global
Neuroscience Competition

BY JOEL KABOT



Baltimore
Montreal
Toronto
San Diego
Florence, Italy
Capetown, South Africa
Vienna
Washington, D.C.
Cairns, Australia
Copenhagen, Denmark
Daegu, South Korea





Previous page, top: Norbert Myslinski has spent decades working to inspire youths to study neuroscience.

Previous page, bottom: Participants in the 2019 International Brain Bee in Daegu, South Korea.

Near left: Myslinski, photographed in Daegu, wants to spread the message that “there’s so much in neuroscience that’s applicable in daily life.”

Spend a few minutes with Norbert Myslinski, PhD, associate professor in the Department of Neural and Pain Sciences at the University of Maryland School of Dentistry (UMSOD), and you’ll realize he has a lot going on.

Whether it’s running the International Brain Bee, an academic neuroscience competition for high schoolers; advising the International Youth Neuroscience Association, a student-run consortium of neuroscience clubs; or lecturing as far afield as China or as close to home as the many different schools of the University of Maryland, Baltimore, one common theme unites it all.

“I’m trying to get the idea out there that neuroscience is for everyone, especially kids,” he says.

His efforts, particularly those on behalf of the Brain Bee, earned him a 2020 University System of Maryland (USM) Board of Regents Faculty Award for Excellence in Public Service. A Regents Award is the highest honor USM bestows to faculty members.

A family history of neurological disorders inspired him to pursue neuroscience and led him to UMSOD, where he first studied serotonin in laboratory animals. But when he found himself becoming allergic to the animals, he shifted his focus to human subjects — and a number of new grants and opportunities focused on bringing science to the lay public.

The Brain Bee got its start in the 1980s, when Myslinski received a National Institutes of Health grant to lead a biomedical

research summer program for high school students. Throughout the next decade, 30 students would arrive on campus each summer to be instructed by UMSOD faculty members.

When President George H.W. Bush declared the ‘90s to be the “Decade of the Brain,” Myslinski wanted to capitalize on the newfound interest in neuroscience. One element of the summer program was a science competition, which often proved to be a highlight of the students’ experience.

“I thought it would be nice to have a bigger competition — one that could inspire young men and women and motivate them to learn about the brain,” Myslinski says.

He started a Maryland-only contest in 1998. Buoyed by its success, Myslinski challenged colleagues across the U.S. and Canada to set up at least a dozen chapters so they could expand the competition. Within a year, the International Brain Bee was up and running. Since then, it has grown to include chapters in more than 50 countries on every inhabited continent.

One thing remains the same, however: It all starts at the chapter level. That’s where high school students prepare for their local Brain Bees by reviewing a downloadable book that contains all of the material to be covered. At the local competitions, organized by chapter coordinators, judges ask questions and grade the participants’ responses. Winning students progress from local chapters to national Brain Bees. The International Brain Bee awaits those who are crowned national champions.



Left: Norbert Myslinski and three International Brain Bee competitors in Grenada

Below: In 2019, the International Brain Bee was held in Daegu, South Korea; this was the first time the competition was held in East Asia.



“I’M TRYING TO GET THE IDEA OUT THERE THAT NEUROSCIENCE IS FOR EVERYONE, ESPECIALLY KIDS.”

— NORBERT MYSLINSKI

At the international level, things get very interesting. The international competition has five parts, including a neuroanatomy cadaver lab where students are asked to identify different parts of the brain.

“Most students have never seen a real human brain before,” says Myslinski, “so it’s a pretty amazing experience for them.”

In another section of the competition, participants must interview “patients” — actors pretending to have certain neurological disorders — and correctly diagnose their conditions. Students can even “order” lab tests and get the results right away.

Students also complete neurohistology and written sections, followed by a live Q&A session. Three judges then tally everything up and determine the winners.

For years, Myslinski coordinated the international events, picking the venues, writing the questions, and raising the necessary funds. Recently, however, a board of directors, composed of two directors drawn from five of the most influential neuroscience organizations, has taken over the role. Myslinski still coordinates the U.S. competition.

In 2019, the International Brain Bee took place in Daegu, South Korea, the first time the competition was held in East Asia. However, this year’s U.S. and world championships had to be canceled due to the COVID-19 pandemic. Myslinski is hopeful, though, that next year’s U.S. event, scheduled for northeast Ohio, and the international championship, scheduled for San Diego, will go on.

Regardless, the International Brain Bee continues to inspire. It has even spurred the creation of a separate organization, the International Youth Neuroscience Association (IYNA), which Myslinski co-founded with student leaders and continues to advise.

“There’s no neuroscience in high schools, and the students wanted it,” Myslinski notes. “So they started clubs but needed some unifying network.”

The IYNA provides just that, giving students an opportunity to coordinate their efforts to increase neuroscience education. The nonprofit, completely run by high schoolers, even publishes a student-authored and -edited scientific quarterly journal, spurring student-led research into the brain.

Myslinski believes that neuroscience can fascinate younger kids, as well. He’s currently creating a series of children’s books for middle school students, with each book exploring a different brain disorder. Working with an established children’s book author, Myslinski hopes to make brain science even more accessible to younger audiences.

After all, Myslinski argues, why should motivated students have to wait until college or even medical school?

“There’s so much in neuroscience that’s applicable to daily life,” he says. **MD**

Lasting Impressions

Laurels



Alkhubaizi



Ganesh



Massey



Strassler

Goot Alkhubaizi, MS, director, Advanced Education in General Dentistry Program; **Nisha Ganesh, DDS, MAEd**, director of predoctoral education; **Ward Massey, BDS, PhD**, clinical associate professor and chair; **Mary Anne Melo, DDS**,

MSc, PhD, associate professor and director, Division of Operative Dentistry; and **Howard Strassler, DMD, FADM, FAGD**, professor, Division of Operative Dentistry; all in the Department of General Dentistry, were co-authors of “Assessment of the Radiant Emittance of Damaged/Contaminated Dental Light-Curing Tips by Spectrometer-Based Methods,” which was published in *Restorative Dentistry and Endodontics*.



Bosio

Jose A. Bosio, BDS, MS, clinical associate professor and division chief, orthodontics, Department of Orthodontics and Pediatric Dentistry, received an award from the American Association of Orthodontists to attend the Chairs and Academic Administrators Management Program of the American Dental Education Association’s Academy of Academic Leadership.



Canares



Chavis

Glenn Canares, DDS, MSD, clinical assistant professor, Department of Orthodontics and Pediatric Dentistry, and **Sydney Chavis, DMD**, clinical assistant professor, Department of Oral and Maxillofacial Surgery, co-authored “The Transition of Patients with Special Health Care Needs from Pediatric to Adult-Based Dental Care: A Scoping Review,” which was published in *Pediatric Dentistry*.



Chellaiah

Meenakshi Chellaiah, PhD, professor, Department of Oncology and Diagnostic Sciences, co-authored “L-Plastin Deficiency Produces Increased Trabecular Bone Due to Attenuation of Sealing Ring Formation and Osteoclast Dysfunction,” which was published in *Bone Research*, and “Methylsulfonylmethane Increases Osteogenesis and Regulates the Mineralization of the Matrix by Transglutaminase 2 in SHED Cells,” which was published in *PLOS One*.



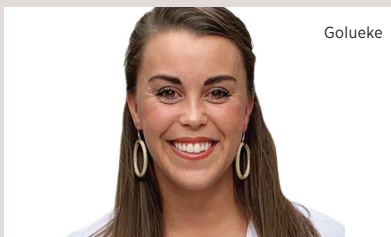
Feng

Hanping Feng, PhD, professor, Department of Microbial Pathogenesis, received two R01 grants from the National Institute of Allergy and Infectious Diseases for “Characterization of Neutralizing Antitoxins and Epitopes in Clostridium Difficile Patients” and “Preventing Norovirus and Clostridium Difficile Gastroenteritis by Engineered Probiotic Yeast *Saccharomyces Boulardii* Secreting Multi-Specific Single-Domain Antibodies.” Feng and **Yongrong Zhang, PhD**, research associate, Department of Microbial Pathogenesis, were awarded a patent for “Tetra-Specific, Octameric Binding Agents and Antibodies Against Clostridium Difficile Toxin A and Toxin B for Treatment of Clostridium Difficile Infection.”



Gentry

Philip Gentry, DDS, FAGD, assistant clinical professor, Dean’s Faculty, Department of General Dentistry, and fourth-year student **Erin Golueke** co-authored “Bridging the Missing Tooth Space Between an Implant and Natural Tooth,” which was published in *GP: The Journal of the New York State Academy of General Dentistry*.



Golueke



Hack

Gary Hack, DDS, and Se-Lim Oh, DMD, MS, clinical associate professors, Department of Advanced Oral Sciences and Therapeutics, and **Cynthia Idzik-Starr, DDS**, clinical assistant professor, Department of Oral and Maxillofacial Surgery, were among the co-authors of “Provisional Removable Prostheses,” which was published in the January issue of *Decisions in Dentistry*. That issue also highlighted research co-led by Hack on oral palate width in patients with deficit schizophrenia. Hack also co-authored “Computerized Optical Impression Making of Edentulous Jaws — An In-Vivo Feasibility Study,” which was published in the *Journal of Prosthodontic Research*.



Oh



Melo

Mary Anne Melo, DDS, MSc, PhD, associate professor and director, Division of Operative Dentistry, Department of General Dentistry, co-authored “Determining the Effects of Eugenol on the Bond Strength of Resin-Based Restorative Materials to Dentin: A MetaAnalysis of the Literature,” which was published in *Applied Sciences*; co-authored “Cerium Dioxide

Particles to Tune Radiopacity of Dental Adhesives: Microstructural and Physico-Chemical Evaluation,” which was published in the *Journal of Functional Biomaterials*; and was the senior author of “Dental Sealant Empowered by 1,3,5-Tri Acryloyl Hexahydro-1,3,5-Triazine and α -Tricalcium Phosphate for Anti-Caries Application,” which was published in *Polymers*.



Price

Jeffery B. Price, DDS, MS, director of oral radiology and clinical professor, Department of Oncology and Diagnostic Sciences, authored the chapter “Caries Detection with Dental Cone Beam Computed Tomography” in *Detection and Assessment of Dental Caries: A Clinical Guide*.



Ren

Ke Ren, PhD, MD, professor, Department of Neural and Pain Sciences, received a five-year, \$620,698 grant from the National Institute of Dental and Craniofacial Research (NIDCR) for “Disruption of Homeostatic Neuroimmune Interactions in Descending Circuitry in the Development of Pain Chronicity,” as well as a five-year, \$227,888 subcontract under the NIDCR grant “LIGHT and Lymphotoxin Targeting for the Treatment of Chronic Orofacial Pain Conditions” awarded to the University of Texas Health Science Center at San Antonio.



Stone

Maureen Stone, PhD, research professor, Department of Neural and Pain Sciences, is president-elect of the Acoustical Society of America and will assume the role in June 2021.



Traub

Richard Traub, PhD, professor and vice chair, Department of Neural and Pain Sciences, co-authored “Valproate Reverses Stress-Induced Somatic Hyperalgesia and Visceral Hypersensitivity by Up-Regulating Spinal 5-HT_{2C} Receptor Expression in Female Rats,” which was published in *Neuropharmacology*, and “The Role of Descending Pain Modulation in Chronic Primary Pain: Potential Application of Drugs Targeting Serotonergic System,” which was published in *Neural Plasticity*.



Syme

Sheryl Syme, RDH, MS, associate professor and director, Dental Hygiene Program, Division of Dental Hygiene, Department of Advanced Oral Sciences and Therapeutics, received the Mars Wrigley Foundation’s Healthier Smiles Grant, awarded by the American Dental Hygienists’ Association’s Institute for Oral Health, for the CURE Scholars Oral Health Promotion and Sealant Program Project.



Younis

Rania H. Younis, BDS, MDS, PhD, director, Advanced Program in Oral and Maxillofacial Pathology, and assistant professor, Department of Oncology and Diagnostic Sciences, received a \$115,000 Maryland Innovation Initiative Phase I grant from the Maryland Technology Development Corp. for “A Blood Diagnostic for Assessing Head and Neck Cancer Histological Immune Profile.”

Legislative Aid



Suzanne Burgee, RDH, BS ’12, QDA, clinical instructor in the University of Maryland

School of Dentistry Dental Hygiene Program, was reappointed for a third consecutive term as legislative committee chair for the Maryland Dental Hygienists’ Association.

The committee — which works with lobbyists, legislators, business owners, and other health care providers and professional organizations — puts forth and tracks legislation, offering support or opposition to proposed laws as they relate to public health, the welfare of Maryland residents, and policies affecting dental hygiene/dental practice.

In 2019, HB738, which allows dental hygienists to practice under the general supervision of a dentist in collaborative settings such as long-term care facilities, group homes, and other health care facilities, was passed. In May 2020, HB749, which allows dental hygienists to prescribe and administer medications commonly used chairside, was passed.

“Maryland now is the seventh state in the U.S. to allow dental hygienists limited prescriptive writing authority,” Burgee says, referring to HB749. “We owe many thanks to the Maryland State Dental Association for its support and collaboration on this bill. Teamwork made this possible.” **MD**

— GWEN FARISS NEWMAN

Photo courtesy of Suzanne Burgee



FocalPoint

Dentistry in the COVID-19 Era: How We Are Making UMSOD's Clinics Safe

BY LOUIS G.
DEPAOLA, DDS, MS

Who could have known?

A cluster of severe pneumonia cases caused by a novel coronavirus first reported in Wuhan, China, in December 2019 has become the worst pandemic in history. By November, more than 55 million cases worldwide and more than 11.1 million cases in the United States had been reported (and more than 264,000 Americans had died from the virus). Researchers identified the cause of these infections as a coronavirus similar to the SARS coronavirus that emerged in 2003. Although similar to SARS, this new virus was identified as a novel, never-reported virus and is now called SARS-CoV-2. It causes a severe acute respiratory syndrome in many patients as well as multiple other serious residual effects; infection in many cases results in death.

Named COVID-19 (coronavirus disease-2019), it unfortunately is very efficiently transmitted from person to person when in close contact (within 6 feet).

Dental providers can be exposed to this infection whenever dental care is provided, and due to the number of cases in the community and the route of transmission, this infection has had a dramatic impact on dental practice.

In March, Maryland Gov. Larry Hogan decreed that only urgent care should be performed until the COVID-19 infection rate dropped to an acceptable level. On May 6, new cases had decreased enough that the governor allowed a resumption of elective medical and dental care.

So, what is the University of Maryland School of Dentistry (UMSOD) doing to protect dental students, faculty, staff, and patients? The virus is dispersed in microscopic droplets when people cough, sneeze, sing, or even talk. Furthermore, most dental treatment involves the use of a device that uses water and air to create an aerosol.

At UMSOD, our first goal was to improve respiratory protection for oral health care providers by reducing the quantity of aerosol generated. While surgical face masks have been effective, a better-fitting device is required to protect against SARS-CoV-2. Consequently, UMSOD requires care providers to wear a fit-tested N-95 respirator, or its equivalent, for all dental procedures. Because the virus also can infect by means of eye contact, full-face shields are required, too.

To minimize the amount of aerosol, every patient is asked to perform a pre-procedural antiseptic mouth rinse, and our clinics have temporarily banned certain procedures that generate excessive aerosol, such as ultrasonic scalers. We also encourage the use of a rubber dam whenever possible. Air-purifying devices have been strategically placed throughout the clinics, and the air exchange rate has been modified to 15 room exchanges per hour. High-volume, extra-oral suction devices have been purchased to improve the quality of air.

All students, faculty, staff, and patients are screened for COVID-19 before entering the building, and everyone is required to wear a face covering for the duration of their visit. Barriers are in place to reduce person-to-person contact, and physical distancing is enforced throughout the building.

As a result, UMSOD meets or exceeds all Centers for Disease Control and Prevention, Occupational Safety and Health Administration, and Maryland Department of Health regulatory guidelines regarding COVID-19. Since March, thousands of patients have been treated at UMSOD. We believe our clinics are as safe as possible for our students, faculty, staff, and patients. **MD**

DePaola is a professor and the associate dean of clinical affairs in UMSOD's Department of Oncology and Diagnostic Sciences.

Alumni

From the Alumni Association



Much has happened since I last wrote. For most, it continues to be a challenging year as we adapt to new practices made necessary by the COVID-19 pandemic. Issues with ventilation, personal protective equipment, and patient scheduling have all required creative solutions — and, sometimes, sheer tenacity! I know I found myself

exhausted the first week my office reopened, but like many of you, I have adjusted to our “new normal.”

I am happy to report that, although most University of Maryland School of Dentistry (UMSOD) administrators have been asked to telework through March, clinical faculty are on-site and school is in session. At our Alumni Board meeting in September, Mark A. Reynolds, DDS '86, PhD, UMSOD dean, reported how proud he was of the faculty who swiftly adapted to the new challenges of educating tomorrow's oral health professionals. Students in UMSOD's clinics are following the required protocols. Additionally, although available dental chairs have been reduced (as mandated by Maryland Department of Health guidelines), innovative changes in scheduling and faculty coverage have resulted in impressive student productivity.

The pandemic has forced us to re-evaluate and re-invent, and this has brought unanticipated benefits in some cases. Although gatherings now must be held virtually, there is a silver lining: Online events enable us to interact

with a wider range of alumni. Our recent Zoom meetings and virtual continuing education classes have drawn UMSOD graduates from afar who otherwise might not have been able to participate!

Look for an announcement about a new way to connect called Lunch-and-Learn. It works like this: The alumni office provides lunch for participants and “drops by” virtually to offer updates about the school. The idea is to connect alumni as they participate in a conversation about UMSOD via Zoom and enjoy lunch together — while socially distanced, of course.

Our annual reunion also will be virtual in 2021, scheduled for April 16. Class agents who have graduated in years ending with a 1 or 6 are asked to contact Nicole Nash in the alumni office if they'd like to assist with planning. Additionally, now is the perfect time for all to update their contact information.

Finally, I am pleased to announce that UMSOD Connect, our student mentoring platform on LinkedIn, is scheduled to be launched in January. Our inaugural focus is on residencies, and we are recruiting recent graduates who have completed residencies to act as “influencers” to provide advice for current students who are evaluating their options.

As you can see, UMSOD and its graduates continue to be resilient, inventive, and engaged!

Best regards,

Shari C. Kohn, DDS '90

President | Alumni Association Board of Directors

For more information about the Alumni Association or events, please contact Nicole Nash, assistant director of alumni relations, at 410-706-3663 or nnash1@umaryland.edu.



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

ClassNotes



Michael Meyers, DDS '54

Michael Meyers was featured in the *Carroll County Times* on Sept. 28. In the interview, the Lonaconing, Md., native and U.S. Army veteran discusses running a family practice on Main Street in Westminster, Md., from 1959 until his retirement in 2003. He also recalls casting his first presidential ballot for Harry Truman and participating in the 1963 March on Washington to advocate for African Americans' civil and economic rights.



Susan Stanton, DDS '91

Susan Stanton was inducted into the Fort Hill High School (Cumberland, Md.) Hall of Fame in September. Stanton has worked in health policy, private practice, dental research, and as a subject matter expert/consultant for private industry. A researcher and prolific author, she has written or co-written 24 articles and abstracts. In 1992, she established a private practice in Maryland. She also has served as a senior health scientist at the Centers for Disease Control and Prevention, where her projects and activities included leading agency-wide science workgroups, working with a team

that provided surveillance for major disease outbreaks, implementing policy, and providing consultation to the director. Stanton, who also has served in leadership roles with the Maryland State Dental Association, American Dental Association, and the University of Maryland School of Dentistry Alumni Association, retired in January 2019.



Edward Ginsberg, DDS '82

Edward Ginsberg was appointed to the board of directors of the American Board of Pediatric Dentistry (ABPD) and will serve from 2020-26. The founding partner of the Smiles4Children pediatric dental group in Catonsville, Ellicott City, and Eldersburg, Md., he graduated from the University of Maryland School of Dentistry (UMSOD) with honors and completed his pediatric dental specialty training at UMSOD in 1984. He is a clinical associate professor at UMSOD and has taught in the Division of Pediatric Dentistry since 1985. Ginsberg also is a member of the Johns Hopkins Hospital craniofacial team and an examiner for the Maryland State Board of Dental Examiners' sedation committee. He has been an ABPD diplomate since 1992 and served on its examination committee as a member, part-leader, and chair of the Oral Clinical Examination.

GET CONNECTED

ARE YOU UNIVERSITY OF MARYLAND SCHOOL OF DENTISTRY (UMSOD) ALUMNI WHO RECENTLY GRADUATED FROM A RESIDENCY PROGRAM? WE NEED YOUR KNOW-HOW!



You're invited to join UMSOD Connect,

the Alumni Association's new UMSOD LinkedIn group, through which alumni meet current students while sharing their knowledge about residency programs. If you're interested, please join us at www.linkedin.com/groups/12149632 or by emailing dentalalumni@umaryland.edu.

InMemoriam



Sue-ning Chu Barry, PhD

Sue-ning Chu Barry, one of the first two women to reach the rank of full professor at the University of Maryland

School of Dentistry (UMSOD), died July 14, 2020, in Fort Lauderdale, Fla. She was 87.

Born in mainland China in 1932, Barry and her family fled communist forces to settle in Taiwan in 1949. After attending high school there, she graduated from Barat College in Illinois. She earned a PhD in zoology from the University of Maryland, College Park, before joining UMSOD's Department of Histology and Embryology as a National Institutes of Health-funded research fellow in 1961; a year later, she became an assistant professor. In 1968, Barry was named an associate professor.

In 1975, Barry, then a member of the Department of Anatomy, and Frieda Rudo, MS, PhD, a member of UMSOD's Department of Pharmacology, were promoted to full professors by then-Dean Errol Reese, DDS. They were the first two women to achieve that academic rank at the school.

After retiring from UMSOD in 1990, Barry donated her Timonium, Md., house to the school in 2014. The money received from the sale of the house was earmarked to support research in UMSOD's Department of Neural and Pain Sciences.

In 2018, Barry published *My Unexpected Life: A Memoir*, chronicling her journey from refugee to U.S. academician, and her many trips around the world.



Ira Bloom, DDS

Ira Bloom, clinical assistant professor in the Advanced Education in General Dentistry (AEGD) program, died Aug. 24, 2020. He was 72.

Bloom was a 1972 graduate of the University of Maryland School of Dentistry and worked in private practice for 40 years before joining the AEGD program as a faculty member. Known as a dedicated professional and devoted family man, Blum was an aesthetic and restorative dentist and a warm and generous colleague to all. He also was loved by his students for teaching them how to “make life easy” and “begin with the end in mind.”

In his spare time, Bloom was a master gardener and spent 12 years designing and planting an exquisite Japanese garden. His gift for artistry was also evident in his charcoal drawings, paintings, and sculpting.

“He was an artist in dentistry and by hobby. His Japanese garden had multiple statues that he made and intricately painted; the garden was just beautiful,” said Douglas M. Barnes, DDS, MS, UMSOD professor and chief dental officer, Faculty Practice.

“He also was very dedicated to his students and AEGD residents – or, as he called them, ‘his kids.’ He was passionate about mentoring them, particularly in digital dentistry.”

He is survived by many family members including his wife, Lynn Bloom (nee Zemel); daughters Hilary Bloom and Dana (Danielle Johansen) Kunzelman; and brothers Alan Bloom and Robert Bloom.

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

Anna M. Barish, RDH, BS '73
William P. Brodie, DDS '55
George T. Keary, DDS '61
Paul P. Mallek, DDS '71

John Miller, DDS '52
Lawrence A. Palmersheim,
DDS '80
George D. Resh Jr., DDS '55

*The school learned of the passing of these alumni between June 1 and Sept. 22, 2020.

GameChanger



Thinking Outside the Box

New Assistant Dean Aims to Move UMSOD's Curriculum Forward

In late July, Mark A. Reynolds, DDS '86, PhD, dean and professor of the University of Maryland School of Dentistry (UMSOD), named Mark D. Macek, DDS, DrPh, professor in the Department of Dental Public Health and director of instructional evaluation, as the inaugural assistant dean for curriculum innovation and scholarship.

Working closely with Reynolds and other members of school administration, Macek is charged with pursuing new teaching methods and technologies and ensuring that the school's strategic plan is aligned with Commission on Dental Accreditation (CODA) standards. Macek is a natural fit for the position, particularly given his previous role as chair of the Accreditation Self-Study Steering Committee, which oversaw UMSOD's successful re-accreditation in 2018.

"As the self-study became more of a distant memory, those in school administration

continued to think about the CODA standards and how we can improve," Macek says. "We're going to explore how we can move in both directions — realizing the strategic plan while adhering to CODA."

The new position also will allow him to "think outside the box," Macek says, putting UMSOD at the forefront of dental education. That could take many forms, whether by incorporating virtual reality when teaching students, enhancing remote learning, or embracing interdisciplinary projects with other schools at the University of Maryland, Baltimore or within the University System of Maryland.

Macek, who joined UMSOD in 1998 after working with the Centers for Disease Control and Prevention's Epidemic Intelligence Service, notes that the COVID-19 pandemic has made innovation in teaching a necessity.

"The pandemic is a perfect example of why we need to explore and take advantage of new technologies," he says. "We want to be prepared. Something like remote learning can both strengthen our curriculum and broaden our reach despite a disruption like COVID-19."

Looking back over his more than two decades in Baltimore, Macek credits UMSOD with giving him an opportunity not only to conduct research but also teach and interact with students clinically and didactically. It's his admiration for — and belief in — the school that drives him forward in his new role.

"We want to set the standard of what dental education can be," Macek says, "so that anyone who is interested in dental education looks to UMSOD." **M**

"The pandemic is a perfect example of why we need to explore and take advantage of new technologies. We want to be prepared."

— MARK MACEK, ASSISTANT DEAN FOR CURRICULUM INNOVATION AND SCHOLARSHIP

— JOEL KABOT



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