

HARVARD

SCHOOL OF DENTAL MEDICINE



2018 DEAN'S REPORT



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MESSAGE FROM THE DEAN

Reflecting on the past year, the HSDM community continues to impress me in every way—the passion of our students, the dedication of our faculty and staff, and the generosity of our alumni and friends. This year, we reached the momentous conclusion of a five-year fundraising campaign. We exceeded our goal and raised a remarkable \$10.7 million in support of scholarships, fellowships, and unrestricted funds that are vital to the School's core needs. With this support, we strive to make a difference in our community and in the world.

We provide our predoctoral students with an exceptional experience that prepares them to lead, and to be active partners in the overall health and wellbeing of their patients. We also continue to build our advanced graduate education programs, this year launching a new general practice residency and an oral oncology fellowship. Our continuing education courses have also grown, offering new courses for dental professionals here at HSDM and in international destinations such as Shanghai, China.

Our students are vocal advocates for diversity in dentistry, and take an active role in recruiting the next generation of dental students, including those who may not have otherwise

considered a career in dentistry to be attainable. They also serve the community in numerous ways, through outreach in local clinics and health centers, and through programs like ACTION, Give Kids a Smile and Operation Mouthguard.

Our basic science research strives to make advances that will have an impact in the lives of patients by exploring skeletal development and rare genetic diseases that could shed light on the way we treat common diseases. Our social science research aims to advance oral health equity and ensure oral health is part of primary care training. In this report, you'll find a list of 50 research projects underway.

While much of this work happens right here at 188 Longwood Avenue, a growing number of our projects happen in all corners of the globe. From Costa Rica to Rwanda, we are actively involved in partnerships to achieve a better understanding of the global burden and distribution of oral disease and how to tackle it through education.

By all accounts, it's been a productive year. I thank you for your support and dedication to HSDM.



Bruce Donoff, DMD67, MD73

Dean and Walter C. Guralnick Distinguished
Professor of Oral and Maxillofacial Surgery





Education

DMD students collaborate with nurse practitioner students through interprofessional education sessions.

TAKING A TEAM APPROACH

Interprofessional education continues to be an important theme throughout the curriculum, as dental students prepare to be collaborative and active partners in the overall health and care of their patients. This year, four interprofessional education (IPE) sessions were held in the predoctoral curriculum for second-year dental students. The DMD Class of 2020 collaborated with pharmacy students from Massachusetts College of Pharmacy and Health Sciences, and nurse practitioner students from Northeastern University in an interactive learning environment. The session topics included substance abuse, chronic kidney disease, pregnancy, and asthma. In addition to dental faculty, physicians, nurse practitioners, dental hygienists, psychologists, and pharmacists participated in the sessions to discuss their role and interprofessional approach to the wellbeing of patients.

Motivating Mentors

Faculty mentors are a vital resource to students and represent the future of dental education at HSDM. This year, Drs. Aram Kim and Supattriya Chutinan, instructors in Restorative Dentistry and Biomaterials Sciences, were recognized for their work as teachers and mentors. Kim and Chutinan received this year's Young Mentor Award, an award that recognizes Harvard School of Dental Medicine and Harvard Medical School faculty in the early stages of their career who devote their time to mentoring others. In the words of their student nominators:



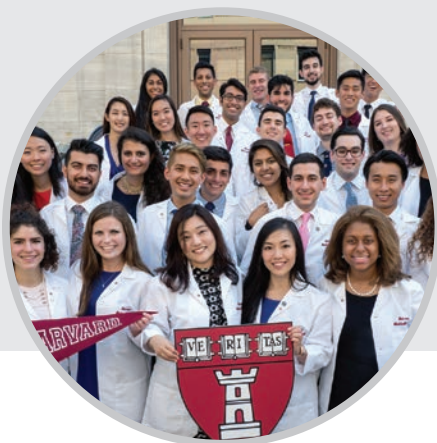
“Dr. Kim is a conductor, a catalyst, the epitome of an individual whose actions speak volumes of her love and dedication to those around her.”



“Dr. Chutinan stands apart as a beacon of inspiration, she reminds her students of the excellence we can achieve, and inspires us to find joy in mentoring the classes that follow.”

DMD CLASS OF 2021 BY THE NUMBERS

Enrollees in the Class of 2021 hail from 18 states and four different countries. They represent 29 colleges and universities. Undergraduate majors are primarily science-based, with 60% majoring in a branch of Biology, 17% in Biochemistry, and 11% in Chemistry. Several students (14% of the class) completed a second major in the arts or social sciences. 28.5% of the class (10 students) took one or more years off before matriculating into dental school.



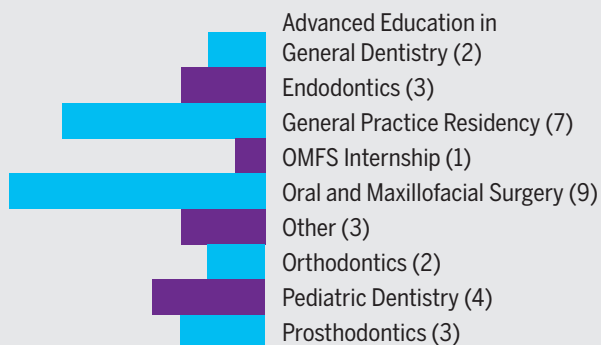
1032
APPLICATIONS

35
ENROLLEES

5%
ADMIT RATE

3.91
AVERAGE GPA

Class of 2018 Postgrad Plans



NEW ADVANCED EDUCATION PROGRAMS

General Practice Residency with the Boston Veterans Affairs (VA) Hospital

Through an affiliation with the VA Boston Healthcare System, HSDM began offering a one-year General Practice Residency program leading to a VA certificate in Hospital Dentistry, and an HSDM certificate in General Dentistry. The program provides experience in all phases of ambulatory and inpatient dental care, with required rotations in oral and maxillofacial surgery, anesthesiology, and internal medicine.

Oral Oncology Fellowship

This one-year, full-time training program, offered through the Division of Oral Medicine and Dentistry at Brigham and Women's Hospital (BWH) and Dana-Farber Cancer Institute (DFCI), is designed for dentists who are committed to developing expertise in oncology and oral health and serving as community leaders. Trainees are co-appointed at HSDM, BWH, and DFCI. Clinical training is based at BWH and DFCI with additional rotations at other Harvard affiliated teaching hospitals as well as community health centers.

CONTINUING EDUCATION PROGRAMS

HSDM's Continuing Education programs provide valuable lifelong learning experiences for dental professionals. This year, opportunities for learners continued to expand with new courses offered in Boston, as well as international locations including China. Nine courses, taught by HSDM faculty, attracted a total of nearly 200 participants to learn about relevant and timely topics in dentistry. Courses covered digital dentistry and digital workflow in implant dentistry, multidisciplinary approaches to advanced dentistry, synergism in dentistry, geriatric dentistry, healthcare education and more.





Student Life & Learning

CREATING PATHWAYS FOR DIVERSITY IN DENTISTRY

HSDM students have taken an active role in recruiting the next generation of dental students—and they are hoping to attract a wide array of students who may not have considered careers in dentistry.

HSDM's Pathways into Dentistry pipeline program introduces middle, high school, and college students to dentistry. The offices of Diversity and Inclusion and Admissions, partner with organizations such as the Metropolitan Council for Educational Opportunity, MEDscience (HMS), MGH/Revere Cares, Reactions in Action (HMS), National Student Leadership Conference, Seeds of Hope (HMS), and Indian Island School, to bring young students, who would not likely be exposed to career opportunities in dentistry, to HSDM to introduce them to the field.

Students competed in games on the Quad at Big/Little Sibling Field Day.

HSDM's Diversity and Inclusion fellows serve as ambassadors, showing them a glimpse of student life and answering their questions about dentistry.

"While we have the students with us, we also teach them about oral health and oral hygiene practices so we can contribute to the prevention of oral disease," Dr. Josephine Kim, director of Diversity and Inclusion, said. "Students leave with knowledge about the field, information on the admissions process, and equipped with oral hygiene products (toothbrush, toothpaste, and floss)," she added.

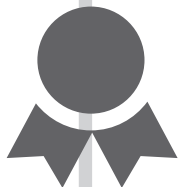
Visiting students who express an interest in dentistry can participate in further pipeline programming with job shadowing opportunities with local dentists.



"If we can convince one middle school student that they can do it and give them guidance on what it might take to get there, then we create a ripple effect."

—Mindy Truong (DMD 2019), senior Diversity and Inclusion fellow

Scholarly Pursuits



A new opportunity for DMD students, *Scholars in Dental Education*, is a training program for students who are interested in pursuing academic careers upon graduation. Scholars serve as education liaisons, as well as guests on committees including admissions, curriculum, and other administrative meetings. Monthly meetings with fellow scholars and mentors allow exploration of a wide range of topics in academic dentistry, and the scholars themselves work with mentors to research topics of interest in dental education.

HSDM was honored for its diversity and inclusion efforts, receiving a 2018 Inspiring Programs in STEM Award from *INSIGHT Into Diversity* magazine. The Award honors colleges and universities nationwide that encourage and assist students from underrepresented groups to enter the fields of science, technology, engineering, and mathematics (STEM).

“It is important to have a diverse community of healthcare professionals that is representative of the people they serve, and it starts with educating young students.”

—Ty Adeseye (DMD 2019) senior Diversity and Inclusion fellow

OUTREACH IN ACTION

Outside of the classroom, HSDM students get involved in numerous activities in the greater Boston community to promote oral health and awareness. Programs like:

Action for Children and Teens in Oral Health Need (ACTION) Clinic, a student volunteer-run pediatric dental clinic offered one Saturday per month at Windsor Clinic in Cambridge; the **Crimson Care Collaborative Nashua Street Jail Clinic**, a fully integrated health and oral care clinic serving the incarcerated that exposes students to primary and public health care practice; the **Give Kids a Smile** program that provides free dental care to children ages 1-17 during an annual event in February held in the Teaching Practices clinic; **Operation Mouthguard**, a program that provides oral health education, and custom-made mouthguards for children from low-income families, as well as high school sports teams in low-income areas of Boston; the **Wampanoag Tribe: Oral Health Relief Effort**, where students learn how to provide culturally-sensitive care to patients with diverse ethnic and cultural backgrounds; as well as many other programs, clinics, and events throughout the year.





Campaign Impact

Laura Rushford DMD17, MMSc 2020, is the first recipient of the Lionel B. Pelletier Family Fellowship in Prosthodontics.

RECOGNIZING A CHERISHED MENTOR

In the fall of 2017, HSDM lost a legendary teacher, mentor, and visionary in the field of oral and maxillofacial surgery. For more than seven decades, Dr. Walter Guralnick was a mentor and friend to many at HSDM and had a lasting impact on the lives and careers of the School's students and faculty. One of those students, Dr. Joy Wang, who became an oral surgeon herself, wanted to return the favor to her mentor. With a pledge of \$100,000 she established the Walter and Betty Guralnick Scholarship—a fund to support future generations of predoctoral students.

“Walter Guralnick had a profound impact on his students and all those who surrounded him. Joy is someone who exemplifies his teaching, mentorship, and values. Her decision to give a gift that will honor his legacy and give back to students is extremely generous and very much in the spirit of Walter's kindness and generosity,” said Dean Bruce Donoff, DMD67, MD73. The Dean and his wife Mady made a generous gift to the Scholarship as well.

Joy Wang, DMD95, MPH95, with the late Walter Guralnick, DMD41.

“His door was always open.

He was always there for me,” she said.
“I wanted to give a gift in the spirit of everything I got from Harvard.”

– Dr. Joy Wang



“Having financial assistance while being surrounded by a supportive community at HSDM has set the foundation for my future as a prosthodontist.”

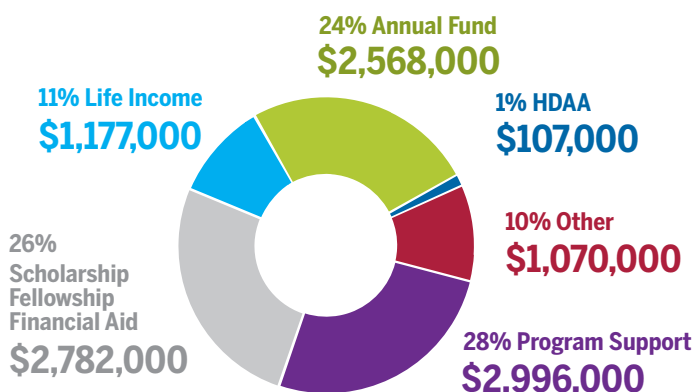
– Dr. Laura Rushford

CELEBRATING SUCCESS

Our generous alumni, donors, and friends helped the School reach well beyond HSDM’s \$8,000,000 goal in the “It Begins with Me” campaign. Raising nearly \$10,700,000 and exceeding the goal by more than 33 percent!

Fundraising Progress

FY18 Gift Distribution



FY18 Gifts by Alumni, Friends, and Organizations

Reflects gifts made by 611 donors



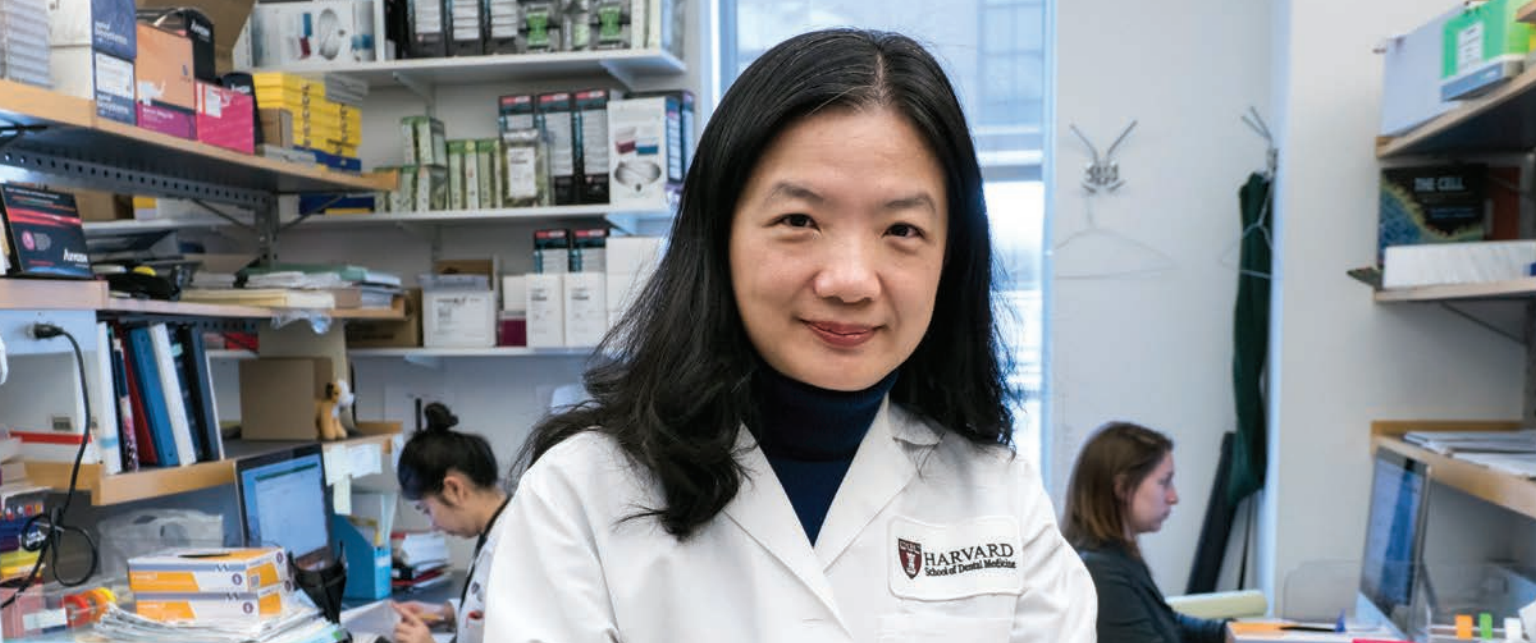
You did it! Thank you!

Increasing Capacity With Endowed Funds

Thanks to the generosity and vision of donors to the Campaign, a number of endowed funds were established to support student financial aid, specialty programs, and global and community oral health public service activities. These funds help HSDM increase its capacity to attract, retain, and support talented students and faculty.

The following endowments were established

- Freeman, Grant, Franklin Scholarship
- Melvin J. Glimcher, MD, Research Award
- Walter and Betty Guralnick Scholarship
- HSDM Endowed Scholarship
- HSDM Student Travel Fund
- JooEun Advanced Graduate Prosthodontics Fund
- Laure Lebret Orthodontics Fund
- Si Kon Lee Scholarship
- Lionel B. Pelletier Family Fellowship in Prosthodontics
- Masako and Seizaburo Sakamoto DMD Scholarship
- Straumann USA LLC Implant Fellowship
- The HSDM Endodontics Fellowship (to become the Robert R. White, DMD, Endodontics Fellowship upon Dr. White's retirement)



Research

Dr. Yingzi Yang leads the Yang Lab at HSDM, investigating a range of skeletal disorders and diseases.

GAINING INSIGHTS FROM RARE GENETIC DISEASES

Dr. Yingzi Yang, associate dean for translational research and professor of Developmental Biology at HSDM, explores how the skeletal system forms and how skeletal diseases arise in her research. One of the unique ways she does this is by studying rare genetic bone diseases to uncover mechanisms that can be applied to more common diseases.

Her funded research projects study conditions such as Heterotopic Ossification (HO), a condition that can occur with injury or trauma where bone forms in soft tissue; another project looks at fibrosis in the bone marrow; and yet another examines cartilage morphogenesis in long bones.

“By looking at cartilage morphogenesis in long bones, and why they elongate in a certain direction, this has tremendous implications in diseases such as dwarfism, cleft palate, and even spina bifida—a condition with an open neural tube,” Yang said.

Yang’s research has significant implications in dental craniofacial research and well beyond.

“As a researcher in medicine, our goal is to also provide a very fundamental understanding of many more physiological or pathophysiological processes. Basic research and medical research are two faces of the same coin.”

“When you’re trying to address a problem in craniofacial development, often what you find can be applied to other places. It’s not limited to only dental implications,” she said.

This year Yang also took on the role of director of the PhD in Biological Sciences in Dental Medicine program at HSDM. The program, offered to students accepted into the DMD program at HSDM, provides the opportunity for students to earn a PhD while earning a DMD degree. It offers advanced study in the molecular, supramolecular, cellular, and supracellular processes that provide the intellectual basis for dental medicine.

“We have a long-standing interest in skeletal development, although most of the time we are investigating how the skeletal system forms, **our ultimate goal is to understand the cellular and molecular mechanisms underpinning skeletal diseases.**”

– Dr. Yingzi Yang

Award Highlight

Recognizing Research Excellence

Dr. Vicki Rosen, professor and chair of Developmental Biology at HSDM, received the William F. Neuman Award this year. The award is the most prestigious given by the American Society for Bone and Mineral Research (ASBMR); it recognizes major scientific contributions in the area of bone and mineral research and contributions to associates and trainees in teaching, research, and administration.

“I am delighted by this honor and proud to be recognized by ASBMR as it is an organization that values diversity and highlights the achievements of women,” said Dr. Rosen.

The Rosen Laboratory studies the physiological roles that bone morphogenetic proteins (BMPs) play in the development, maintenance, and repair of musculoskeletal tissues (bone, cartilage, tendon, ligament, meniscus, muscle) with the goal of developing novel strategies for their repair and regeneration.



Student Research

Student Research Day at HSDM is an annual event where graduating DMD, MMSc, DMSc, and certificate students present their scholarly work to faculty evaluators as part of their research requirements for graduation. This year's event, held in April, provided students with the opportunity to showcase their research in poster sessions and interact with faculty, staff, and peers. Awards were presented for the best student posters.



Zahra Aldawood, DMSc18 (Oral Biology), MMSc 2021, discusses her research into *Harnessing Prx1-expressing cells for regeneration of calvarial bone defects*.

Funded Research Projects

FISCAL YEAR 2017–18

Hend Alqaderi

Oral Health for Syrian Refugees

Funder: Karam Foundation

Roland Baron

Cellular Mechanisms of PTH1R Activation with Osteoporosis Treatments

Funder: Maine Medical Center

Comparison of the Osteocytic Responses to Abaloparitide versus Teriparatide

Funder: Radius Health, Inc.

PTH Resistance and Marrow Adipogenesis

Funder: NIH/NIDDK

R-Spondin3 as a Target for Anabolic Bone Therapy

Funder: NIH/NIAMS

Mechanisms and Function of the Microtubule Podosome Connection in Osteoclasts

Funder: NIH/NIAMS

Chia-Yu Chen

Electrophoretic Fusion of Perpendicular Type I Collagen into Titanium Nanotube for the Future Peri-Implant Ligament

Funder: Osseointegration Foundation

Christina Cho

Comparative Evaluation of Composite Resin Restorations Fabricated from CAD/3D Printing and CAD/CAM Technologies

Funder: Academy of Operative Dentistry

Corneliu Sima

Regulation of Inflammation in T2D-Associated Periodontitis

Funder: NIH/NIDCR

John Da Silva

Ryan White HIV/AIDS Program 2015

Funder: HRSA-HIV/AIDS Bureau-Public Health Service

Nurse Education, Practice, Quality and Retention (NEPQR) Program Interprofessional Collaborative Practice

Funder: Northeastern University

Erica Frenkel

The Role of Salivary Mucin in Preventing Cariogenic *Streptococcus* Biofilm Formation

Funder: NIH/NIDCR

Bernard Friedland

Development Initiative for Ethical Review and Oversight of Health Research Involving Human Subjects in Rwanda

Funder: NIH/FIC

Giuseppe Intini

A Multi-Fluorescent Intravital Microscopy Approach to Study Osteosarcoma

Funder: NIH/NCI

Andreia Ionescu

Hypertrophy and Inflammation in Osteoarthritis: Epistasis or Synergy?

Funder: NIH/NIAMS

David Kim

Comparison of Volumetric Changes of Soft Tissue around Dektal Implants following Connective Tissue Graft

Funder: Osteology Foundation

Soo-Woo Kim

Comparison of Volumetric Changes of Soft Tissue around Dental Implants following Connective Tissue Graft

Funder: American Academy of Implant Dentistry

Satya Kota

Epigenetic Regulation of Skeletal Patterning and Morphogenesis During Development

Funder: NIH/NIAMS

Yefu Li

An Herbal Derivative as the Basis for a New Approach to Treating Post-Traumatic Osteoarthritis

Funder: U.S. Department of Defense

Eli Machtei

Dimensional Changes of the Keratinized Gingiva and Vestibular Depth Following Socket Preservation Procedure Using Two Surgical Protocols

Funder: Valeant Pharmaceuticals, LLC

Beate Lanske

PTH Resistance and Marrow Adipogenesis-R56 Bridge

Funder: NIH/NIDDK

Determine the Reproductive Phenotype of Fgf23 and Klotho Knock-Out Mice

Funder: University of Copenhagen

Christine Murphy

Family Intervention with Caregivers of Children with Dental Needs

Funder: Case Western Reserve University

Equitable Care For Elders

Funder: Health Resources & Services Administration

Academic Units for Primary Care Training and Enhancement

Funder: Health Resources & Services Administration

Patient Safety: Developing a Patient Safety System for Dentistry

Funder: University of Texas Health Science Center at Houston

BigMouth: Implementing Dental Quality Measures in Practice

Funder: University of Texas Health Science Center at Houston

Measuring Occurrence of and Disparities in Dental Clinic Adverse Events

Funder: University of Texas Health Science Center at Houston

Shigemi Nagai

Quantitative Assessment of Efficacy of New PRO-SYS Toothbrush

Funder: Benco Dental Supply Company

Iwate Project for Curricular Changes

Funder: Iwate Medical University

Gili Naveh

Tooth Movement Derived by PDL Cellular Manipulations

Funder: NIH/NIDCR

Bjorn Olsen

A Mechanism for Tyrosine Phosphorylation of Extracellular Matrix Proteins

Funder: NIH/NIAMS

Nora Renthall

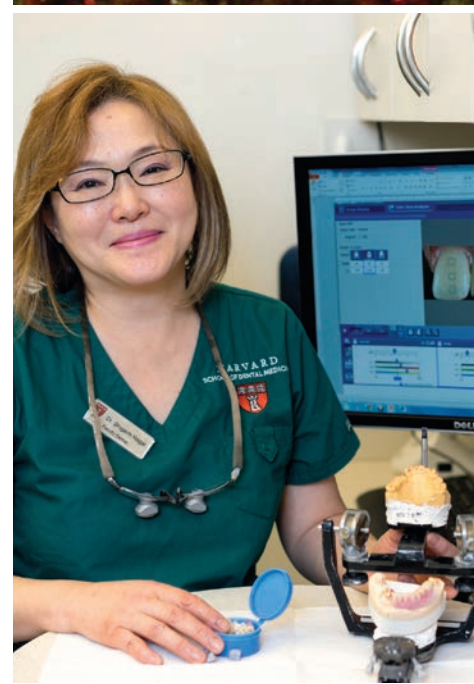
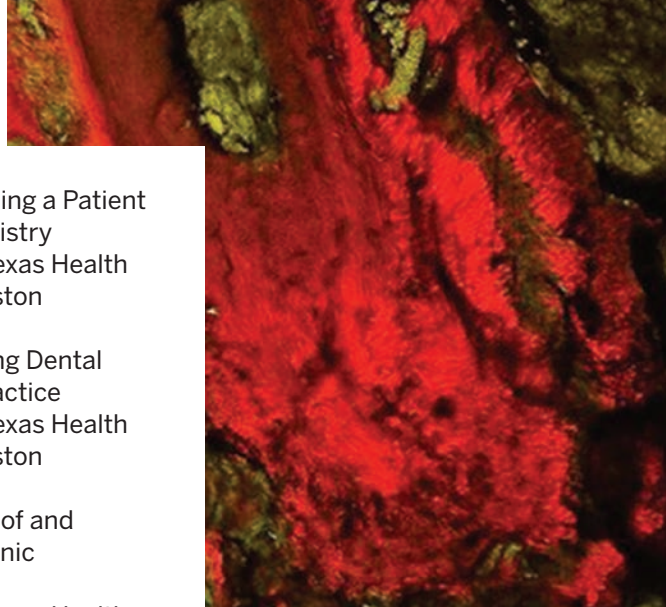
Child Health Research Career Development Award

Funder: Children's Hospital Boston

Vicki Rosen

Identification, Characterization, and Utilization of Adult Meniscal Progenitor Cells

Funder: U.S. Department of Defense



Cartilage-Bone-Synovium
MPS: Musculoskeletal Disease
Biology in Space
Funder: Massachusetts
Institute of Technology

Adult Bone Mass Regulation
by Type 2 BMP Receptors
Funder: NIH/NIAMS

11th International BMP Meeting
Funder: NIH/NIAMS

Brittany Seymour
CUGH-GH Starter Kit: Toward
Competency-Based Best
Practices for Global Health in
Dental Education: A Global
Health Starter Kit
Funder: Consortium of
Universities for Global Health

Global Health Starter Kit for
Dental Education
Funder: International College
of Dentists USA Section
Foundation Inc.

Vietnam Health Advancement
Initiative
Funder: University of Medicine
and Pharmacy at Ho Chi Minh City

The Global Health Learning
Helix: Modeling 3D Global Health
Education
Funder: Abundance Foundation

Jeffrey Shaefer
Inter-professional Case-based
Pain Medicine Curriculum for
Students of Dentistry, Medicine,
Pharmacy, Psychology, and
Nursing in Boston, MA
Funder: NIH/NIDA

Brett Stein
A Quantitative Analysis of the
Selective-Impression Technique
Using CAD/CAM Technology
Funder: Greater New York
Academy of Prosthodontics

Malcolm Whitman
An Herbal Derivative as the Basis
for a New Approach to Treating
Post-Traumatic Osteoarthritis
Funder: U.S. Department of
Defense

Role of the First Secreted Tyrosine
Kinase in Bone Development,
Homeostasis, and Repair
Funder: NIH/NIAMS

The First Secreted Tyrosine Kinase
Funder: NIH/NIGMS

Yingzi Yang
Mechanisms of Hippo Signaling in
Alcoholic Liver Disease
Funder: NIH/NIAAA

Gas-Hedgehog Signaling in
Intramembranous Bone Formation
and Expansion
Funder: NIH/NIDCR

Molecular Mechanism of Wnt/
Planar Cell Polarity Signaling
Funder: NIH/NIAMS

Mechanistic and Therapeutic
Studies of Fibrous Dysplasia in a
New Mouse Model
Funder: University of Pennsylvania

Anitha AbdulRahiman, DMD15,
MMSc18, presents her research on
adverse events in endodontics at
Student Research Day.






Clinical Care

A patient receiving care in the Dental Center's Teaching Practices.

PROVIDING PATIENT-CENTERED CARE

The Harvard Dental Center serves as a vital resource to the greater-Boston community serving over 38,000 active patients. Three tiers of care are offered through the Faculty Group Practice and the Teaching Practices: Advanced Graduate and Predoctoral Clinics. The Center's mission is to set the standard of excellence and innovation in patient-centered care.

 **38,153**
Active Patients as of July 2018

 **26,664**
Patient visits to the Teaching Practices (FY18)

 **18,420**
Patient visits to the Faculty Group Practice (FY18)

Expanding Treatment Options

Chia-Cheng Li, DMSc14, joined the Faculty Group Practice in FY18 to offer oral cancer screenings and treatment to patients.



Dr. Li is an instructor in Oral Medicine, Infection and Immunity at HSDM and a research fellow in the Division of Genetics at Brigham and Women's Hospital. She is responsible for both predoctoral and postdoctoral oral pathology courses, and the consult service at the Harvard Dental Center. Dr. Li received her DDS and MS degree in Oral Biology/Virology from National Yang-Ming University in Taiwan. She completed her postgraduate training at HSDM, where she received a DMSc degree in Oral Biology. Dr. Li is a diplomate of the American Board of Oral and Maxillofacial Pathology and is a fellow in the American Academy of Oral and Maxillofacial Pathology.



Drs. Adam Hamilton and German Gallucci lead the Implant Dentistry program at HSDM.

Implant Program Celebrates Its Roots

This year marked the tenth anniversary of HSDM's Advanced Graduate Education program in Implant Dentistry. The program was first launched in 2008 to address a growing demand for dental specialists with skills, knowledge, and interest in oral implantology, and to meet the needs of an aging population with the latest implant technological advances and techniques.

The program is designed for dentists with proven scholarship and excellence in patient care to achieve academic leadership in the clinical and scientific fields of implant dentistry and tissue regeneration. Clinical activities take place in the Faculty Group Practice of the Harvard Dental Center and at affiliated institutions. Implant fellows are exposed to both surgical and restorative aspects of implant dentistry, with special attention to patient care under comprehensive treatment planning.

Winning Smiles

The Orthodontics team at the Harvard Dental Center goes to great lengths to put smiles on the faces of their patients.

When a young patient of Mohamed Masoud, DMSc07, assistant professor of Developmental Biology and clinical associate in the Faculty Group Practice, took an expedition with her family to travel around the globe by sailboat, she was worried that her crooked teeth would never get straightened.

"I looked horrible because my teeth looked horrible and I didn't want to smile," Salina said.

Dr. Masoud came up with the idea of completing regular checkups by using Facetime, to video chat with Salina, and see how her orthodontic treatment with invisible aligners was progressing. His work virtually treating Salina won an award for the best treated aligner case in the teen category at the Invisalign Ortho Summit.

"Thank you Dr. Masoud! Even in the Arctic the treatment was possible!"

– Salina, young patient





Global & Community Health

PARTNERSHIPS AND PROGRESS

Oral disease is one of the most prevalent diseases worldwide, affecting 3.9 billion people. HSDM is committed to working with partners around the world to help achieve a better understanding of the burden and distribution of oral disease and how it can be tackled through patient education, workforce development, integrated care delivery, and universal health coverage.

Progress begins with education. All HSDM students take *The Practice of Oral Health* course in their second year, where they learn about vulnerable populations, global health systems, and epidemiology of disease. To build on this foundation, HSDM offers global health courses as well as a special track in Global and Community Health which requires students to take electives in global and/or community health, design and complete a special research project, and defend a thesis.

Students and faculty are engaged in community outreach projects throughout the greater Boston area, and at many local community health centers. Internationally, HSDM is involved in projects in Rwanda, India, Vietnam, Costa Rica, and elsewhere. Both locally and globally, the work is driven by the belief that oral healthcare should be fully incorporated into primary health programming.

Dr. Steffany Chamut (center) with University of Rwanda School of Dentistry students.





Taking Lessons Into The Field

In a unique learning opportunity, second-year DMD students had the chance to take concepts learned in their *Principles of Oral Health* class and apply them in the field. Assistant Professor of Oral Health Policy and Epidemiology, Brittany Seymour, MPH11, led a one-week extension course in Costa Rica that gave students a firsthand look at some of the most pressing challenges in global health, such as the effects of environmental degradation, migrations and changing demographics, and nutritional and epidemiological transitions.

The HSDM students were paired with dental students from the University of Costa Rica. Together they visited rural hospitals and ministries of health and learned about the country's health systems. Afterward they worked in teams to strategize and create solutions to challenges they saw in the field.

"The students learned a tremendous amount about the importance of true community partnership and collaboration, and not just what that looks like in theory, what it looks like in action and how challenging it can be," Seymour said. "They see themselves as global citizens and I think they've gained the perspective that what they learned here not only can benefit communities around the world, but can also be applied to challenges faced at home in the U.S."

"This experience has definitely affirmed a lot of my goals, motivations, and aspirations and made me think broader too. I have a responsibility to help as many people as I can because there's so much need out there. We can do better both in the U.S. and globally in improving health care and oral health."

– David Danesh, DMD 2020



Building A Dental School In Rwanda

Since 2011, HSDM has been a leading partner in the effort to launch the new dental school and bachelor of dental surgery degree program at the University of Rwanda. In May 2018, University of Rwanda Vice Chancellor Philip Cotton visited HSDM with Paul Farmer, MD88, Kolokotronis University Professor of Global Health and Social Medicine, and others from the Human Resources for Health (HRH) Program.

Cotton spoke about efforts to bring together fourteen institutions, ten campuses, and 30,000 students into one public university. Through the HRH program, the University of Rwanda has built a new

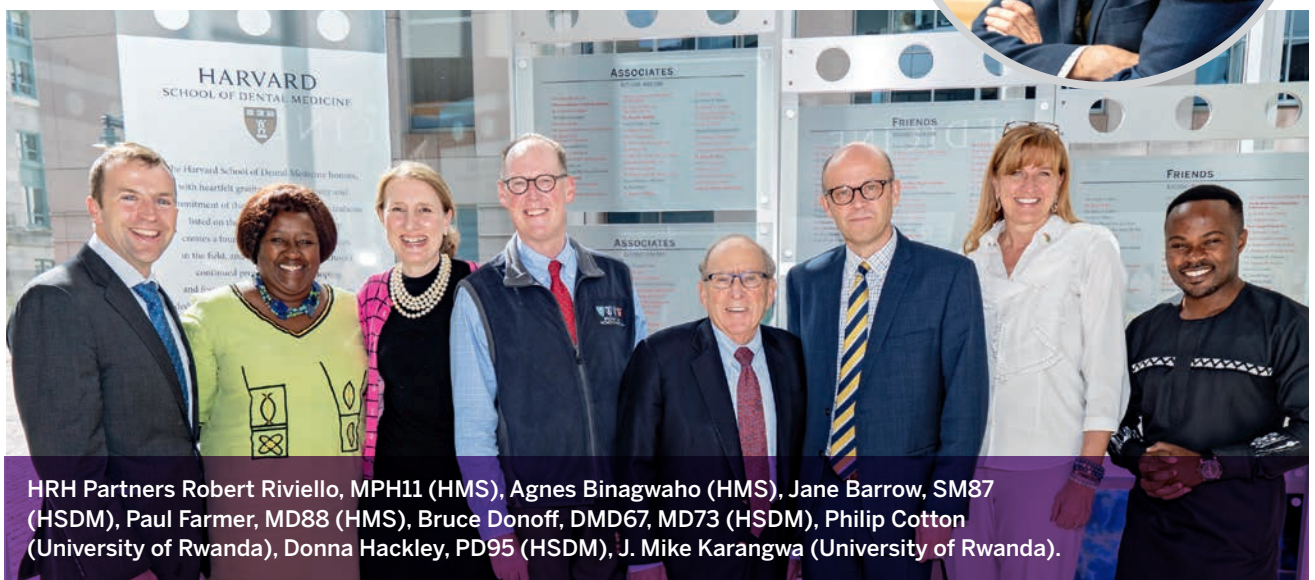
healthcare education infrastructure, including the first ever dental school in the nation.

“We are just going to have our fifth graduation this year. We will see the graduation of our first-ever dental surgeons,” Cotton said.

Cotton attributed the success of the University of Rwanda and its programs to a new dynamic culture around education in Rwanda, and a commitment to creating an open, accessible, and empowering space for students.

“Harvard has had this quiet yet monumental impact on the lives of young people who occupy this space.”

– University of Rwanda Vice Chancellor Philip Cotton



HRH Partners Robert Riviello, MPH11 (HMS), Agnes Binagwaho (HMS), Jane Barrow, SM87 (HSDM), Paul Farmer, MD88 (HMS), Bruce Donoff, DMD67, MD73 (HSDM), Philip Cotton (University of Rwanda), Donna Hackley, PD95 (HSDM), J. Mike Karangwa (University of Rwanda).



Leadership

WELCOMING HARVARD'S 29TH PRESIDENT

In 2018, Harvard University named widely admired higher education leader, and Harvard Corporation member, Lawrence Bacow, MPP76, JD76, PhD78, as its next president. Bacow is an alumnus of both Harvard's Law School and Kennedy School of Government, where he also served as Hauser Leader-in-Residence at the Kennedy School's Center for Public Leadership. With a long career in higher education, he served for a decade as president of Tufts University, and previously as a faculty member and chancellor of Massachusetts Institute of Technology.

Bacow stepped into the presidency in early July, and on his first day sent a personal message to the community.

"I am honored to succeed Drew and humbled to have the chance to lead this extraordinary institution. I am one of countless people whose lives have been transformed by Harvard, and helping extend that experience to others is the opportunity of a lifetime," he said.

"There is no place I would rather be, and no community I would rather be part of, to help address the challenges ahead and to consider how we can each do our part to meet them," he added.

Bacow is well known to Harvard School of Dental Medicine, and was keynote speaker at HSDM's Sesquicentennial Gala in 2017, where he spoke about the importance of the School and its mission.



"Larry Bacow is a longtime friend of Harvard School of Dental Medicine, serving as former Harvard Corporation liaison to HSDM, and more recently as keynote speaker at HSDM's Sesquicentennial Gala. We're thrilled to welcome him as Harvard's 29th president."

– Dean Bruce Donoff

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ASSOCIATE DEAN, DEVELOPMENT AND ALUMNI RELATIONS

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Financial Summary

COMPARATIVE FINANCIAL STATEMENT

YEAR ENDED JUNE 30

2017

2018

Income Summary

Student Tuition	\$9,573,806	\$9,592,412
Federal Sponsored Programs	6,195,844	7,129,808
Nonfederal Sponsored Programs	973,213	65,647
Current Use Gifts	732,200	1,090,460
Endowment	9,567,598	9,640,659
Services Income	8,350,211	8,934,222
Other Income	2,913,605	3,017,788

TOTAL INCOME

\$38,306,527

\$39,470,996

Expenses Summary

Salaries and Wage	\$16,817,320	\$16,601,664
Employee Benefits	5,818,479	5,857,642
Scholarships	79,229	131,375
Supplies and Materials	3,294,028	3,550,697
Space and Occupancy	2,685,626	2,918,877
Interest	1,014,482	772,320
Depreciation	1,782,048	1,766,182
Services Purchased	3,904,647	3,629,772
Subcontracted Services	213,816	309,436
Other Expenses	3,705,664	3,745,382

TOTAL EXPENSES

\$39,315,339

\$39,283,347

**Thank you for supporting
Harvard School of Dental Medicine.**



**HARVARD SCHOOL OF
DENTAL MEDICINE**

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With my compliments.

Bruce Donoff
Dean

