

**AN ENERGIZING
ALUMNI DAY**
Celebrates Legacy
and Innovation

**HIGH SCHOOL
STUDENTS**
Dive into Dentistry

**SLUG SLIME
INSPIRES**
Adhesive Hydrogel for
Treating Oral Lesions

Harvard School of Dental Medicine
Fall 2024 / Volume 84, Number 2

HARVARD UNIVERSITY
DENTAL SCHOOL AND HOSPITAL

188
LONGWOOD AVE

Harvard Dental



The Class of
2028 Seizes
Their Moment

Student Snapshot

William An, DMD27, and Valeria Ortiz Jimenez, DMD27, spent their summer break learning alongside six Harvard Medical School (HMS) students in Rwanda. The global community-based education program, sponsored by HMS and associated with the University of Global Health Equity (UGHE) and the Paul Farmer Collaborative, offered students a chance to listen, observe, and learn from community partners in Rwanda for three weeks.

“As HSDM students, we also got to foster amplitude of conversation around the importance of oral health in the context of systemic health,” said Ortiz Jimenez. “With more attention to oral health education on a community level, we can alter the perceptions of oral hygiene, push advocacy for policy changes, and improve the management of systemic diseases.”

The program also included creating a quality improvement project that partnered with local villages and communities. Ortiz Jimenez’s project on oral health hygiene education and awareness was chosen for funding and future implementation at the UGHE.



Dear Alumni and Friends,

FOR MANY HSDM ALUMNI, including me, the mentorship I received throughout my career has had a huge influence on my trajectory. It was a mentor who first introduced me to dentistry back in my years as a teen in Missouri. That was when I first realized how fulfilling it could be to combine my interests in science and health care to treat patients. Later on, when I came to HSDM as an advanced graduate student in the Periodontology program, pursuing a Doctor of Medical Sciences degree, my eyes were opened even wider to the enriching opportunities and mentorship available at Harvard and in the Longwood Medical community. Not only did I find passionate and dedicated mentors in HSDM faculty members, but also in the Harvard-affiliated labs and hospitals. Today, this still rings true for our current students.

In this issue, you'll read about how younger teens are taking an interest in dentistry, and how HSDM is providing them with an opportunity to get a taste of working in the field through the MEDscience summer program. We know it is important to provide these pathway opportunities early on to encourage careers in health care as our nation faces provider shortages, particularly in rural and underserved communities. We've also addressed this through initiatives like our ongoing Bridge to Dental School program that encourages students underrepresented in dentistry to apply to dental school. Last year, we saw a 25% increase in applications to our DMD program; this underscores the growing desire of our students to make a difference through careers in dentistry. You can learn more about their motivations and interests in a story about our new predoctoral class.

When I talk with our new students, I often give them examples of the career paths they can explore by pointing to our successful alumni. The two recipients of this year's Distinguished Alumni Awards, Drs. Stephen Sonis and Maurizio Tonetti, are wonderful examples of alumni who have achieved great success and recognition and continue to pay it forward by mentoring others and advancing the field through their research. I encourage you to read about their careers which were



influenced by their own HSDM mentors. I'm also grateful for our alumni leaders in the Harvard Dental Alumni Association who serve as excellent role models for students with their dedication to serving our community and bringing us together.

The spring and summer were energizing with well-attended events around Alumni Day and a Leadership Forum hosted by HSDM's Initiative to Integrate Oral Health and Medicine. I enjoyed connecting with alumni and thought leaders who are driving innovation and advocating for policies that better integrate oral health and medical care to improve patient outcomes.

This fall, we look forward to more opportunities to come together at receptions hosted around the country and on Harvard's turf for the Harvard-Yale football game. I hope to see you at one of these upcoming events.

A handwritten signature in black ink, appearing to read 'Will', written in a cursive style.

WILLIAM V. GIANNOBILE, DDS, DMSC96, PD96
 Dean and A. Lee Loomis, Jr. Professor of Oral Medicine,
 Infection & Immunity
 Harvard School of Dental Medicine

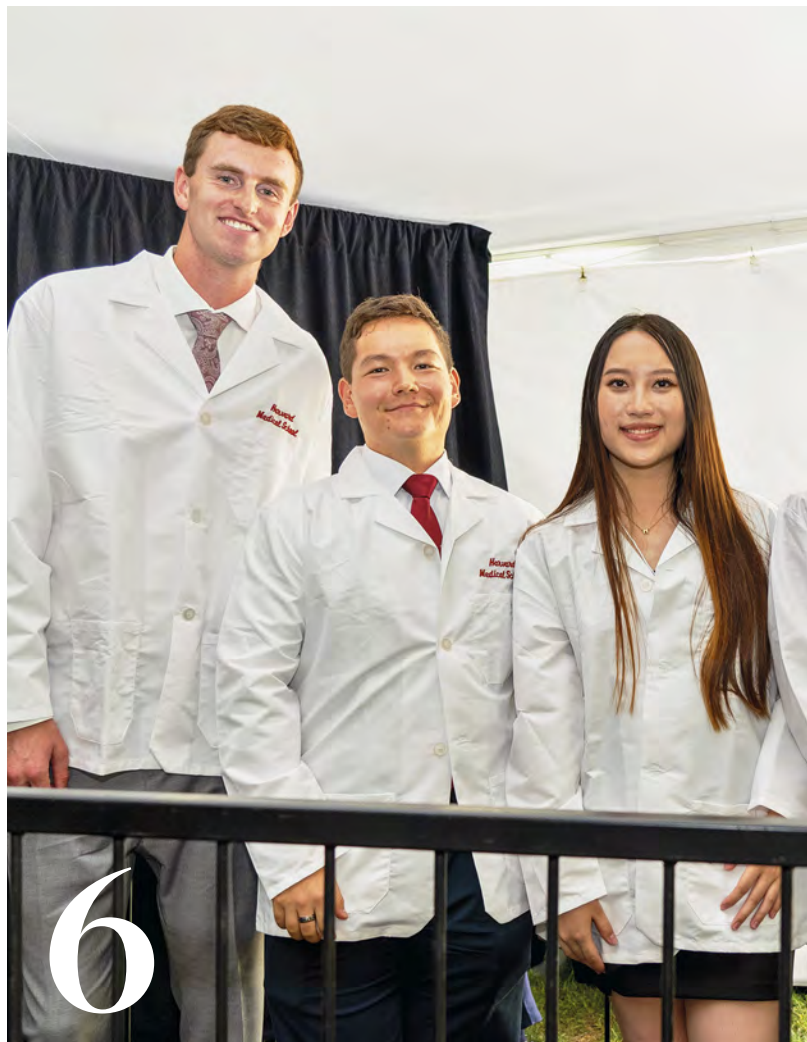
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On Longwood Ave.



SPACE UPGRADE

A Fresh New Look

Finishing touches were made to renovations in HSDM's main building lobby and the first floor of HSDM's Research and Education Building (REB). The transformative updates provide a more modern aesthetic and amenities. In the REB, a community gathering space with a kitchenette and new furnishings has enhanced the communal atmosphere and is filled with activity. The newly remodeled areas provide a welcoming entry point to the School and space for the HSDM community to socialize and study.

LEFT: Predoctoral students relaxing and studying in HSDM's Research and Education Building.

INTERNATIONAL APPEAL

Perio Experts from 20 Countries Convene at HSDM

HSDM hosted the International Academy of Periodontology Research Conference (IAPRC) in June. The event brought more than 80 esteemed speakers and participants from 20 different countries to Boston for an engaging two days of presentations on the most promising new research in the field of Periodontology. Dr. Magda Feres, chair of HSDM's Department of Oral Medicine, Infection, and Immunity, and IAPRC director of Scientific Affairs, served as the local host. Dean William Giannobile presented the keynote lecture, "Precision Periodontology: AI and Omics to Customize Patient Care."



ABOVE: IAPRC speakers and participants gather on the front steps of Gordon Hall.



ABOVE: Cami Tussie, DMD25, Anita Nasser, DMD25, Alireza Eghdamian, and Caspian Chaharom holding the Ingenuity Award at the 2024 Harvard President's Innovation Challenge.

STUDENT INNOVATORS

Ingenuity Award Goes to PerioSense

Cami Tussie, DMD25, and Anita Nasser, DMD25, along with student collaborators from Boston University, were honored with the Ingenuity Award at the 2024 Harvard President's Innovation Challenge for their work on an automated periodontal probe. The device, PerioSense, calculates probing depth with reproducible accuracy, making dental periodontal charting more efficient. The team also won second place in the general track during this year's Boston University's Innovate@BU New Venture Competition, receiving a \$10,000 prize.

“As students, we noticed how incredibly time-consuming periodontal probing is when working without a dental assistant, how the measurements are often not reproducible across providers, and how the time-consuming nature of probing often leads many to neglect periodontal screening altogether,” said Tussie. “We hope our probe can standardize probing across providers, improve the efficiency of the probing and charting process, and lead to better and earlier diagnosis of periodontal disease.”

INCOMING CLASS

New AGE Students Arrive on Campus

In July, HSDM welcomed the newest cohort of Advanced Graduate Education (AGE) students. The 41 residents from eight different countries and 18 U.S. states will pursue either a master of medical sciences (MMSc) degree, doctor of medical sciences (DMSc) degree, and/or certificate in a specialty field. During orientation, students had the chance to meet their co-residents, as well as their faculty instructors.

BELOW: General Practice resident Preeya Thomas getting to know other new AGE residents during orientation.



ABOVE: (Left to right) AGE residents Joseph Montesano, DMD23, W. Benton Swanson, David Tentler, and Parsa Shahidi

LEFT: (Left to right) AGE Orthodontics residents Nirali Thakor, Madelyn Koh, and Stephanie Yang, DMD23



Student Focus

The Class of 2028 Seizes Their Moment

AS BOSTON, MASSACHUSETTS, SIZZLED in an early August heat wave, a new cohort of dental students arrived on campus, ready to put on their white coats. Incoming Doctor of Dental Medicine (DMD) students were immersed in a weeklong Introduction to the Profession, forging connections with classmates and faculty who will guide them through their first year of the program.

The week began with dental and medical students celebrating their transition into the health care



You are all well poised to take the next steps in realizing your dream of becoming a doctor and putting on the white coat.”

DEAN WILLIAM GIANNOBILE

profession during the traditional White Coat Ceremony on the Harvard Medical School (HMS) Quad held on Monday, August 5. The deans of Harvard School of Dental Medicine (HSDM) and HMS, along with Bernard Chang, dean for medical education at HMS, welcomed the incoming class.

“You were chosen for the great promise we see in you and for your commitment to science, clinical care, and to service. At a time when our nation faces health care shortages—particularly in rural and underserved communities—we need you more than ever,” said Dean William Giannobile during the White Coat Ceremony. “You’ve chosen a path that is both challenging and highly rewarding. Here, you’ll find others who share your passion and determination.”

Family members and friends joined the students to cheer them on as they took the stage to introduce themselves in their white coats.

This year there was a 25% increase in applications for the 35 spots in HSDM’s predoctoral program. The dental students in the Class of 2028 hail from 13 different states, and two different countries. The class comes from 26 undergraduate institutions with nearly half entering directly from undergraduate programs. Eleven percent of the incoming class are first-generation students. During their first year, HSDM and HMS students learn alongside each other before entering each school’s focused curriculum.

“I am eager to deepen my understanding of oral and systemic health links with a robust medical education this year,” said Alisha LaBuda, an incoming DMD student from Scottsdale, Arizona.

Throughout the week, dental and medical students attended orientation sessions and participated in activities to get to know their classmates and the community. They also learned about the curriculum and resources available to support them.

WHAT ARE YOU LOOKING FORWARD TO MOST AT HSDM?



“HSDM’s holistic approach to oral health offers me the freedom to explore various and creative avenues, merging dentistry with my other interests. This autonomy allows me to pursue my ideas and carve out my unique dental journey. I am profoundly grateful for this opportunity, as it helps me find my purpose and place within HSDM’s vibrant community.”

NOURA ABOUSY, DMD28



“HSDM’s small class size and pass/fail curriculum create an environment that fosters close relationships and collaboration among classmates. I believe that advancing as a society is more important than individual success, and HSDM’s values align with this principle.”

RAHUL AINPUDI, DMD28



“I’m excited to receive broad exposure to different avenues of the dental profession and adopting therapeutic regimes in clinical practice. I look forward to deepening my understanding of oral and systemic health links with a robust medical education this year.”

ALISHA LABUDA, DMD28



“I am most excited to form long-lasting relationships with all the people I will be surrounded by. The small class size of HSDM makes it possible for me to know all my classmates on a deep level, and I am confident that I will be able to form real connections with my instructors as well.”

CLARK MORGAN, DMD28

Rahul Ainpudi, DMD28, who comes to HSDM from Florida, is excited to join a collaborative and close-knit community.

“I believe that advancing as a society is more important than individual success, and HSDM’s values align with this principle,” he said. “I aspire to become a productive member of the Harvard community and to forge meaningful friendships with my peers.”

Students also had the opportunity to listen to powerful patient stories during a patient clinic visit and explore a community-based clinic in the Greater Boston area.

During the week, students were introduced to their academic societies led by faculty advisors. The societies are smaller supportive groups that play a pivotal role helping students navigate the curriculum and serve as home base for students throughout their education. Joining this year as a new society director is Dr. Angeliki Polymeri. Before arriving at HSDM, Polymeri was a clinical lecturer at the University of Michigan School of Dentistry.

The weeklong orientation wrapped up on Friday, August 9 with a class oath that underscored the student’s commitment to treating their patients with respect, kindness, fairness, and empathy. Several



RIGHT: First-year students wait for their moment on stage at the White Coat Ceremony.

BELOW: Class of 2028 dental and medical students get to know one another during orientation week.

first-year dental students worked with their medical peers to write the class oath that the entire class recited together.

“You are all well poised to take the next steps in realizing your dream of becoming a doctor and putting on the white coat. We look forward to supporting you every step of the way and following your achievements over these next four years,” said Giannobile. “I encourage you to absorb all you can and make the most of every moment you are here...it’s your place, and it’s your time.” ♥



Alumni Focus

Harvard Dental Alumni Association Leaders Take on New Roles

IN EARLY JULY, Miguel Roque, DMD16, MMSc19, who has served as president of the Harvard Dental Alumni Association (HDAA) since 2022, passed the torch to Mindy Greenblatt Stroom, DMD05, who takes over as president of the HDAA for the next two-year term, moving from her previous role as vice president. Roque, an endodontist in private practice in Wellesley, MA, will continue to volunteer in a leadership role at Harvard, serving in a new capacity on the Executive Board of the Harvard University Alumni Association (HAA) as vice president of Graduate Schools.

“During his presidency, Miguel worked tirelessly to bring alumni together from across the country—through small pop-up events in different regions, bolstering alumni communications, and strengthening ties between the alumni and student community,” said Dean William Giannobile. “We’re grateful for his contributions, and thrilled that he will serve as our first representative on the Executive Committee of the HAA.”

During his tenure, Roque made strides incorporating more student and alumni connection points and launching Firsthand Advisors—a new online mentorship platform for students and alumni.

“Serving as president of the HDAA has been an incredible honor. In two short years, we’ve achieved so much, and I am excited to see Mindy Stroom take over this role. Her dedication and vision make her the ideal person to lead our community into the future and continue enhancing the HDAA,” Roque said. “It is a privilege to represent HSDM at the University level and further strengthen the reputation of our dynamic and impactful community.”

Stroom, an orthodontist from Ohio, will



Dr. Miguel Roque and Dr. Mindy Greenblatt Stroom

continue to build on the momentum of the HDAA. Joining her will be board members Adesegun Tewogbade, DMD04, serving as vice president, Ketan Amin, DMD04, Daniel Cassarella, DMD08, Jiachen Lin, DMD21, Sonia Molina, DMD87, Sadia Niazi, MMSc99, and Matthew Plummer, DMD73.

“My goals for these next two years include concentrating on continuing to bring the alumni together—virtually or physically. I feel like we lose touch after we graduate, and we are all yearning for a way to be involved in each other’s lives,” said Stroom. “I want to also continue to create and maintain mentorship opportunities with the dental students, especially the

women alumni. I hope we can create more informed paths for those getting out into the real world while juggling working, being parents, and leading productive and mentally healthy lives.”

HSDM alumni from all degree programs are members of the HDAA. The HDAA and Office of Development and Alumni Relations welcome alumni feedback and suggestions, which can be emailed to hsdm_development@hsdm.harvard.edu. Alumni are invited to join HSDM’s online mentoring platform, Firsthand Advisors, through the website: <https://harvardmcs.firsthand.co/> Join the HSDM group to connect directly with students. ♥

Alumni Focus

An Energizing Alumni Day Celebrates Legacy and Innovation

IN A DAY THAT WAS FILLED WITH hugs, selfies, and catching up with classmates from years past, Harvard School of Dental Medicine (HSDM) alumni came together on Friday, June 7 to celebrate long-awaited reunions and lifelong connections. More than 120 alumni and guests returned to HSDM for Alumni Day, including reunion classes celebrating their 50th, 45th, 25th, 20th, 15th, 10th, and 5th year reunions.

Miguel Roque, DMD16, MMSc19, president of the Harvard Dental Alumni Association (HDAA), welcomed attendees gathered in HSDM's Research and Education Building (REB) auditorium and introduced Dean William Giannobile.

"I have come to know Dean Giannobile throughout my presidency and am impressed by his commitment to students, faculty and staff, and alumni. We are

BELOW: The Class of 2004 relived their class photo on the front steps of HSDM.



fortunate to have him at the helm of HSDM. He truly values alumni engagement, so it's great to have such a strong turnout today," Roque said.

Recognizing Alumni Service and Achievement

Dean Giannobile thanked the alumni who returned for their reunions and recognized the class representatives for each reunion class. He gave a special shoutout to the Class of 2004 who had the largest showing for their 20th reunion—eliciting cheers from the crowd. Giannobile then gave a State of the School presentation highlighting the school's progress in relation to strategic priorities including the recruitment of key faculty and staff, new research funding, and facility improvements. He also thanked Roque who recently finished his term as HDAA president.

"I'm grateful for Miguel's service to HSDM. He energized the activities of the HDAA and increased networking and student mentorship opportunities. We're thrilled that he will go on to serve as HSDM's representative in the University-wide Harvard Alumni Association," Giannobile said.





LEFT: George Taylor, DMD74, talked with a predoctoral student during a networking reception for alumni and students.

BELOW: Members of the DMD Class of 2014 reconnected during their 10-year reunion.



At the end of Roque's term, Mindy Greenblatt Strem, DMD05, became president of the HDAA and Shola Tewogbade, DMD04, became vice president, joining new and returning board members Ketan Amin, DMD04, Dan Cassarella, DMD08, JC Lin, DMD21, Sonia Molina, DMD87, Sadia Niazi, MMSc99, and Matthew Plummer, DMD73.

This year's Distinguished Alumni Award winners were then recognized by Dean Giannobile. The first recipient, Stephen Sonis, DMSc76, PD76, was chosen for his advocacy and support of cancer patients and survivors.

"Dr. Stephen Sonis is renowned worldwide for his groundbreaking work on oral mucositis and oral toxicities from cancer therapy and is one of the founding fathers of oral oncology," Giannobile said, as Sonis stepped to the front of the auditorium to receive his medal.

"Any success I've had has come from collaborative relationships with this school," Sonis said, noting he has benefited from mentors and collaborations within HSDM. "This is truly a wonderful honor."

The second award winner, Maurizio Tonetti,

MMSc89, PD89, was selected for his contributions to improve periodontal risk and diagnosis through his work as a clinician and researcher.

"Dr. Maurizio Tonetti is a preeminent researcher in periodontology and implant surgery with an emphasis on regeneration, minimally invasive surgery, and microsurgery. Maurizio's cutting-edge research has transformed the way we look at periodontology," Giannobile said.

Tonetti also attributed his success to his education at HSDM. "I'm proud to be part of the legacy of this school and the Perio program, and I hope to see this legacy spread around the world," he said.

Looking to the Future

After a short break, a full house packed the REB auditorium for the Alumni Day Symposium, *The AI Revolution in Dentistry*. Speakers Robert A. Faiella, MMSc85, PD85, and Christina Bonebreak Jackson, DMD14, discussed insights from their work using artificial intelligence (AI) systems in the field.

Faiella discussed how AI-driven tooth identification helps with the detection of bone levels and root

surface calculus and is applied to the interpretation of radiographs for enhanced caries identification and implants. He pointed out the advantages of using AI along with the dentist’s interpretation to help inform a patient’s decision for treatment.

“It gives you more insights and has an impact at the point of patient care,” he said.

Faiella also highlighted how AI is being applied to administrative tasks in dental practices, such as

credentialing, and how it can significantly automate and accelerate the process.

Jackson spoke about the applications of AI in orthodontics. She demonstrated how 3D applications and AI make it possible to highly customize treatments for each patient.

“Orthodontics is rich with data that can be mined,” she said. With tooth segmentation, she explained training data can come from a machine-learning model and inform treatment planning.

Jackson also sees AI applications in dental monitoring allowing for greater efficiencies. Patients will be able to take scans with their phone, generating reports that will allow their doctor to remotely monitor their progress more efficiently.

The speakers joined a panel co-moderated by Dean Giannobile and Magda Feres, DMSc99, chair of Department of Oral Medicine, Infection, and Immunity, and took questions from the audience.

Celebrating a Prominent Portrait

After the audience spent time envisioning the future of dental medicine, it was time to honor the legacy of someone who was instrumental in the School’s recent past—Bruce Donoff, DMD67, MD73.

“I’m delighted to welcome our alumni and esteemed guests here today to recognize the tremendous impact



ABOVE: Christina Bonebreak Jackson, DMD14, shared insights on the use of AI during the Alumni Day symposium.

RIGHT: Grace Wu, DMD99, and Helen Chiao, DMD06, snapped a selfie during Alumni Day.





“
His contributions have profoundly shaped not only the Harvard School of Dental Medicine, but the entire landscape of medical education at Harvard.”

GEORGE DALEY
DEAN OF HARVARD MEDICAL SCHOOL

of Dr. Bruce Donoff and his remarkable 28 years as dean, as we celebrate the reveal of his official portrait that will grace the walls of HSDM,” Giannobile said. Giannobile added it was fitting to honor the former dean in the Research and Education building, a structure that Donoff had the vision to create, doubling the footprint of the School in 2004.

Donoff, his wife Mady, and their adult children Daniel and Elizabeth were seated in the front row of the auditorium across from the covered portrait. Dean Giannobile and Zachary Peacock, DMD04, Walter C. Guralnick Associate Professor of Oral and

Maxillofacial Surgery, stepped up to remove the covering and reveal the striking likeness of Donoff as the audience applauded.

Guest speakers Jane Barrow, executive director of HSDM’s Initiative to Integrate Oral Health and Medicine, and Harvard Medical School Dean George Daley, each came to the podium to say a few words about Donoff’s legacy at HSDM. Barrow recounted Donoff’s passion for integrating oral health and medicine and his support for advancing health equity.

Daley noted Donoff’s steadfast leadership over 28 years and the strong connections between the dental and medical schools.

“It’s wonderful to be able to celebrate Bruce with this amazing portrait. His contributions have profoundly shaped not only the Harvard School of Dental Medicine, but the entire landscape of medical education at Harvard,” Daley said. “His vision and dedication have left an indelible mark on this institution.”

“This is really spectacular. I’m overwhelmed,” said Donoff, as he expressed gratitude to his family, the speakers, and the audience. “I’m very honored by this day and this portrait.”

After the program concluded, alumni and guests gathered for lunch, which was followed by student-led tours of the school. At the end of the day, a networking reception gave alumni the chance to connect with current dental students. ♥

ABOVE: Ms. Jane Barrow, HMS Dean George Daley, HSDM Dean William Giannobile, and Dr. Zachary Peacock honored former HSDM Dean Bruce Donoff with his official portrait.



Drs. Maurizio Tonetti and Stephen Sonis celebrated their Distinguished Alumni Awards.

Alumni Focus

Honoring Careers Spent Advancing Research and Mentorship

Meet the 2024 Distinguished Alumni Award Recipients

TWO ACCOMPLISHED GRADUATES of Harvard School of Dental Medicine's (HSDM) advanced graduate programs were honored on Friday, June 7 with Distinguished Alumni Awards presented during Alumni Day. Stephen Sonis, DMSc76, PD76, and Maurizio Tonetti, MMSc89, PD89, were recognized for their significant contributions to the mission of the School.

Dr. Stephen Sonis

Stephen Sonis, DMSc76, PD76, an expert in oral oncology, was honored for his groundbreaking work on oral mucositis and oral toxicities from cancer therapy. Sonis received his DMD from Tufts University School of Dental Medicine, and then completed a combined doctorate and residency at Harvard. As a Knox Fellow at Oxford University, he conducted research in tumor immunology.

"When I came to HSDM, I knew was fortunate to be at a place that very early on emphasized the relationship



The relationships I made at Harvard have sustained for a very long time. Individuals who were my mentors, were very generous with their time, so I hope to follow the same path.”

DR. STEPHEN SONIS

between systemic health and oral health and recognized that the School extended well beyond 188 Longwood Avenue,” Sonis said. “Drs. Shklar and Goldhaber encouraged me to do research beyond the dental school, and that opened up huge opportunities for me.”

Currently, Sonis is a professor of Oral Medicine at Harvard, a senior member of the Division of Oral Medicine and Dentistry at Brigham and Women’s Hospital, and a designated member of the Distinguished Faculty in Surgery at the Dana-Farber Cancer Institute. He has leadership roles in two translational research companies and has done extensive non-profit work focused on the adverse health and economic outcomes of cancer toxicities.

Sonis has published on the clinical, biological, and health economic aspects of cancer and complications associated with its treatment. He holds several patents and is the author of more than 350 original publications, reviews, and chapters, and is the author or editor of eleven books.

Throughout his distinguished career, he has served as a generous mentor to countless scientists in the field. Mentees know him as a brilliant researcher who has dedicated his life’s work to prioritizing patients, relationships, and family.

“The relationships I made at Harvard have sustained for a very long time. Individuals who were my mentors, were very generous with their time, so I hope to follow the same path,” he said.

Sonis, who has mentored countless residents since 1979, continues to work with pre- and postdoctoral students from HSDM and HMS. He makes a point to ensure his mentees feel supported in all aspects of their personal and professional lives.

“The students are super smart and have a great work ethic. They are eager to do good work,” he said. “It’s fun working with them!”

Dr. Maurizio Tonetti

Maurizio Tonetti, MMSc89, PD89, was the second alumnus honored with a Distinguished Alumni Award for his contributions to improving periodontal risk and diagnosis through his work as a clinician and researcher. He earned his DMD from the University of Genoa and went on to complete his MMSc in periodontology at HSDM.

“HSDM prepared me for my career in academia and I had a fabulous experience with my fellow residents—all of whom are now accomplished leaders in academia, practice, and entrepreneurship,” said Tonetti. “I’m really proud to have received this unexpected recognition.”

Tonetti currently serves as the chair and professor at the Shanghai Jiao Tong University School of Medicine and the director of the Shanghai Perio-Implant Innovation Center at Shanghai Ninth People’s Hospital. He also maintains a part-time private practice limited to periodontology and implant surgery with an emphasis on regeneration, minimally invasive surgery, and microsurgery. Previously, he served as professor and department head of periodontology at several universities across Asia, Europe, and North America.

He is widely recognized for his contributions to improved periodontal diagnosis and risk assessment, control of periodontitis, the practice of periodontal regeneration, and design and execution of large clinical trials in periodontology and implant dentistry.



This is for those who encouraged me to be in academia, and who taught me how to pursue innovation.”

DR. MAURIZIO TONETTI

Tonetti’s research has been published in numerous journals such as *New England Journal of Medicine*, the *Journal of Dental Research*, and the *Journal of Clinical Periodontology*. His cutting-edge research has helped transform the way dentists, clinicians, and other health care workers look at periodontology.

Tonetti credits his mentors and time at HSDM for his success as a clinician and researcher.

“This is for those who encouraged me to be in academia, and who taught me how to pursue innovation,” said Tonetti. “I’m proud to be part of the legacy of this school and the Perio program, and I hope to see this legacy spread around the world.” ♥

Education Focus

High School Students Dive into Dentistry



ABOVE: Dr. Tejasvita Chandel worked with a MEDscience student during a hands-on skill workshop.

WHILE SOME HIGH SCHOOL STUDENTS spent their summer break soaking up the sun or working part-time jobs, a group of 13 students in grades 9–12 came to Harvard School of Dental Medicine (HSDM) to learn about dentistry. The initiative is part of a partnership with the Harvard Medical School (HMS) MEDscience program, that encourages students with an interest in STEM careers to get a firsthand experience in health care fields. The diverse group of budding dentists came from public and private high schools across the greater Boston area and beyond, including local schools in East Boston, Charlestown, Arlington, Watertown, Newton, Wellesley, Haverhill, and Wilbraham.

This is the first summer HSDM has offered an immersive weeklong course for high school students interested in oral health and dentistry. The MEDscience program itself has been active since 2005 when HMS established the first Summer School program focused on science and medicine.

“We’ve found that there’s great interest from increasingly younger teens to get a taste of what it’s like to work in health care professions. Part of HSDM’s mission is to foster the next generation of oral health professionals, so this was a wonderful opportunity to give young students early exposure to a pre-dental pathway and show them how rewarding a career in



The MEDscience students were so excited to be part of the program. They loved the hands-on aspects and really grasped the importance of teamwork in health care.”

DR. TEJASVITA CHANDEL

dentistry can be,” said Dr. Sang Park, associate professor of Restorative Dentistry and Biomaterials Sciences and associate dean for Dental Education.

Dr. Tejasvita Chandel, lecturer in Restorative Dentistry and Biomaterials Sciences, helped build a curriculum for the MEDscience dental summer program that included hands-on skill workshops, simulated cases, career talks, and lectures on topics such as oral carcinoma and endocarditis.

“The MEDscience students were so excited to be part of the program. They loved the hands-on aspects and really grasped the importance of teamwork in health care,” Chandel said. Due to the popularity of the program, Chandel said they expect to offer it each summer.

The program included experiencing a day in the life of current dental students at HSDM and learning from faculty and residents. Heidi Shen, DMD27, participated



ABOVE: Mohamed Alaeddin, HSDM laboratory coordinator and instructional dental technologist, demonstrated techniques used in the wet lab.

LEFT: MEDscience students showed their handiwork.

in a panel in which MEDscience students could ask DMD students questions about dental school and get tips on preparing for college applications.

“I was impressed by how thoroughly they are planning for college and beyond at such a young age, thinking about how to prepare for dental school and residency even,” said Shen. “They asked thoughtful questions that showed a genuine interest to learn about what got us interested in dentistry; how we balanced research, athletics, coursework, and social lives in college; and what a day in our lives in dental school looks like. Multiple students reached out to me after the program with more questions, and it’s been sweet to continue the conversations we started.”

The MEDscience students also had the chance to roll up their sleeves during exercises in the wet lab mixing dental stone and pouring a mold of a dental arch. They learned about the delicate combination of art and science that is applied in dentistry.

“During their visit, I used the same techniques we employ with our predoctoral students. I demonstrated artistic tooth morphology by using wax to model an incisor. The students were incredibly excited and creative, thoroughly enjoying every minute of the exercise,” said Mohamed Alaeddin, HSDM laboratory coordinator and instructional dental technologist.

In reflections written by the students, it was clear that having the opportunity to be immersed in dentistry made quite an impression.

“I LOVED IT,” said one of the students. “Doing this actually made me fall more in love with my passion for dentistry.” ♥



Innovation Focus

Tackling Algorithmic Bias in Dentistry

A NEW INITIATIVE, the Generative Artificial Intelligence (AI) Summer Research Program, brought two Harvard undergraduates to Harvard School of Dental Medicine (HSDM) this summer to study ways to promote algorithmic fairness in oral health research. The first-of-its-kind program offered by the Office of the Vice Provost for Research and Harvard College Office of Undergraduate Research and Fellowships provides Harvard undergraduate students with diverse research opportunities in generative AI in a range of research settings across the University.

Harvard College students Hewan Kidanemariam and Gabriel Maxemin chose HSDM for their interest in health equity and technology. They spent the last 10 weeks learning alongside Dr. Hawazin Elani, assistant professor in Oral Health Policy and Epidemiology, and her team whose research focuses on oral health disparities and algorithmic bias in machine learning.

“Being one of the 30 principal investigators participating in this program

highlights the importance of oral health,” said Elani. “This pilot program provides an opportunity to catalyze cross-disciplinary collaboration among students at all levels—from undergraduates to postdoctoral researchers—and position HSDM as a key site for cutting-edge research to advance oral health research.”

“
This pilot program provides an opportunity to catalyze cross-disciplinary collaboration among students at all levels.”

DR. HAWAZIN ELANI

The HSDM project run by Elani’s team aims to address these challenges by supporting those involved in identifying and mitigating algorithmic biases in oral health research, presenting an exciting



Harvard College students Gabriel Maxemin and Hewan Kidanemariam were part of the Generative AI Summer Research Program.

avenue for students to engage with cutting-edge technologies, gain hands-on experience in machine learning and AI, and directly address health disparities.

“Access to oral health care remains challenging for low-income populations and racial and ethnic minorities. And algorithmic bias in machine learning (ML) models poses a significant concern, potentially exacerbating these disparities among vulnerable populations,” said Elani. “As a health disparities researcher, I am naturally concerned about how ML could further widen these gaps. I was excited to have the students learn about the impact of machine learning on health care disparities and develop strategies for creating fair algorithms to reduce these inequities. Their enthusiasm and dedication to tackling such critical issues were truly inspiring.”

Kidanemariam and Maxemin were eager to tackle these real-world problems. They both brought strong experience in the sciences and information technology to the task. Kidanemariam is a rising senior at Harvard College studying computer science and statistics. Maxemin graduated in spring 2024 with joint concentrations in chemistry and physics, and earth and planetary sciences.

“Growing up in rural Ethiopia, I witnessed firsthand the devastating impact of limited access to health care technology on health outcomes,” said Kidanemariam. “This project deeply resonates with me as it offers



Members of Dr. Hawazin Elani’s EQUAL Lab in HSDM’s Department of Oral Health Policy and Epidemiology

the opportunity to support underserved and vulnerable populations who are most at risk of being harmed by algorithmic bias—by working at the intersection of technology and fairness.”

Throughout the program, the duo worked with Elani and her group to develop a customized large language model (LLM), also known as a chatbot, that incorporates knowledge about algorithmic fairness. The goal is through developing an interactive engagement engine, the model will be trained to recognize and address biases that could arise during the machine learning process. This platform will also offer real-time feedback to users, guiding them in understanding and addressing bias concerns throughout the research process.

“By customizing the LLM with these capabilities, we’ve aimed to create a versatile tool that can be applied to various domains, from health care to finance, to detect and reduce algorithmic bias,” Kidanemariam said.

Maxemin and Kidanemariam also had the opportunity to work daily with faculty experts, machine learning specialists, and HSDM students. Their research taught them how to navigate the ambiguity of fairness in machine learning.

“The topic of fairness seems to be left behind as AI technologies evolve,” said Maxemin. “We learned that in order for our chatbot to maximize its performance, it must be informed by research outside the scope of just dentistry.”

The team hopes that the platform they created will provide a space where users can inquire about algorithmic fairness and be equipped with the tools and resources needed when developing their own models.

“Our hope is that algorithms employed within dentistry in the future are fair and unbiased, ensuring health care equity,” Maxemin said.

Both Maxemin and Kidanemariam look forward to applying the skills and knowledge learned through the summer program to their future careers in science and technology.

“Being a part of the community at the Harvard School of Dental Medicine has been really exciting. I’m lucky to be able to work at the intersection of such interesting fields,” said Maxemin. ♥



LEADING BY EXAMPLE

Dr. Hawazin Elani, assistant professor in Oral Health Policy and Epidemiology, has a longstanding interest in exploring the social determinants of population health, health disparities, and improving access to oral health care. She’s also a dedicated mentor and role model to others within the profession.

In June, Elani was awarded Harvard Medical School’s Young Mentor Award. The Excellence in Mentoring Awards were established to recognize the value of quality mentoring relationships and the impact they have on professional development and career advancement in basic and clinical medicine, research, teaching, and administration.

“What truly sets Dr. Elani apart is her commitment to building a lasting partnership beyond our current positions. She values diverse perspectives and is open to understanding the unique needs of our team members,” said her nominators. “Through her narrative, she has inspired us to overcome cultural barriers and step out of our comfort zones, making our personal development an integral part of our professional journey.”

Elani was also named an awardee of the William F. Milton Fund from Harvard University’s Office of the Provost to fund a new study that may lead to insights into the complex interplay between social, environmental, and biological factors in craniofacial congenital anomalies.

In the project, “Machine Learning-Based Risk Prediction for Craniofacial Congenital Anomalies,” Elani proposes to use several large national datasets to identify how neighborhood characteristics and social determinants influence the risk of craniofacial congenital anomalies. Through this study, she hopes to set a new standard in prenatal care that significantly impacts public health and drives further innovation in preventing and treating congenital anomalies.

ABOVE: Dr. Hawazin Elani (center) was recognized with the Young Mentor Award. She’s pictured with Postdoctoral Research Fellow Mariane Furtado (left) and Dean William Giannobile (right).

Innovation Focus

Taking an Integrated Approach to Treating Oral Health Over Age 65

MORE THAN 100 EXPERTS from the worlds of policy, business, academia, and health care came together for a Leadership Forum hosted by the Harvard School of Dental Medicine (HSDM) Initiative to Integrate Oral Health and Medicine on June 4 and 5, 2024. Jane Barrow, executive director of the Initiative, convened the forum to explore the tremendous growth of Medicare Advantage plans and the implications for oral health and access to dental care for Americans over age 65.

Stakeholder Engagement

Dr. David Blumenthal, professor of the Practice of Public Health and Health Policy at Harvard T.H. Chan School of Public Health, delivered an engaging keynote

on the successes and current challenges of the Traditional Medicare (TM) and Medicare Advantage (MA) programs and what they mean for oral health and dental care.

“Participation in Medicare Advantage plans in 2024 will surpass that of participation in Traditional Medicare,” Blumenthal said. “They are attractive because they cover hospital, outpatient, and pharmacy expenses, with limited or no out-of-pocket contributions from beneficiaries.”

The plans also offer supplemental benefits such as dental, vision, and hearing, that are not typically included in TM. The catch is that the plans generally require both: that care be provided “in network” and that prior authorization be obtained. The experts in attendance noted that it can be difficult to get payers to support integrated care models, despite the popularity with patients.

Drs. Lisa Simon of Harvard Medical School and Darien Weatherspoon of the University of Maryland shared research on the lack of utilization of TM and MA dental benefits. Potential reasons identified

BELOW: Dr. Natalia Chalmers talked with an attendee of the Leadership Forum.



“
We have been actively engaging with stakeholders to identify opportunities to increase access to care through existing authorities and plan flexibilities.”

DR. NATALIA CHALMERS



include beneficiaries not understanding their benefits and/or having concerns about incurring out-of-pocket expenses, a lack of providers willing to accept MA reimbursements, transportation issues, or other health concerns preventing beneficiaries from seeking care at a dental office.

“Untapped funds for supplemental benefits could help explain why MA plans realize a significant surplus each year,” said Blumenthal who hypothesized that the annual plan renewals and patient “churn” deter plans from reinvesting any surplus.

Increasing Access and Opportunity

Dr. Natalia Chalmers, the chief dental officer for the Centers for Medicare & Medicaid (CMS), spoke about the challenges and opportunities in delivering dental care to the 156.2 million people covered through CMS programs.

“We have been actively engaging with stakeholders (e.g., states, plans, providers, advocacy groups) to identify opportunities to increase access to care through existing authorities and plan flexibilities,” said Chalmers. “We’ve had success clarifying Medicare coverage for medically necessary dental care for services related to transplant surgeries, head and neck oncology, and other interventions for complex care.”

Panelists agreed there has been progress clarifying access to medically necessary dental care. Like Dr. Chalmers, they believe there are many opportunities

to integrate care and benefits, to improve equity, and to enhance health outcomes. Additionally, state-level experiments in Medicaid accountable care organizations were identified as holding great promise as blueprints for how to integrate care in a financially viable way for other patient populations, such as those with intellectual and developmental disabilities.

Real-World Innovations

The second day of the Forum dove into real-world innovations in integrated benefits, care delivery, and health education that strive to provide equitable holistic care to older adults and others across their lifespan. A discussion with Dr. Russell Philips of HMS, Mr. Steve Thorne, CEO of Pacific Dental Services (PDS) Health, and Dr. David Kim of Memorial Care California, highlighted a new joint venture that aims to provide comprehensive dental care to Memorial Care patients via PDS Health integrated medical and dental practices.

“There is significant opportunity to improve health outcomes and potential to lower downstream expenditures by increased access to dental care for this patient population,” said Thorne and Kim.

This theme was echoed by other speakers who discussed efforts to integrate dental care into chronic disease management protocols, the integration of behavioral health screenings into dental practices and embedding dental hygienists into primary care practices.

ABOVE: (Left to right) Speakers Mr. Steve Thorne, Dr. David Kim, and Dr. Russell Philips shared insights during a forum presentation.



ABOVE: Dr. Shenam Ticku, HSDM faculty member, spoke about the 100 Million Mouths project led by HSDM.

ABOVE RIGHT: Jennifer Crittenden shared her research from the University of Maine Center on Aging during the poster presentation session.



“
There’s enthusiasm from our trainees when learning about oral-systemic connections and how they can play a role in promoting the oral health of their patients.”

DR. HUGH SILK

Interprofessional Education

Presentations of real-world innovations in medical-dental integration were followed by exciting examples of interprofessional education designed to prepare health professionals to work together to provide holistic, integrated care. One of these examples is the 100 Million Mouths project led by HSDM.

“The 100 Million Mouths project aims to create oral health champions in each of the 50 states to help all health professions training programs incorporate oral health competencies into their curricula and to train primary care providers how to apply fluoride varnish,” said HSDM faculty member Dr. Shenam Ticku.

Other examples highlighted included the National Dental Association’s oral health training program for clinical nurses and HSDM’s efforts to teach oral health competencies to medical trainees.

“There’s enthusiasm from our trainees when learning about oral-systemic connections and how they can play a role in promoting the oral health of their patients,” said UMass Chan Medical School professor and HSDM lead researcher, Dr. Hugh Silk. “They often wonder why oral health historically has

been omitted from their didactic curricula and clinical training activities when it is so important.”

Another panel focused on how to integrate oral health care into care protocols for individuals in nursing homes and hospitals. An inspiring presentation was made by the team from Maine’s Oral Team-based Initiative in Vital Access to Education (MOTIVATE) which has been successful incorporating oral health care into their protocols. Additionally, a strong health and economic case was made for tooth brushing in the hospital, and in the ICU, in particular.

Throughout the two days, the audience was engaged and asked probing questions. Many ideas were generated for partnerships across academia, health plans, and provider groups to launch demonstration projects aimed at advancing medical dental integration.

“It was a robust couple of days,” said Bob Lewando, co-chair of the Initiative and executive director of Blue Cross Blue Shield of Massachusetts Dental. “Participants learned a lot about opportunities and challenges in MA for oral health and some real-world success to help advance integrated care.” ♥

FACULTY ADVOCATE IN WASHINGTON FOR AFFORDABLE DENTAL CARE

Dr. Lisa Simon, an HSDM alumna and Harvard Medical School faculty member, and Dr. Brian Swann, an alumnus and lecturer on Oral Health Policy and Epidemiology, testified before the U.S. Senate Committee on Health, Education, Labor, and Pensions in May. The Committee, led by Chairman Senator Bernie Sanders, held a hearing to examine dental care in America, and how to make it more affordable and available.

Swann, who serves as a board member of Remote Area Medicine (RAM), and a member and co-chair of the Committee on Global Oral Health Outreach for the National Dental Association, testified about his experience delivering free dental, vision, and medical services to underserved and uninsured individuals through RAM's Corps of humanitarian volunteers.

"RAM represents an immediate short-term solution to a long-term problem. It creates a community template that could potentially become a sustainable entity. Prevention is the long-term solution," said Swann. "There is a need to bring attention to the social determinants of health and begin the process of educating not only patients, but the community and all health

BELOW: Dr. Lisa Simon testified before the U.S. Senate Committee on Health, Education, Labor, and Pensions from her experience as both a dentist and physician.



ABOVE: Dr. Brian Swann testified before the U.S. Senate Committee on Health, Education, Labor, and Pensions about his experience delivering free dental, vision, and medical services to underserved and uninsured individuals through RAM's Corps of humanitarian volunteers.

professionals on what is needed for sustainability and longevity of our oral and systemic health."

Simon spoke from experience practicing as a dentist in community health centers and serving as an internal medicine physician.

"Practicing as a dentist in a community health center broke my heart. The wait for my services routinely exceeded four months, and I was often forced

to extract teeth I could have saved because of insufficient Medicaid funding," Simon said. "Now as an internal medicine physician, I see even more unmet dental needs than I did practicing dentistry—I see the patients who never make it to a dental office."

Simon stressed the need for adult dental coverage to be included as a mandatory Medicaid benefit and noted that dental care delivery should become a national priority. She cited statistics that fewer than half of Medicare beneficiaries see a dentist each year, and when they do, they spend more than \$1,000 out-of-pocket on their care.

"Both my medical and dental patients have asked me the same question: why is dentistry so separate? Why is it so hard for me to access and afford dental care? I tell them that there is no good reason. There is no good reason why we live in a country where low-income Americans are 16 times more likely to lose all their teeth than their wealthier neighbors. It simply isn't fair. My patients deserve better," she said.

“
Now as an internal
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DR. LISA SIMON

Research Focus

Slug Slime Inspires Adhesive Hydrogel for Treating Oral Lesions

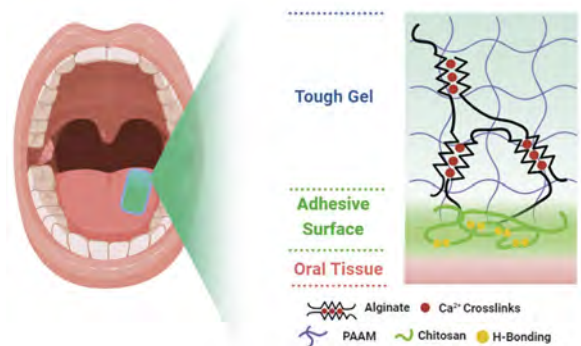
A DISCOVERY INSPIRED BY THE HUMBLE SLUG may soon be the answer to managing painful oral lesions associated with chronic inflammatory conditions and sealing surgical wounds in the oral cavity.

Scientists at Harvard had been searching for a biomaterial that would hold up in wet conditions—that is when they turned to Mother Nature for inspiration. When slugs feel threatened, they secrete a sticky mucus that protects them from predators. This mucus has strong mechanical properties allowing it to stick to wet surfaces and stretch about 10 to 15 times its original length. Inspired by these properties, researchers in the Mooney Lab of Harvard John A. Paulson School of Engineering and Applied Sciences, and the Wyss Institute for Biologically Inspired Engineering, developed a strong adhesive patch composed of 90 percent water from a natural polymer derived from algae, and present in dental impression materials. The adhesive patch will work on wet surfaces and is not toxic to humans. After finding it successfully stuck to animal tissues, acting as a surgical wound sealing biomaterial in lab testing, their findings were published in *Science* in 2017.

Now, its applications for oral health and treatment of painful oral lesions may be coming soon to a dental

office near you. David Tiansui Wu, DMSc23, lecturer on Oral Medicine, Infection, and Immunity, has been involved in the development of an adhesive hydrogel patch that can seal wounds and act as an intraoral Band-Aid capable of strong adhesion in wet environments and on dynamically moving surfaces. His work as a postdoctoral research fellow and periodontology resident at Harvard School of Dental Medicine (HSDM) first exposed him to the slug-inspired biomaterial

BELOW: Tough Gel Adhesive (DenTAI) attaches strongly to diverse oral tissues. It is composed of a dissipative matrix and adhesive surface.



“
This novel technology has the potential to impact several areas in dentistry, including applications in oral wound repair and regeneration, and drug delivery.”

DAVID TIAN SUI WU, DMSC23

and connections he made in the Mooney Lab fueled his interest in developing a product for use in dental medicine.

“When I started at Harvard University, I had the privilege of meeting Professor David Mooney, who is a world-renowned expert in tissue engineering and biomaterials and decided to start my doctoral thesis at the lab,” Wu said. “At that time, Benjamin Freedman, a postdoctoral fellow at the lab was working on the preclinical translation of the Tough Adhesive Hydrogel technology for diverse medical and health care applications such as hemostasis in general surgery, tendon repair in orthopedic surgery, and wound sealing in dermatology. As a periodontist-in-training, the possibility of bringing this revolutionary technology from benchtop to patient care appeared to be a great opportunity to solve unmet needs in our field,” Wu added.

Wu collaborated with Freedman to advance the preclinical testing and development of the technology and expand its functionality with drug release capabilities that would allow the hydrogel to deliver a range of medications relevant for dental, oral, and craniofacial applications.

In parallel, Wu and Freedman began working with other faculty collaborators at the Massachusetts General Hospital Department of Oral and Maxillofacial Surgery and Department of Dermatology respectively, including Drs. Fernando Guastaldi and Yakir Levin, to conduct preclinical validation of the adhesive technology in oral applications.

Together, they developed what they call “Dental Tough Adhesive (DenTAI).” Their findings were published in a landmark paper in the *Journal of Dental Research* paving the way for the technology’s clinical translation to one day impact patient care.

“Chronic inflammatory conditions, such as oral

lichen planus and recurrent aphthous stomatitis, negatively affect patients’ quality of life. Current treatment approaches are mainly palliative and often ineffective due to inadequate contact time of the therapeutic agent with the lesions,” said Wu. “This novel technology has the potential to impact several areas in dentistry, including applications in oral wound repair and regeneration, and drug delivery. In periodontics and oral surgery, this technology can be applied to seal surgical sites such as gingival graft harvest sites, extraction sockets, bone augmentation surgical sites, and much more. Our vision is to one day develop sutureless wound repair.”

This innovative technology is now being translated into the clinical arena through a license for continued development beyond the laboratory. The multidisciplinary team is taking the next steps to bring the technology into the dental office by obtaining clearance from regulatory authorities such as the U.S. Food and Drug Administration (FDA).

“My goal as a clinician, scientist, and innovator is basically to bridge the gap between benchtop research and the clinical arena,” Wu said. “We are excited to translate this technology to impact millions of patients and their dentists in improving their oral health.” ♥

BELOW: Dr. Benjamin Freedman and Dr. David Tiansui Wu won several awards for the technology, including the Grand Prize in Health and Life Sciences at the Harvard President’s Innovation Challenge.



Research Focus

Goldhaber Award Recognizes Distinguished Dental Implant Researcher



Dr. Daniel Buser is the 2024 Goldhaber Award recipient.

DR. DANIEL BUSER, an internationally renowned dental implant surgeon, has been named this year's Goldhaber Award recipient. Established in 1989 in honor of former Harvard School of Dental Medicine (HSDM) dean Dr. Paul Goldhaber, the award recognizes an individual who is held at the highest international esteem in their field related to oral and systemic health.

Buser was a professor of oral surgery at the University of Bern/Switzerland for nearly 20 years. Today, he serves as a part-time lecturer in the Department of Restorative Dentistry and Biomaterials Sciences at HSDM and treats implant patients in private practice. He continues to lecture at national and international conferences.

Selected for his outstanding contributions to teaching and research in oral health science, Buser is most noted for his contributions in pioneering guided bone regeneration (GBR). He has remained active with his team at the University of Bern/Switzerland in translational research with countless pre-clinical and clinical studies in implant surfaces, bone augmentation with GBR, bone grafts and bone substitutes, anatomical studies using CBCT, and long-term documentation of dental implants.

Buser has served as president of various academic associations including the European Association for Osseointegration, the Swiss Society of Oral Implantology, and the International Team for Implantology. He has authored and co-authored with his team more than 400 publications and book chapters, including the 3rd edition of the book *30 Years of Guided Bone Regeneration (GBR)*. His transformative work has earned him several scientific awards.

Buser shared his experience, "Modern Implant Dentistry in the Past 40 Years: Research Milestones, Clinical Progress and Current Trends," during the annual Paul Goldhaber Lecture on October 7, 2024 where he was also presented with the award. ♥

News & Notes

Alumni News

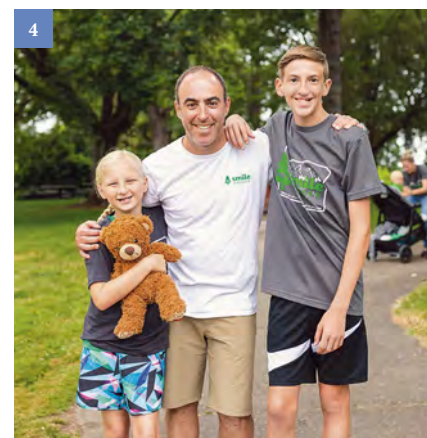
1 Luciano Andrada, MMSc16, was named interim chair of the Department of Periodontics at the Virginia Commonwealth University School of Dentistry.



2 HSDM alumni are well represented in Columbia University's Oral & Maxillofacial Surgery residency program. Half of the residents are alumni of HSDM, with one alum in each residency year. Pictured from left to right: **Eric Chan, DMD23**, **Lindsay Rutherford, DMD18**, **AJ Salcines, DMD18**, **Jonathan Wilson, DMD22**, **Justin Fazzolari, DMD19**, and **Quang Do, DMD21**.



3 On a visit to Cape Cod and the South Shore, Dean William Giannobile had the pleasure of visiting HSDM alumni **Jenny Chang, DMD97, DMSc01**, **Mario Abdennour, MMSc00**, and **David Wu, DMSc23**, in their practice in West Harwich, Massachusetts, and **Gus Dehni, DMD97, MMSc00**, at his practice in New Bedford, Massachusetts.



4 Judah Garfinkle, DMD02, co-founded the non-profit organization, Smile Oregon, whose mission is to provide support, awareness, and education to those impacted by cleft and craniofacial conditions in Oregon. The organization celebrated its 15 years of service.

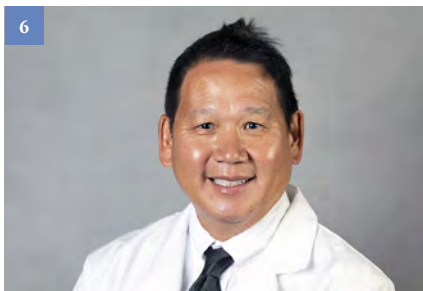


5 **Alfred Griffin III, MMSc17**, was named a recipient of the 10 Under Ten award from the Massachusetts Dental Society. The award is given to ten dentists who have been in the profession for ten years or less and have significantly contributed to their profession, community, and/or organized dentistry. Griffin is the founder and CEO of LightForce Orthodontics, a start-up offering fully customized, 3D-printed brackets.



Marci Levine, DMD00, MD03, MMSc06, was honored with the New York University Distinguished Teaching Award. Levine currently serves as a clinical associate professor in Oral and Maxillofacial Surgery at NYU College of Dentistry.

6 **James K. Mah, DMSc95, PD95**, was named dean of the University of Nevada, Las Vegas School of Dental Medicine in May 2024. Dr. Mah served as interim dean since September 2022, during which time he has demonstrated exemplary leadership and commitment to the school's mission of excellence in education, patient care, and research. His experience includes faculty and administrative roles at the University of Alberta and the University of Southern California.



7 **Harrison Mackler, DMD12**, recently opened the Dr. Harrison Mackler Dental Center at Howard Brown Health in Chicago, Illinois. The center aims to provide comprehensive and inclusive dental care to the LGBTQ+ community and individuals living with HIV/AIDS.

Kiya Movassaghi, DMD93, a board-certified plastic surgeon from Eugene, Oregon, has been appointed as the president of The American Society for Aesthetic Plastic Surgery (The Aesthetic Society). Currently, he serves as a clinical assistant professor of Plastic Surgery at Oregon Health & Science University and directs an Aesthetic Society-Endorsed Aesthetic Fellowship.



8 **Mario E. Ramos, PD94**, was recently named president of the American Academy of Pediatric Dentistry (AAPD) Foundation. The AAPD Foundation, based in Chicago, Illinois, is the largest dentist-led charity dedicated to the needs of children. It funds non-profit clinics, dental schools and dentist-led organizations with a focus on removing barriers for those who cannot afford dental care.



9 **Michael Richardson, DMD04, Melanie Burns, DMD92, Lily Liu, DMD16, Jiyeon Kim, DMD11, Jevae Nelson, MMSc19, DMSc20, PD18, and Adesegun "Shola" Tewogbade, DMD04**, recently got together for an informal HSDM reunion in Atlanta, Georgia to play golf at Topgolf.

In memory of alumni who passed away between March 2, 2024–August 1, 2024, HSDM recognizes: **Stuart J. Balaban, DMD67; Jeffrey Hoover, DMD73; Joseph L. LeBlanc, former faculty; and James E. Mulvihill, DMD66, PD69.** Please contact Alumni Relations with any updates to this list.



10 HSDM alumni and friends, including **Magda Feres, DMSc99**, Susan Jenkins, **Bob Lewando, PD83, SPH83**, Dean William Giannobile, Alpdogan Kantarci, and **Myron Allukian, MPH67, MPH69**, reunited for an alumni social overlooking the Boston Harbor. Over 30 attendees reconnected with former classmates, friends, and HSDM faculty.

11 Leslie Will, DMD80, received the 2024 O.B. Vaughan Special Recognition Award from The American Board of Orthodontics for her contributions to orthodontic education. Will is the chair of the Department of Orthodontics and Dentofacial Orthopedics and Anthony A. Gianelly Professor of Orthodontics and Dentofacial Orthopedics at Boston University.



Faculty News

12 Morgan Celistan, MMSc23, lecturer in Endodontics, has been named HSDM's Director of Predoctoral Endodontics. In this role, she will be leading the preclinical and clinical curricular development for predoctoral students' endodontic studies.



Bruce Donoff, DMD67, was awarded an Alumni Lifetime Achievement Award from his undergraduate institution, Brooklyn College. The award recognizes his accomplishments as a distinguished alumnus of the college and was presented at the 60th reunion for the Class of 1963.

Magda Feres, DMSc99, chair of Oral Medicine, Infection, and Immunity (OMII), Eduardo H. de Souza Oliveira, research associate, and collaborators from the University of São Paulo Bauro School of Dentistry, were named awardees of the 2024 Lemann Brazil Research Fund for their project, "Exploring the Effects of CaneStat, a Novel Hybrid Protein, on Oral Proteome Dynamics and Microbiome Composition." Feres was also promoted to full professor this spring.

Catherine Hayes, DMSc93, PD93, chair of Oral Health Policy & Epidemiology (OHPE) along with OHPE faculty members **Jane Barrow** and **Brian Swann, MPH08**, and advanced graduate student **Nithya Ramesh**, were appointed to Massachusetts' Special Commission on Oral Health. The Commission is tasked with studying the state's oral disease burden and making recommendations for improvement. Its goals include increasing public awareness of the importance of oral health to overall health and improving oral health literacy for health providers and the public.

Hiroe Ohyama, MMSc96, DMD03, completed the ADEA Leadership Program. Her team advisor was **Michael Reddy, DMD85, DMSc89, PD89**, the dean of the UCSF School of Dentistry. The program encompassed five sessions, each focusing on vital pillars such as Education, Service, Community Initiatives, Research Leadership, and Advocacy for DEIB.



13 Angeliki Polymeri joined HSDM as the new society director for DMD students in the Peabody Society. Before arriving at HSDM, Polymeri was a clinical lecturer at the University of Michigan School of Dentistry.

Lakmali Silva, assistant professor of Oral Medicine, Infection, and Immunity, received this year's Harvard School of Dental Medicine Fellowship in honor of Aina M. Auskaps, DMD, award. The award is part of the Harvard Medical School's Eleanor and Miles Shore Faculty Development Awards Program and will culminate in a ceremony to honor recipients in December.

Shenam Ticku, instructor in Oral Health Policy and Epidemiology, was named a 2024–2025 Rabkin Fellow in Medical Education by the Shapiro Institute for Education and Research at the Beth Israel Deaconess Medical Center. The fellowship is a nationally recognized development program that provides intensive training and protected time for faculty to advance careers in academic medicine as educational leaders.



15 Shelyn Akari Yamakami joined HSDM as the new society director for DMD students in Cannon Society. Dr. Yamakami holds DDS and MSc degrees from the State University of Maringa, Brazil and successfully completed her PhD in Sciences at the University of São Paulo, Brazil in 2020.



14 Andre Weissheimer, clinical director of Orthodontics, was recently granted a patent from the United States Patent and Trademark Office for an innovative invention to be used in personalized medicine and digital orthodontics. The invention, “Indirect Bonding Trays with Bite Turbos,” was created to improve the efficiency and convenience of esthetic orthodontic treatment with the InBrace appliance. The innovation has also been clinically translated and is being utilized by orthodontics companies.

In Memoriam

James Mulvihill, DMD66, PD69, HSDM alumnus and former faculty member, passed away peacefully on Wednesday, May 15 at his home in Maine.

Dr. Mulvihill served as assistant dean for student affairs at HSDM in the early 1970s, he also led the Health Careers Program, one of the first HSDM summer programs to promote diversity in dentistry by encouraging underrepresented students to consider careers in dentistry and medicine. From HSDM, he went on to serve in leadership roles in academia, research, and non-profit organizations. As vice president for Education and Research and dean of the Clinical Campus of the Long Island Jewish Medical Center, he led the development of the health professions programs at the new Health Sciences Center of the State University of New York at Stony Brook. He also served as vice president and provost for Health Affairs and the executive director of the University of Connecticut Health Center from 1980 to 1992. In 1995, Mulvihill became president and chief executive officer of the Forsyth Dental Center in Boston. And in 1996, he was appointed to a three-year term as president and chief executive officer of the Juvenile Diabetes Foundation International.

A dedicated educator, Mulvihill was recognized by the American Dental Education Association in 2008 with a Distinguished Service Award. He also received distinguished alumnus awards from both the College of the Holy Cross in Worcester, Massachusetts, his undergraduate alma mater, and from HSDM for his leadership and service.



Student News

16 This summer HSDM welcomed the Class of 2027 as they transitioned from Harvard Medical School to begin their preclinical education at the dental school.

17 Jennifer Shahar, MMSc25, and **Betty Ben Dor, DMD25,** were honored with Dean's Community Service Awards by Harvard Medical School for their impact on the community. Shahar was selected as a 2024 Dean's Community Service Award Trainee Recipient for her work with the American Association of Orthodontics Foundation (AAOF). Shahar served as resident director for the AAOF, providing a resident perspective for the board working to reach and connect with residents nationwide. Ben Dor was selected as a 2024 Dean's Community Service Award Student Recipient for her work with the Action for Children and Teens in Oral Health Need (ACTION) program—a HSDM student-run pediatric dental clinic that provides care to pediatric patients at the Cambridge Health Alliance (CHA) in Cambridge and the Greater Boston area. Ben Dor serves as a coordinator for the program.



18 Residents and faculty from HSDM's Advanced Graduate Program in Prosthodontics attended the Academy of Prosthodontics Annual Meeting in Denver, Colorado. **Huilin Cao, MMSc24, Diana Lopez, MMSc25, Chu-Chi Huang, MMSc26, May Jindarojanakul, DMSc27,** and **Jessica Poon, MMSc26,** presented their clinical cases and research during the poster competition. Huang was awarded first place in clinical reports for his poster on digital workflows for immediate



denture fabrication. **Jindarojanakul** and **Poon** were awarded second place in the research competition for their review of digital impression techniques for full-arch implant restorations.

19 HSDM dental public health resident **Nithya Ramesh, DMSc25,** traveled to Nairobi, Kenya in July for research focused on the pilot implementation of a project for community health workers in Kenya in collaboration with the WHO AFRO.



Members of HSDM's Hispanic Dental Association attended and presented their research at the Hispanic Dental Association National Conference. **Edson de Sousa, DMD26,** earned second place at the research poster competition for his research on the metabolic syndrome's effects on periodontal treatment outcomes.

HSDM News

20 Students from Modern Science and Arts of Cairo College of Dentistry spent their summer learning at HSDM. The program provided an opportunity for externs to expand their didactic and clinical knowledge in general dentistry and periodontics through courses taught by HSDM faculty members **Tejasvita Chandel, MMSc22, Magda Feres, DMSc99, David Kim, DMSc05, Mohamed Maksoud,** and **Sang Park, MMSc01.** Externs also observed clinical cases treated by HSDM faculty and residents.



Jaclyn Dang joined the Harvard Dental Center as a staff dentist in the Cambridge Faculty Group practice in August. Dr. Dang earned her DDS from New York University College of Dentistry. Following her graduation, she served as an Army dentist stationed at Fort Liberty, North Carolina. Dr. Dang deployed to combat zones in the Middle East, specifically Kuwait and Jordan, in support of Operation Enduring Freedom (Spartan Shield), serving as a dentist to U.S. Soldiers, NATO Military, and government officials.

Charles Dansereau joined HSDM as senior director of Information Technology in August. He brings over 30 years of experience as a senior technology executive to HSDM where he will oversee the operation and evolution of our technology environment, supporting the clinical, administrative, teaching, and research activities of the School.



21 Andrew Finn joined HSDM as director for External Education in April. He leads the strategic direction and management of all external education offerings, bringing a strong business acumen to the role at the local, national, and global levels. Previously he served as associate director of operations and finance at Harvard Law School (HLS) Executive Education where he led a team responsible for planning and delivering

executive educational programs for lawyers from around the world.

Candice Fleming joined HSDM as director of Predoctoral Orthodontics. Fleming earned her DMD from the University of Connecticut and her MS in orthodontics from the University of Michigan.



22 Leanne "Jake" Jacobellis, program coordinator for the Office of Global and Community Health, was chosen as a 2024 Harvard Hero. The Harvard Heroes program celebrates the accomplishments of staff University-wide whose work supports the mission of Harvard at the highest levels of contribution, impact, and excellence.

Thomas C. Miller joined HSDM as the new dean for Administration and chief operations officer. He brings more than 35 years of significant leadership, management, fiscal planning, and business development experience to this vital senior role where he will provide strategic operational expertise and day-to-day oversight of the key administrative areas of operations, finance, grant administration, human resources, information technology, and risk and compliance.

23 This summer, HSDM celebrated its more than 200 exceptional faculty and staff with its annual Employee Appreciation Barbecue. Members of the community took time out of their busy schedules to catch up with one another, enjoy delicious food, and participate in a variety of games and activities.



24 The Harvard Dental Center (HDC) practices in Boston and Cambridge received an in-kind gift of 142 new dental handpieces and accompanying motors from the company Bien-Air in July. The gift is valued at more than \$600,000. Dr. Sang Lee, April Jefferson, and Andy Radics met with Melissa Marlin, Director of Bien-Air Institutional Sales for North America, to recognize the generous donation.



Upcoming Events



November 1
American Academy of Periodontology HSDM Alumni Reception

San Diego, CA



November 7
American College of Prosthodontists HSDM/BU Alumni Reception

Marco Island, FL



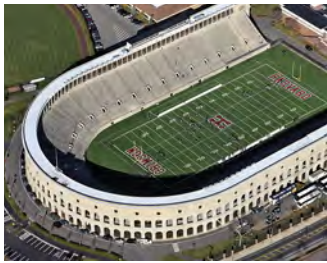
November 14–15
Innovations and Modern Techniques in Restorative Dentistry

HSDM
188 Longwood Avenue
Boston, MA



November 17–19
Master Clinician III: Comprehensive Treatment Mechanics

HSDM
188 Longwood Avenue
Boston, MA



November 23
Harvard-Yale Game & HSDM Tailgate

Harvard Stadium



December 6
HSDM Prevention Symposium
(for students and faculty)

HSDM Research and Education Building
190 Longwood Avenue
Boston, MA



January 31
Yankee Dental HSDM Alumni Reception

Boston, MA



SEE A FULL LIST OF EVENTS AT:
HSDM.HARVARD.EDU/CALENDAR





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HARVARD-YALE TAILGATE

Saturday, November 23

Get ready to cheer on the Crimson with HSDM! Alumni and friends are invited to join the free HSDM tailgate starting three hours before kickoff. All are welcome to join the tailgate even if you do not have a ticket to the game.



Learn more and register today

Additional details will be sent to registrants one week before the event.

