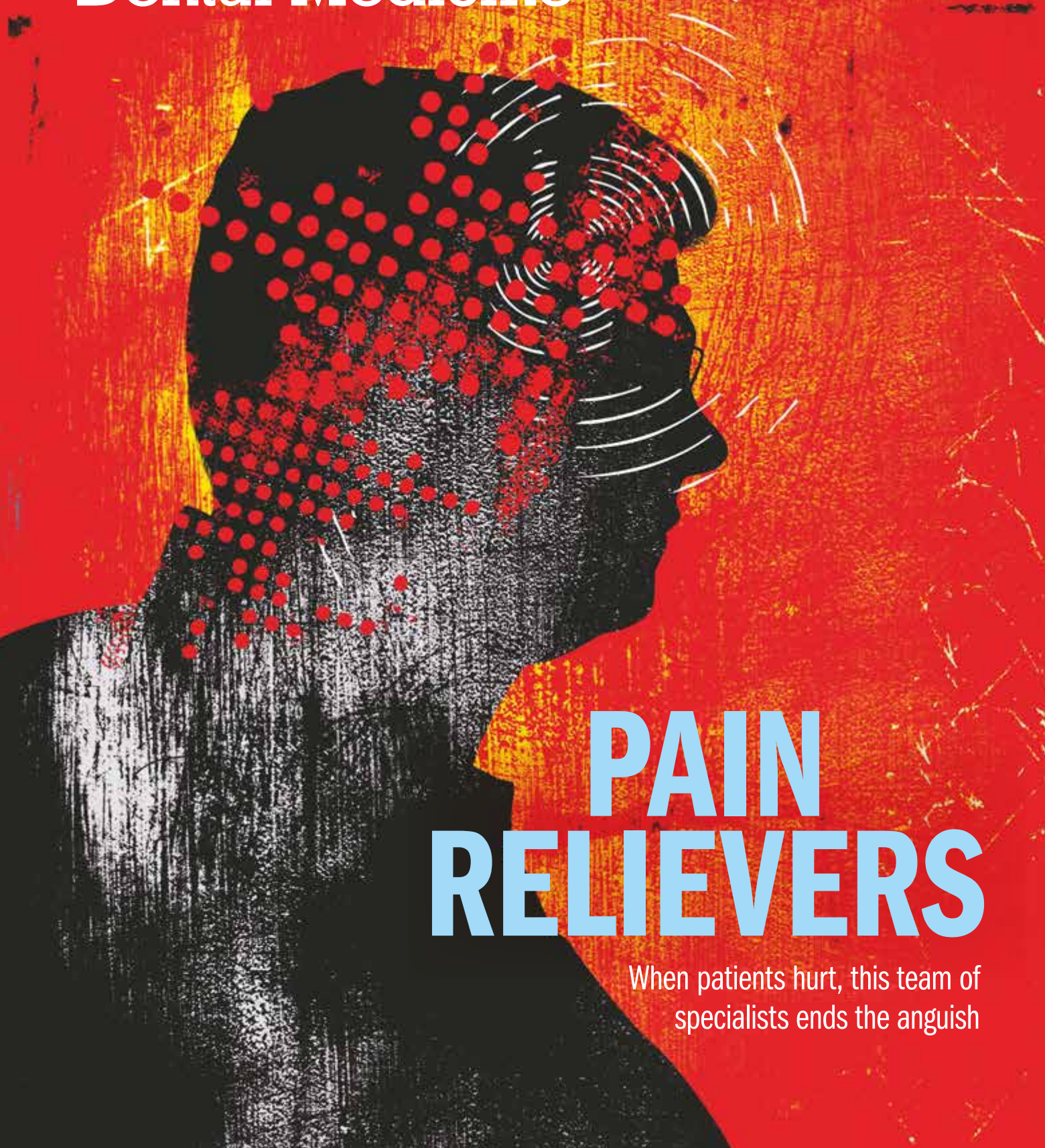


Tufts

Dental Medicine



PAIN RELIEVERS

When patients hurt, this team of
specialists ends the anguish



THE ART OF HEALING

Nancy Marks, the dental school's community-service learning coordinator, has had a career as a printmaker, painter, public health advocate and community organizer. Much of her work combines the creative impulse with the psychology of healing. One such project, her mixed-media exhibit "The Intimacy of Memory," uses keepsakes—wedding rings, combat medals, a mundane travel clock—to tell the stories of people who have died, as recalled by their loved ones. "Objects are just a way to get back to the memory," Marks says. "Grief is really remembering how much we love and miss our loved ones." The exhibit was on display at the Tufts University Art Gallery this fall. Learn more about her work: go.tufts.edu/nancymarks.

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REWARDS OF PUBLIC HEALTH DENTISTRY

I had the opportunity to reconnect with friends, faculty and staff at the 2015 Yankee Dental Congress. After speaking with Executive Associate Dean Mark Gonthier, I was motivated to reflect on my career path since graduating from Tufts.

My professional journey started with the school requirement that third- and fourth-year students participate in a monthlong externship at a dental clinic that focuses on treating an underserved population. I spent a month working at the Winslow Indian Health Care Center in Arizona. The externship gave me a chance to provide private-practice treatment options in a community health-center setting. Upon graduation, I completed a one-year Advanced Education in General Dentistry program at the same health center and later signed on as staff.

Throughout college and the first couple of years of dental school, I always pictured myself in a lavish, state-of-the-art dental office in an urban area. While that would have been fine, I am very thankful that I landed in Arizona. It's a great feeling providing needed treatment to patients for whom access to care can be difficult. Being at a site that hosts student externs and AEGD residents creates an excellent environment for both teaching and learning. Of course, each community health center is unique, but it's rewarding to be part of a team that has a mission is to serve its population. What I have learned is that even in this first-world country, there are still communities, both urban and rural, in dire need of basic medical and dental services.

There are so many paths one can carve out in dentistry. I never expected to be in public health, but I truly love it, and I love the opportunity to work as a teacher/mentor to students. I have immense gratitude to Tufts for emphasizing that our chosen profession comes with great power

and great responsibility. As dentists, we have the opportunity to not only improve individual lives, but also the well-being of our communities.

OMAR ABUZAINEH, D13
FLAGSTAFF, ARIZONA

REFLECTIONS FROM A NEW GRAD

After graduating from Tufts last May, I took a job in a private practice in Shaftsbury, Vermont. I've been working with two fellow Tufts graduates and I've learned so much.

Tufts does a great job teaching diagnosis and treatment planning. Aside from a few very complex cases, I've felt comfortable diagnosing caries, working in prosthodontics and other areas and explaining the various treatment options.

One area I'm not comfortable with is endodontics. It's always a struggle to fulfill endo requirements at school; looking back, I wish I had spent more time with endo cases. Another concern is appointment times. On my first day on the job, I knew I would have to pick up the pace. But I had no idea how much quicker I would have to be! I had eight patients scheduled that first day and was also expected to do exams. In school we were given three hours to do any procedure. I became very comfortable with that amount of time and didn't think about working more quickly. Now I know that first I need to get good and then get fast!

I am forever grateful for the education I received at Tufts and for the time and preparation that goes into the curriculum. Here in Vermont, when I tell people I went to Tufts, they always say my alma mater is one of the best dental schools.

JEREMY CLOVER, D15
ARLINGTON, VERMONT



TALK TO US Tufts Dental Medicine welcomes your letters. Send them to Helene Ragovin, Editor, Tufts University Office of Publications, 80 George St., Medford, MA 02155 or email helene.ragovin@tufts.edu. Letters are edited for length and clarity.

Tufts

Dental Medicine

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OUR PROFESSIONAL FUTURE



GREETINGS! I WAS recently invited by Massachusetts State Sen. Harriette Chandler to speak before the Joint Committee on Public Health on proposed legislation that seeks to establish an advanced dental hygiene practitioner level of practice. I did not speak either for or against this legislation, and I submitted no written testimony. However, any program propos-

ing to educate additional members of the dental team should be done in accordance with the recently approved Commission on Dental Accreditation standards for such programs and in a dental school environment.

In response to questions, I said I considered it possible such a program could be developed at Tufts School of Dental Medicine within two years. As there has been some misinterpretation about my comments, I want to take this opportunity to set the record straight and address issues related to workforce and program development at Tufts.

FIRST, WORKFORCE EXPANSION: In 2000, the landmark “Oral Health in America: A Report of the Surgeon General” noted that prevention measures have resulted in marked improvements in oral and dental health for most Americans. However, it also highlighted profound disparities in the oral health of our citizens, amounting to a “silent epidemic of dental and oral diseases” affecting vulnerable populations, including the poor, and particularly children and elders.

Since that report, the access-to-care issue has been discussed by a variety of constituencies both within and outside our profession. Although there are many factors influencing access to care, one of the responses has been to expand the dental workforce through increased enrollment of dental students. Since 2000, 12 new dental schools have been opened, with still others planned. Enrollment has increased from 4,200 dental students in 2000 to 5,800 in 2015—a 40 percent increase. This is still fewer students than we enrolled in 1978 (6,300), despite a 44 percent increase in the U.S. population. There is continuing debate as to whether we need more dentists: The federal

Health Resources and Services Administration argues that we do, whereas the American Dental Association Health Policy Institute (HPI) says that unless demand for dental services increases significantly, the current workforce is sufficient. However, because HPI data also show that only 42 percent of our population over age 65 received a dental visit in 2012, as did less than 48 percent of children, it would appear there is still considerable unmet need.

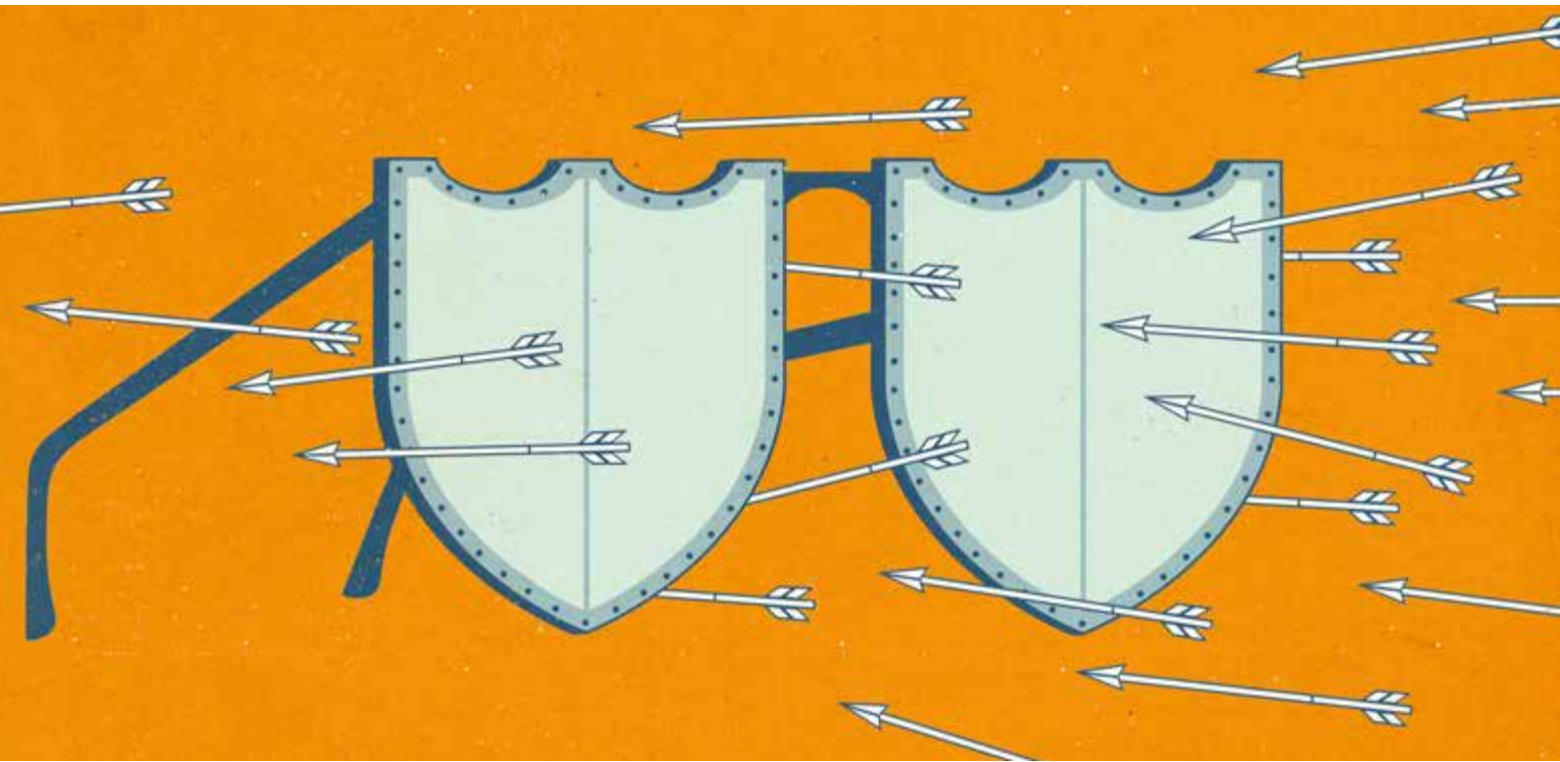
SECOND, A PROGRAM IN TWO YEARS: There is no doubt that any dental school could develop a new program in a two-year period, not counting time for its accreditation. However, we have had no discussions at Tufts or with any other school about creating such a program and have no plans to do so. We have no capacity; our resources are fully invested in our current programs.

SUMMARY: The dental profession is facing many challenges. We are concerned about the environment our graduates will enter—how it might change over the course of their careers and how we can provide appropriate curriculum and clinical experiences while they are at Tufts. In the past, the essence of practice did not change for many years; today, it is impossible to predict how the practice environment might change in just the next five years.

These challenges affect all of us, although the impact differs depending on whether you are in practice or in education. The Surgeon General’s report exposed the oral health issues this country is facing. We in dental education must work closely with our colleagues in organized dentistry to address these challenges, and we must be innovative and courageous. If we do not lead, we will be forced to follow.

HUW F. THOMAS, B.D.S., M.S., Ph.D.
Dean and Professor of Pediatric Dentistry
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Word of Mouth



Safety Gap

Shortcoming in protective eyewear spurs look at new standards **BY HELENE RAGOVIN**

IT HAPPENED IN the blink of an eye. Peter Arsenault, D94, was in his private practice, drilling out a patient’s faulty silver filling. He was wearing safety glasses and a mask. He felt something fly into his eye. A chunk of filling had spun off the handpiece and shot through the narrow space between the bottom of his safety glasses and his cheek.

He ended up in the ER. A month later, another small fragment landed in his eye—again, while wearing safety glasses.

“I realized there was this bottom gap, and when I was drilling, I was in the line of fire” from molten metal, broken burs, pumice and other debris, says Arsenault, an associate clinical professor in the department of comprehensive care at the School of Dental Medicine. “I thought, ‘I can’t be the only dentist this has happened to.’”

Conversations with colleagues revealed that, indeed, many had had similar experiences. The national standards for safety glasses, Arsenault

learned, address front impact and side shields, but not the gap at the bottom. As a dentist with a mechanical bent—he has degrees in plastics engineering and worked as an engineer before going to dental school—Arsenault and an engineer friend set out to investigate the problem. Their independent research used mannequin heads and spray bottles of red dye to demonstrate that in most styles of safety glasses, the bottom gap exposes the eyes to flying debris when a dentist leans over a patient.

Arsenault brought the issue to the American Dental Association, and is

leading a subcommittee on eye safety. Shannon Mills, who serves on the ADA's standards committee for dental products, hopes the data developed by Arsenault's group can be used by the American National Standards Institute (ANSI), the nonprofit that oversees protective products for U.S. industries, to develop new standards for dental eyewear.

"[The ADA] doesn't write the standards, but we can write supporting documentation and work with ANSI" to make changes, Mills says. Arsenault's group hoped to have its findings ready by the end of 2015, and Mills says the standards committee is putting together a working group of dental professionals, safety experts and industry representatives to consider solutions.

Requirements for dental safety eyewear were put into place in the early 1990s, driven by concerns about blood-borne pathogens, not projectiles. "Because of the way patients and dentists are positioned in the operatory, the standards for safety eyewear used in other industrial settings don't provide adequate coverage for dentists," Mills says.

It's difficult to get an accounting of how many dentists suffer eye injuries, Arsenault says, because emergency departments do not record patients' professions or how the injuries occurred.

Mills, a vice president at Northeast Delta Dental, is all too familiar with the bottom gap. As a dental student in the 1970s, long before eyewear was a standard in dental practice, a doctor said to him, "If I didn't know better, I'd swear you had pieces of gold in your eye." And yes, he did—the result, apparently, of polishing crowns and other restorations. Later, while serving in the Air Force, Mills ran the technical evaluation program for dental equipment, including safety glasses.

"When [Peter Arsenault] came to us, I said, 'I know exactly where you're going with this,'" says Mills.

HELPING EARTHQUAKE SURVIVORS

Mabi Singh, D107, was in his native Nepal, mourning the death of the aunt who had raised him, when a devastating earthquake struck the mountainous nation last April. The disaster and the resulting aftershocks, landslides and avalanches killed more than 8,800 people, injured more than 23,000 and displaced hundreds of thousands.

"The earthquake itself wasn't that terrifying, as I was in a safe area, but the environment afterwards was terrible," says Singh, an associate professor of diagnostic sciences. "Nobody could get in contact with anyone; you didn't know what had happened to other people. Then, the aftershocks kept coming."

Singh had been in the eastern outskirts of the capital Kathmandu, at the Pashupatinath Temple, a sacred Hindu temple. Hospitals in the surrounding areas were soon overwhelmed. Phone service was lost, and as the aftershocks hit, more and more damage was done to the area's infrastructure. Singh said there was no electricity for three days after the quake. People spent nights in tents or simply outside, fearing they would be trapped by debris if they ventured inside their homes and an aftershock came.

Instead of returning to the U.S., Singh traveled to the Kathmandu office of the nonprofit Help Nepal Network—he cofounded the network's U.S. chapter in 2005. The organization mobilized to provide support to other relief organizations and to deliver food and supplies. Singh brought rice and other nonperishable foods, water purification tablets, tents and plastic sheeting for shelter to remote areas.

Singh says he was grateful for the opportunity to serve. "I grew up in Nepal," he says. "I was glad I was there during the earthquake, even more than for the death of my aunt, because I would have felt very helpless. Being able to be there and help was very satisfying." —EMMA JOHNSON



Mabi Singh, D107, right, helps load supplies.



For information about the Help Nepal Network, visit www.helpnepal.net/usa.



On the set for the ASDA's "Sugar" video in the Alumni Lounge.

Sugar Dance

The pop band Maroon 5 sings, "Need a little sweetness in my life." But for dental students, more appropriate lyrics are "Need a little treatment in your life."

The Tufts chapter of the American Student Dental Association (ASDA) filmed a video this summer that featured students, faculty and staff dancing to the Grammy Award-winning band's song "Sugar," with lyrics rewritten for the oral-health conscious. "Your sugar/wrecks teeth/won't you come here and let me see?" for instance, replaces "Your sugar/yes please/won't you come and put it down on me."

The project attracted 50 participants from throughout One Kneeland Street, who handled everything from the lyrics, choreography, videography and editing to the performance; vocals were provided by Docappella, an a cappella group of Tufts medical and dental students.

Video projects have become popular among ASDA chapters, says Pei-Yun "Agatha" Kao, D18, an ASDA delegate. It's hoped this one can be used during orientation and to help introduce new students to the school. "It was also a fun project to bring everyone together to create a memory," Kao adds. To see the video, visit bit.ly/sugarparody.

WAR AND REMEMBRANCE

MICHAEL LEPORE'S FIRST book of poems, *Forgotten Heroes*, dealt with the physical and emotional toll the Vietnam War had on those who fought. Lepore, DG83, was concerned about repeating himself in his second volume, but he needn't have worried. *Vietnam Voices: Echoes of the Vietnam Experience* (Grayson Books, 2014) continues the story, this time with an eye to the wives, girlfriends, parents and children whose lives were also upended by war.

A VETERAN'S REQUEST

*Read me a poem, one
that calms my racing
thoughts. Fill the canvas
of my mind with colors
of romance, sing praises
of joy when the morning
is dark with mist.*

*Read me a poem, tested
by time, whose rhymes dance
on the tip of the tongue,
like a song without notes,
whose sweet refrain fills
the room and frees the soul.*

*Read me a poem, pure
as a vernal spring, refresh
the forest of my mind,
melt away the shadows,
ebb the flow of thoughts
that fill my eyes with tears.*

*Read me a poem that will
never grown old, let it live
unchanged, a sanctuary. Stir
my heart with its promise,
sweeten the magic of its words
with the beauty of a tender voice.*

—Michael F. Lepore, DG83

THE

D

LIST

A SMATTERING OF DENTISTRY
TIDBITS TO INFORM, AMUSE AND AMAZE

NOVEMBER

8TH

The date, in 2015, that marked the 120th anniversary of the discovery of X-rays by Wilhelm Röntgen. The first dental radiograph was made in 1896, with an exposure of 25 minutes.



Number of Victorian-era dental business cards on display in the Virtual Dental Museum (virtualdentalmuseum.org), a project of the University of the Pacific Arthur A. Dugoni School of Dentistry.

\$42.4 MILLION TO \$102.6 MILLION

The amount that could be saved each year in U.S. health-care costs if dentists screened patients for diabetes, hypertension and high cholesterol, according to the ADA Health Policy Institute.

7+10

The teeth in President Obama's mouth most likely to have gingival recession, according to a majority of periodontists quizzed by *Brilliant Doctors Magazine*. The magazine showed the dentists an unidentified, cropped photo of the president's smile.



\$404,030

Average practice expenses in 2013 for an owner-dentist in private practice, including both general practitioners and specialists, according to the American Dental Association.

1897

Year the National Association of Dental Faculties chose lilac as the academic color of dentistry.



27

Percentage of patients who lie about how often they floss, according to a survey by the American Academy of Periodontology.

Research



GROW YOUR OWN

Dental stem cells hold promise for replacing damaged teeth and even jawbone **BY DAVID LEVIN**

LOSING TEETH IS part of childhood. For adults, however, missing molars or broken incisors require a manmade solution in the form of dentures or implants. Using dental stem cells to grow new teeth and jaw bone would have advantages over existing tooth-replacement techniques, and could even be used to reconstruct a patient's jaw after

a severe injury or disease, according to a researcher at Tufts School of Dental Medicine who is trying to do just that.

Pam Yelick, G89, a professor of orthodontics and director of the division of craniofacial and molecular genetics, and her colleagues are developing ways to grow healthy new teeth and bone from dental stem cells—a type

of “universal cell” that can morph into many different types of oral tissue. After harvesting the stem cells from healthy adult tooth pulp, Yelick's team isolates them in the lab and gradually coaxes them into forming new tooth buds, the tiny clusters of soft tissue that eventually grow into a mature tooth.

It's a revolutionary new way of treating damaged or missing teeth. Tooth buds, she says, are incredibly complex—they form only in conditions that mimic an embryonic jaw, in which bone, tooth, soft palate and gums are beginning to take shape.

Using stem cells is also a better solution than dentures, which some patients find uncomfortable, or fixed titanium implants, which “create a totally artificial situation,” Yelick says. Because an implant can't move, the repeated impact of chewing is transferred directly to the jawbone and surrounding teeth, causing gradual bone loss. “If you could instead implant living, vascularized tooth in the jaw, that could be a much better option,” says Yelick, who also holds faculty appointments at the Sackler School of Graduate Biomedical Sciences, the School of Medicine and the School of Engineering.

Just as in a developing

human embryo, dental stem cells must receive the right mixture of nutrients and growth hormones at precisely the right times. It's nearly impossible to do that in petri dish, however. Instead, for the cells to grow into tooth bud tissue, they're placed on a “scaffold,” a biological environment that mimics the three-dimensional structure of tooth buds as they form in an embryo.

Getting that structure just right is a big part of Yelick's challenge. For the cells to grow effectively, the scaffold needs to have the exact shape and elasticity of real embryonic tissue.

Her team is still experimenting with designing the right scaffold, testing materials ranging from polyester to silk—which can be formed into complex structures, yet degrade easily in the body—to find the best configuration.

Their work looks promising. Over the past several years, Yelick and her research team have used these scaffolds to develop tooth buds, implanted them in pig jaws and watched them develop into early-stage adult teeth over the course of five months. It's an encouraging sign, but she quickly notes that it will be years before we will be able to grow our own replacement teeth.

MODEL APPROACH TO CLEFT SURGERY

3-D technology helps surgeons sharpen their treatment plans

BY MICHAEL BLANDING

CLEFT LIP AND cleft palate are the most common birth defects in the U.S., affecting 1 in 940 and 1 in 1,574 children, respectively. Surgeons are able to fix these problems by stitching together the soft tissues of the lip and grafting bone to fill in the gaps. Because these procedures are usually done when an infant is weeks or months old, scarring of the soft tissues is an inevitable part of the healing

process, and more surgeries are often needed.

“What tends to happen with these patients is that as a child gets older, the repair may not look as good because of the scarring,” says Carroll Ann Trotman, professor and chair of orthodontics at the School of Dental Medicine. “The result varies from patient to patient,” because their facial features change shape as they grow. The challenges go beyond aesthetics—some kids cannot move the facial soft tissues when eating, smiling or speaking, for instance.

Using motion-capture technology similar to that used in animated films and video games, Trotman has developed an approach designed to improve the way surgeons treat these patients and evaluate outcomes by providing a more objective way to measure

soft tissue movement and facial structure than is currently available.

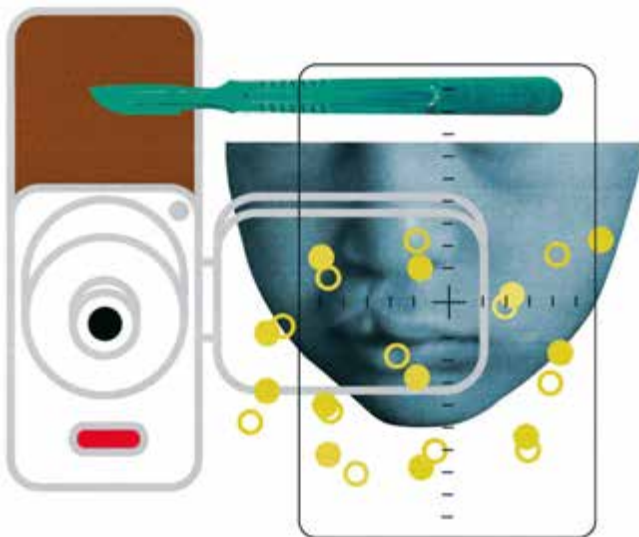
With this technique, facial movements can be modeled in three dimensions, both at rest and in motion. “Usually surgeons judge the extent of the problem by looking at the patient,” Trotman says. “The approach that we have developed adds an objective component to the surgeon’s subjective assessment.”

With funding from the National Institute of Dental and Craniofacial Research, Trotman and surgeons from the University of North Carolina–Chapel Hill, Wake Forest Baptist Health Craniofacial Center, Boston Children’s Hospital and Massachusetts General Hospital began a clinical trial in November to assess how surgeons integrate the 3-D modeling technique when making decisions and planning treatments for surgeries to repair and replace lips.

After interviewing the doctors about their initial approach to the surgery, the researchers will show them static and animated 3-D models to determine whether and how they modify their surgeries. “We’ll do an analysis of how the treatment plan is modified in each step of the evaluation to see if this really does make a difference,” Trotman says.

In a preliminary study of 21 patients published in the *Cleft-Palate Craniofacial Journal* in November 2013, Trotman and colleagues at the University of North Carolina School of Dentistry reported that surgeons who used the 3D modeling changed their initial treatment plan for a significant number of the patients. Moreover, using these same patient data, Trotman and her collaborators were able to demonstrate that surgeons exhibited significant bias in their judgments about the surgical outcome for patients, and this bias led to disagreements about the outcomes. The findings were recognized as the best research abstract by the American Association of Oral and Maxillofacial Surgeons at last year’s International Association for Dental Research conference.

That’s a strong indication that 3D modeling can help enhance, not supplant, doctors’ intuitive sense for how to go about these repairs, Trotman says. “You can’t do this without looking at the patients, so subjective information is very important. What we want to do is improve the evidence base available for surgeons to plan their treatment—thus, adding the objective components.”



HAND AND GLOVE

Silk proteins and an inkjet printer create an instant germ detector

BY JACQUELINE MITCHELL

AN ORAL SURGEON is about to make an incision when the word “contaminated” appears in bright red letters across her gloves, which inadvertently have picked up harmful bacteria. What does it take to deliver that warning? Nothing more than a little silk and an inkjet printer.

Pioneering work by a team of Tufts researchers led by Fiorenzo Omenetto, the Frank C. Doble Professor of Engineering, has led to the development of “conformal” biosensors—silk-based inks containing any number of compounds and applied with an ordinary inkjet printer on multiple surfaces. Such sensors could, for example, detect harmful bacteria on surgical gloves or other surfaces in the dental operator.

The research, published in the journal *Advanced Materials* in June, may be significant in medicine and other fields. The potential applications are limited only by the imagination, says Omenetto, the associate dean for research at Tufts School of Engineering.

In their paper, the researchers describe the

development of customized silk-based inks containing molecules that change color in the presence of the bacterium *E. coli*, proteins that stimulate tissue growth and gold nanoparticles that heat on demand or function as optical sensors, among other uses. The research was supported by the Office of Naval Research and the Air Force Office of Scientific Research.

“Silk is unique because it does multiple things well,” says Omenetto, the paper’s senior author. “The fact that we can now activate [the silk-based ink] with so many mixers makes it particularly powerful.”

Stable, chemically neutral and nontoxic, purified silk protein—or fibroin—achieves the perfect viscosity for use in an inkjet printer when the material is dissolved in water. It’s also biocompatible, meaning it doesn’t trigger an immune response

when introduced into the body. This happy accident of nature is one reason why David Kaplan, the Stern Family Professor of Engineering and chair of the Department of Biomedical Engineering at Tufts, one of the paper’s coauthors, has been studying silk’s potential as a biomedical/bioengineering material for the past 15 years.

“Not only is the material naturally good, there happens to be a lot of resident expertise here at Tufts,” says Omenetto. “The body of knowledge is growing every second here, and David [Kaplan] certainly was an amazing catalyst.”

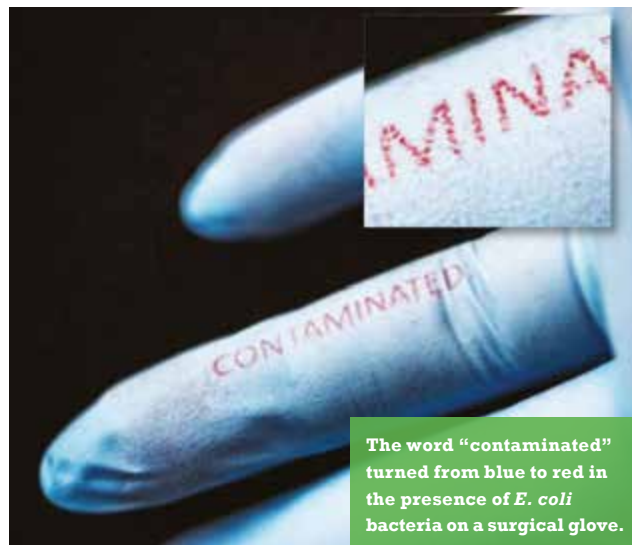
In addition to the germ-detecting surgical gloves, Omenetto imagines one day taking a digital photo of a complex wound—maybe a battlefield injury—and sending that snapshot to an inkjet printer. The result might be a custom bandage that could be impregnated

with antibiotics and tissue growth factors—compounds that encourage healing by stimulating skin, muscle and/or bone growth. Such a bandage could distribute the medicine to precisely targeted areas of the wound.

These ideas first percolated in Omenetto’s lab around 2007, he recalls, as the team was working on a drug-delivery project. The researchers added an optical element to silk film that reflected light differently under different conditions. In their early experiments, the team used it to detect the amount of oxygen present in a sample of blood. Omenetto and his colleagues soon came up with the idea of a silk film embedded with sensors that warn of the presence of harmful bacteria.

Because silk is extremely stable, easy to work with and nontoxic to people and the environment, Omenetto sees it as a potential green replacement for plastics and other inorganic compounds used in high-tech fields. Harnessing silk’s versatility, he says, could mean decreasing industry’s carbon footprint and toxic-waste output without sacrificing technological performance.

“Eventually, materials will have to change,” he says. “It’s going to become simply unsustainable to live consuming nonrenewable materials the way we do today.”



The word “contaminated” turned from blue to red in the presence of *E. coli* bacteria on a surgical glove.



A FRIEND TO THE FINISH

Bryan Lyons, D95, takes his place on Team Hoyt and in Boston Marathon history

BY JACQUELINE MITCHELL

ON A BRIGHT SUNDAY LAST APRIL, BRYAN LYONS, D95, TOOK THE MOUND AT Fenway Park to toss the ceremonial first pitch—and to mark the evolution of yet another great Boston tradition. Dick Hoyt, who has pushed his son, Rick, in a wheelchair in every Boston Marathon since 1980, brought Rick onto the field. The elder Hoyt handed Lyons the ball.

“It *did* go over the plate,” Lyons says. “I was nervous because of what [Patriots quarterback] Tom Brady did [when he threw the first pitch]. He hit the dirt.” His voice cracks as he continues. “Then I pushed Rick off the field, sort of like a handoff.”

The next day, on April 20, the new Team Hoyt, Lyons and Rick, ran the 119th Boston Marathon. It was the first time in more than three decades that Rick, 53, had competed in the storied race without his father.

Pushing Rick “was an amazing experience,” Lyons says. “I wasn’t thinking about getting to the next mile or the next hill or the next water station. I’m certainly not saying it was easy, but it was easier with him.”

Lyons, who was running in his seventh Boston Marathon, says the 26.2 miles melted away because he spent the race making sure Rick was OK, that he was properly hydrated, comfortable and warm during the unusually cold marathon day. “There is no shortage of love and support for Team Hoyt, and that was evident along the entire course,” Lyons says.

The crowd made such a difference that it provided yet another diversion from the lousy weather. “I didn’t even realize how cold, windy and wet it was until after the race,” Lyons says. “I didn’t feel any of those things during the race. The crowd in Boston, they pull you along and they push you along.”

Team Hoyt began in 1977, when 15-year-old Rick, who was paralyzed at birth due to oxygen deprivation, told his dad he wanted to participate in a 5-mile run to benefit a lacrosse player who had been paralyzed.

Since then, Dick and Rick completed thousands of marathons and triathlons, including six Ironman competitions—that’s a 2.4-mile swim, a 112-mile bike ride, followed by the 26.2-mile marathon. They do it all for the Hoyt Foundation, the father and son’s charitable foundation that advocates for the inclusion of people with disabilities in all facets of society.

Now local legends etched into Boston sports lore as surely as marathoners Bill Rodgers and Joan Benoit Samuelson—if not Celtics great Larry Bird and Brady—Team Hoyt is cheered on by half a million marathon fans every April.

At age 75, Dick Hoyt shows few signs of slowing down, but father and son decided that the 2013 Boston Marathon would be their last long-distance race together. When that race was halted by the bombings at the finish line, they chose to run one more time, in 2014. Together, they completed Boston 32 times.

COMEBACKS AND TEAMMATES

On a snowy day in February 2014, Lyons got a phone call from Dick Hoyt. Rick wanted to do Boston in 2015. Would Lyons, a family friend and runner, be his teammate? Lyons was stunned. “I know world-class athletes have all offered to run with Rick,” he says. “All these people have asked him, and the answer has always been no. So to be asked was incredibly humbling.”

Dick and Rick Hoyt did get plenty of offers, but they couldn’t think of anyone else they wanted to continue the Team Hoyt tradition. Bryan Lyons “was the perfect guy as far as Rick and I are concerned. He loves pushing Rick,” says Dick.

Like many New Englanders, Lyons, a New Hampshire native, knew the Hoyts’ story and the inspiration they provide with every step of every Boston Marathon.

But how did a dentist who ran as a hobby come to be the one to get that call from Dick Hoyt? That story starts in 2001, just after Lyons opened his first dental practice in Billerica, Massachusetts. After staying late one night to do paperwork, Lyons was hit by a drunk driver as he drove home.

At the time, he was spending much of his free time training for and running marathons all over the country with his younger brother and sister-in-law. Though he could knock off 16 to 18 miles pretty easily, he had never thought of himself as a serious runner. “In college I would just go out for a run to try to maintain a semblance of fitness—and sanity,” he says. “Same thing in dental school.”

The injuries from the accident were not life-threatening, but it would be months before he could sleep through the night without pain. And it wasn’t until 2006—five years after the accident—that Lyons was able to run 5 miles relatively pain-free. What should have felt like an accomplishment left him discouraged—his pace was nearly 30 minutes slower than it had been before the accident. A childhood friend suggested Lyons set his sights on a triathlon, the race that involves swimming, biking and running. His first tri included a 0.6-mile swim, a 25-mile bike ride and a 6.5-mile run. The former marathoner took to it like a duck to water.

“I couldn’t tell you my time, but I was hooked,” Lyons says. “I didn’t care how slow I ran because I had nothing to compare it to, and of course the [running] time would be slower because I’d already been swimming and biking.”

He joined a local triathlon club. In 2008, an email went out to the members, recruiting athletes to run the Boston Marathon with Team Hoyt. The challenge came at a crucial point in Lyons’ recovery. “I knew someday I would be able to do another



Rick Hoyt raises a hand in triumph as Bryan Lyons, D95, pushes him across the finish line on Boylston Street.

marathon, but at that point, I was still only able to do about a half marathon,” he says. “The Hoyts were the only impetus I needed.”

Over the next five months as he trained with Team Hoyt, Lyons forged a strong friendship with the father-son duo. “I told Dick after that first Boston Marathon that I’d love to come back and run with the team next year,” Lyons says. “He said, ‘Only if you do it every year after, as well.’”

Lyons did come back, and not just for Boston. Since his accident, he

estimates he’s done nearly 100 triathlons and hundreds of road races and cycling events, many of them pushing other Team Hoyt athletes—Lyons is president of the foundation’s New England chapter.

“I’m very grateful that Tufts provided me with a career that affords me the opportunity to pursue my passions, including running, travel and the foundation work that I do with Team Hoyt,” says Lyons.

When he ran Boston with Rick Hoyt last April, Lyons says he definitely wasn’t prepared for the media blitz. So well-known is the story of Team Hoyt that fans lining the route even knew a dentist had taken

over behind the wheel. A few people shouted, “Hey, Doc!” Lyons doesn’t care if anyone recognizes him or knows his name. He runs to support Team Hoyt and his friend Rick.

“The outpouring of love and support for Team Hoyt along that route was incredible,” Lyons says. “It’s not about me. It’s about Dick and Rick. Just to be a part of helping continue that tradition is amazing.” Rick and Bryan are deep into their training for Boston 2016. Team Hoyt will once again toe the starting line in Hopkinton, Massachusetts, on April 18.

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When patients hurt,
this team of specialists
ends the anguish

PAIN

RELIEVERS

BY JACQUELINE MITCHELL AND HELENE RAGOVIN

ILLUSTRATIONS BY JOANNA SZACHOWSKA

LIKE A LOT OF THE PATIENTS WHO COME TO THE TUFTS CRANIO-facial Pain Center, the 30-something Ph.D. student was at her wits' end. Since high school, she'd suffered from three or four migraine headaches a year. Then she woke up one morning with a sharp pain in her cheek that never went away. She began having one or two migraine headaches a week and feared her condition might ruin her career in academia.

By the time she showed up at Tufts, the woman was anxious and depressed, says Egilius L.H. Spierings, a clinical professor in the department of diagnostic sciences at the School of Dental Medicine.

"Generally, people have come through a good number of physicians and dentists before they ultimately end up here at the clinic," says Spierings, a neurologist who consults with the dentists on complex cases. "She had seen a lot of physicians and gotten a lot of different opinions. She was on a number of medications. That's the kind of thing that would make anyone irritable."



She underwent a complete work-up. Over the course of several months, the dentists ruled out any tooth-related problems, like abscesses, grinding and clenching of the teeth or jaw misalignments. The clinic psychologists helped determine which came first, the patient's intractable pain or the depression and anxiety.

"Everybody here got involved with this patient," Spierings says. That approach—a team of specialists from many disciplines working together to unravel the puzzle of seemingly intractable pain—is the guiding philosophy at the Craniofacial Pain Center. It was among the first pain programs to use this holistic approach and is now one of the largest university-based centers of its kind in the country, according to Noshir Mehta, DG73, DI77, who served as the pain center's director from its founding in 1985 until 2012. The team includes dentists, physicians and psychologists and draws on the expertise of physical and occupational therapists. A current physiol-

ogist according to a study published in the *Journal of the American Dental Association (JADA)* in July 2014.

The Tufts Craniofacial Pain Center treats patients suffering from headaches, sleep problems and facial pain. The vast majority of them are diagnosed with conditions like cervical or musculoskeletal problems or sleep apnea, Mehta says, and is indicative of some of the primary causes of pain in patients everywhere. A study in the October 2015 issue of *JADA* found that "pain in the muscles and temporomandibular joints was reported as frequently as that in the teeth and surrounding tissues in patients visiting general dentists." That conclusion was based on a survey of dentists in the northwestern U.S. from 2006 to 2009. Overall, the *JADA* study concluded that 21.7 percent of the U.S. population suffers from orofacial pain—and, Mehta says, facial pain quite often is accompanied by pain in other parts of the body.

Approximately 1,500 new patients a year come through the doors of

patient care, work in this field, both research and clinical, is among the most interprofessional of endeavors at the School of Dental Medicine—a noteworthy model as collaborative health-care practice moves toward becoming the norm for the 21st century. "It's not just that I'm a dentist. We look at our patients from a global standpoint," says Mehta.

"In this environment, not only do the students get exposure to treating pain, but [also] how to collaborate with specialists outside their own field," Dhadwal says. And for patients, the advantage is that all the providers can be brought together when the patient is there.

For more than 15 years, the pain center has been sharing its expertise by hosting weekly rounds at the dental school to address specific cases or topics, such as managing pain in patients who have other physical or mental illnesses or using new technologies to measure and study pain. Academics and health-care providers can call into the sessions from anywhere, either to share their own knowledge or to seek opinions about their patients. Two experts from Saudi Arabia called in this fall, says Ronald Kulich, a professor of oral pathology in the dental school's department of diagnostic sciences, who hosts the sessions.

At a recent call-in, Chao Lu, DG10, an assistant professor in the department of diagnostic sciences at the dental school, presented two cases that, at first glance, looked like temporomandibular joint disorder. Closer examination, however, revealed other possible causes. In one case, a woman claimed her jaw misalignment and bruised left cheek resulted from a bad fall. But an MRI showed an injury more consistent with being hit or punched, information that could help the team offer intervention for domestic violence. In the other, a young girl had jaw pain typical of
Continued on page 18 **»**

"I think most of what I know about headache and face pain, I learned from patients."

—Egillius L.H. Spierings

ogy fellow who spent six years as a Buddhist monk works with patients on mindfulness meditation.

BEYOND TOOTHACHES

Chronic pain affects 100 million American adults and costs the country roughly \$600 billion annually, according to the U.S. Institute of Medicine. Orofacial pain—including headaches—may account for as much as 40 percent of that price tag,

the Craniofacial Pain Center at One Kneeland Street, says Shuchi Dhadwal, DG10, DI14, its interim director. In addition to treating patients, the center's other mission is education. Predoctoral students rotate through the clinic, and there is a postgraduate program that leads to either a certificate or a master's degree in orofacial pain.

Because pain management transcends traditional boundaries in



RX FOR PRESCRIBED PAINKILLERS

Late on a Friday afternoon, a new patient comes into the dental office with a toothache. She's in severe pain, she says, and her X-rays reveal a cavity. There isn't time to start a procedure, so you book an appointment for first thing Monday morning. She asks you to prescribe her something for the pain, just to get her through the weekend.

"What would you do?" Ronald J. Kulich, a professor of diagnostic sciences, asks a roomful of second-year dental students. "Write her a script for 30 pills? What's your gut reaction?"

Kulich, a psychologist who specializes in chronic pain, is using this hypothetical case to help his students understand the basics of addiction screening. It's part of a continuing effort to stem the tsunami of prescription-painkiller addiction that has swamped the United States since the early 2000s.

Every day, 44 Americans die from an overdose of prescription painkillers, which includes opioids, hydrocodone, oxycodone and methadone, as well as benzodiazepines like Valium and Xanax, according to recent data from the Centers for Disease Control and Prevention. The next generation is also at risk. Every 25 minutes a baby is born suffering from opioid withdrawal, according to the National Institute on Drug Abuse. The alarming statistic represents a fivefold increase since 2000. That's why it's crucial for dentists to know the signs of and risk factors for addiction before taking out that prescription pad.

Drawing from a mosaic of real-life cases, Kulich offers students more detail about his hypothetical patient. She has a pleasant demeanor, but she's unemployed and may be so

permanently as a result of back surgery. She had a postsurgery prescription for Vicodin, but she says she didn't refill it. She smokes a little less than a pack of cigarettes a day and takes an antianxiety medication to help her sleep. She takes some heavy-duty headache meds, and she has an allergy to the drug suboxone.

At least one student recognizes this last red flag—suboxone is used to treat opioid addiction.

"I encourage you to use the patient's medicine list as a way to complete your evaluation," Kulich advises the students. "Sometimes that will tell you more than a patient will. Knowing esoteric medications will give you a nice history."

Since 2010 dentists and physicians practicing in Massachusetts are required to check the state's prescription monitoring program (PMP) database, which is housed on a secure website and keeps track of all prescriptions filled by patients in the last year. The database, which is populated by data from pharmacists and health-care providers, is designed to prevent patients from doctor shopping to obtain multiple painkiller prescriptions from multiple providers. All 50 states plus the District of Columbia and Guam employ PMP technology. Massachusetts was among the first to mandate its use and to work aggressively toward training physicians and dentists in identifying patients at high risk for substance abuse, says Kulich, who is working with state agencies in Massachusetts to determine how health-care practitioners and law enforcement can work together to address addiction.

The PMP can also help dentists make better clinical decisions, avoid drug interactions and foster better collaboration with their patients' other health-care providers, he says. "It's going to give you an opportunity to have a conversation with the patient," says Kulich, who acknowledges some dentists are reluctant to broach the topic of addiction with their patients. "Assessment doesn't have to ruin your relationship with the patient, but may improve it and give you a chance to have a frank discussion."

In Kulich's hypothetical case, the PMP reveals the patient filled not one, but two prescriptions for opioid painkillers recently, one from a dentist, the other from a physician. Whether she lied about it or forgot, says Kulich, doesn't really matter. Dentists still need to treat their patients' pain.

A cautious dentist might opt to prescribe this patient a very small number of pain pills and require her to come back on Monday for follow-up. An over-the-counter analgesic such as acetaminophen or ibuprofen could also work, although these drugs also carry risks, such as stomach and cardiovascular side effects. For some patients, prescription opioids remain the safest and most effective strategy for pain control, providing the dentist conducts an adequate assessment of risk, says Kulich.

"It's not about shifting away from opioids," he says. "The buzzword is 'rational prescribing.'" —JACQUELINE MITCHELL

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nighttime tooth grinding. But when one of the pain center's physicians noticed she had a slight rash, he ordered a blood test. The diagnosis turned out to be Lyme disease, caught early thanks to the interdisciplinary team at Tufts.

The pain center's collaborative approach also helped identify the source of the doctoral student's sudden,

stabbing cheek pain. Spierings ordered a CT scan to see whether an ear, nose and throat problem could account for her discomfort. The scan revealed a tiny bone spur, "like a splinter in your nose," he says. "Once you have that, it causes inflammation, and you're stuck with it." A simple surgery took care of the problem, a solution that no single health-care provider had arrived at.

A SNEAKY FOE

"Face pain is an elusive area. Very few people or institutions really have a good understanding of it," Spierings says. And if the pain continues without relief, it takes on a psychological dimension, too—and can affect other people in a patient's life. Dhadwal says she became interested in pursuing pain as a specialty—she received advanced training

MOVING THE NEEDLE

When George Maloney sees a patient in pain, he first determines whether the ache emanates from the nerves or the muscles. For nerve-based pain, he often prescribes medications. For muscle pain, he reaches for his needles.

Maloney, a clinical professor at the Tufts Craniofacial Pain Center, is a longtime advocate of using acupuncture over painkillers to treat muscle pain more effectively. In addition to his D.M.D., he has a master's degree in acupuncture from the New England School of Acupuncture.

Painkillers, Maloney says, provide only generalized relief and can lead to drug dependence and addiction. "Opioid pain relievers can be effective for a short-term treatment of a day or two," he says. By contrast, acupuncture can provide lasting relief from the pain.

Maloney begins acupuncture treatment by stabilizing the points of contact, or occlusion, between the teeth with a mouthguard or oral splint. "If you create a stable occlusion, which can reduce muscle activity in the jaw muscles, then you will find it much more effective when you treat the muscles more directly with needling," he says. He treats muscle pain with traditional acupuncture needles or electro-acupuncture, which sends a low, pulsating electric current to the muscles.

In traditional Chinese medicine, inserting acupuncture needles into specific locations balances the flow of qi, or vital energy, throughout the body. More modern explanations typically point to acupuncture's ability

to stimulate peptides and other biochemical signals that cause physiological effects, such as increasing blood flow, reducing inflammation and easing muscle tension.

Maloney first got involved with the alternative medicine technique after repeatedly surveying patients on what reduced their pain and finding that a high percentage of them mentioned acupuncture. Maloney took a distance-learning course through UCLA Medical School in 1998, following it up with the program at New England School of Acupuncture in 2002. Acupuncture works, he says, because chronic pain puts the face and jaw muscles into an altered state. Acupuncture can gradually get the muscles to relax.

While acupuncture is not widely used by dental pain practitioners, several clinical studies have shown it to be effective in treating craniofacial pain, especially when combined with stable occlusion. As far back as 1997, the National Institutes of Health issued a consensus statement affirming evidence that acupuncture is effective in relieving postoperative dental pain.

Maloney wants to add to the body of evidence. He is beginning a review of studies about the effectiveness of acupuncture in treating temporomandibular joint disorder and craniofacial pain. "I think that this review and other controlled clinical trials can produce the kind of evidence that may lead to wide-scale acceptance," he says. —MICHAEL BLANDING



at Tufts in craniomandibular disorders—because a close family member suffered from chronic pain. “It can be really stressful not just for the patient, but for the family members as well.”

What bedevils both health-care providers and patients is pain’s invisibility—you can’t see it on an X-ray or measure it with a blood test. That, along with its extraordinarily subjective nature, makes it a frustrating adversary.

“If you cut your arm, and you show it to someone, they will see the cut and they will believe you,” Mehta says. “If you have pain, it’s up to you to describe it. And it’s up to me to believe you.” The standard practice of asking patients to rate their pain on a scale of 0 to 10, for example, leaves a lot of leeway. “If you have a pain of 3, it might be the same as someone else’s 7,” Mehta says.

“That’s the problem with chronic pain—you have to believe the person who is giving you information, and how much you believe in your patient will lead you to treat the patient differently,” Mehta says. “The good doctors in pain management will look at everything, but need to come into the conversation believing their patients are telling the truth.”

Spierings, a physician, agrees. He holds a Ph.D. in pharmacology, but he is primarily a neurologist who specializes in migraine headaches. In the early 1980s, he did a fellowship in headache medicine under John Graham, a pioneer in the field, at Boston’s Faulkner Hospital. “If you asked me what is the single most important thing that he taught me, I would say to listen to patients and to take as valuable what they tell you,” says Spierings. “I think most of what I know about headache and face pain, I learned from patients.”

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MIGRAINES AND MUSCLES

One of the things Egilius L.H. Spierings has learned over nearly 40 years of practice remains controversial in headache medicine—but it seems intuitive to anyone who has found that shoulder massage can ease a headache.

“People’s mouths drop open when I tell them that in the headache world, there is no attention being paid to the muscles,” says Spierings, a neurologist on the staff at the Tufts Craniofacial Pain Center.

About 5 percent of people suffer from daily headaches, according to a study Spierings published in the journal *Headache* in 2013. Among those, about half have migraine, the often-severe headache that can be accompanied by light sensitivity or seeing lights, increased sensitivity to sounds or smelling odors. The rest suffer from tension-type headache, characterized by milder, diffuse pain in the head and sometimes in the face.

While migraine may get more attention from headache experts, both types of headaches have perplexing origins. Tension headache is thought to be caused by a lack of sleep, stress, hunger, thirst, eye strain or strain on the muscles of the shoulders, head and neck, usually due to bad posture. (Think sitting at your desk all day.)

Migraine is a more baffling condition. What is known is that it occurs when blood vessels in the head dilate. Spierings doesn’t dispute that. But he’s certain that just as with tension headache, stress on the muscles in the neck, jaw and shoulders may also play a role, especially in people who have frequent or long-lasting migraine headaches. The more pain the person endures, the more likely she—and women suffer from migraine at about twice the rate as men do—is to store tension in those muscles.

It’s the musculature, he points out, that dentists treat when they fit patients with an appliance to ease jaw pain caused by nighttime clenching and grinding. Headaches often accompany these habits, and sometimes they are the first, if not only, daytime symptom.

The paralytic Botox, a long-acting muscle relaxant, is now used to treat chronic migraines—Spierings, a pharmacologist, participated as an investigator in one of the clinical trials that led to FDA approval of Botox as a headache remedy. “The pain is ultimately caused by the blood vessels widening,” he says. “But what drives the frequency, I think, is a muscular mechanism.” He says his findings that Botox alleviates migraine only among chronic sufferers support that conclusion.

In the quest for a more universal treatment for migraine, Spierings is among the researchers looking at targeting a chemical in the body called calcitonin gene-related peptide (CGRP) that is known to dilate blood vessels. Scientists have been able to block CGRP’s effects with a new class of drugs called anti-CGRP antibodies. The early results are promising. “It seems like a tremendous step forward,” he says. -JACQUELINE MITCHELL



the ties that bind

When newborns struggle to breast-feed,
a simple surgery may be the answer

BY JULIE FLAHERTY PHOTOGRAPHS BY KATHLEEN DOOHER

IT'S A THURSDAY MORNING, AND MARTIN KAPLAN, D75A, A PEDIATRIC dentist in Stoughton, Massachusetts, is seeing his second infant of the day. He scans a form filled out by Courtney Baker, who holds her 3-month-old daughter, Scarlett.

"Breast swelling, clogged ducts, bruising, bleeding, flattened nipples," he says, reading down the list of symptoms Baker has checked.

"Not all at once," she notes.

"Thrush?" he asks, referring to the painful infection that can affect both the baby's mouth and the mother's breasts.

"Three rounds of it."

Kaplan examines the sweet, dark-haired baby. He soon confirms what the mother and her lactation consultant suspected: Scarlett has a lip-tie and tongue-tie.

In infants with tongue-tie, the frenum—the string of mucosal tissue that connects the tongue to the bottom of the mouth—is too short, limiting a baby's ability to move the tongue. Studies indicate anywhere from 0.2 percent to 10 percent of newborns are born with this condition. Similarly, a lip-tie restricts the movement of the upper lip from the gums. Lactation experts say either condition can



Courtney Baker and
her daughter, Scarlett.

make breast-feeding difficult, because the baby cannot latch onto the breast properly, leading to sore nipples, long on-and-off feeding sessions, lots of gulped air and decreased milk production in the mother.

The treatment is a frenectomy, the snipping of the frenum to free the tongue and/or upper lip. Physicians and midwives reportedly have performed frenectomies for hundreds of years. The simplest means is to snip the frenum with scissors, but it can also be excised and sutured, or treated with a laser. The practice fell out of favor in the 1950s and '60s, when bottle feeding became more common. (Tongue-ties don't cause as many problems in bottle-fed babies.) But now that public health advocates have widely recognized the benefits of breast milk in bolstering infants' immune systems, experts are looking closely at frenum removal as a way to help more mothers breast-feed successfully.

Still, the quick-and-simple procedure remains controversial. Not everyone agrees on what constitutes a tongue-tie, whether a tongue-tie needs to be treated or what treatment is best.

Frenectomies have become a huge part of Kaplan's practice in recent years; he estimates he treats about 600 infants and toddlers annually. He uses a laser, which removes layers of tissue by vaporizing the water within the cells. The benefits, Kaplan says, are minimal bleeding (usually none), no sutures and a low risk of infection, because the laser essentially cauterizes the wound. Kaplan doesn't even use anesthetic.

There is, however, lots of crying, which usually starts as soon as the dental assistants start to swaddle the baby. (After a few fainting incidents, Kaplan no longer lets the parents stay in the operating room.) But in less than a minute, it is over. In a much-practiced move, Kaplan scoops up Scarlett and rocks her with a soothing "shush, shush." She quiets almost immediately. With a bouncing gait, Kaplan carries

her down the hall to her mother.

Kaplan is scheduled to evaluate seven more infants for tongue-ties the next day. The demand is so great, he says, that he could devote his practice entirely to this one procedure.

BEYOND FEEDING PROBLEMS

A baby with a tongue- or lip-tie tends to suckle on the tip of the nipple, which is painful for the mother and less effective for the baby. Over time, the condition can reduce the amount of milk the mother produces, possibly leading her to stop breast-feeding sooner than the one year that is recommended by the American Academy of Pediatrics. While 75 percent of new mothers start out breast-feeding, only 43 percent of them still breast-feed by the time their infants are 6 months old, according to the Centers for Disease Control and Prevention.

"If the babies cannot get a deep latch, if they are swallowing air, they are going to have issues," says Fawn Rosenberg, D85, a family dentist in Lexington, Massachusetts, who started doing laser frenectomies about 15 years ago. "Plus the mothers are in so much pain. Breast-feeding should not be painful."

Rosenberg says she breast-fed her three children, the youngest until she was 3. "I'm a big believer in the benefits of breast milk," she says. "I think that every mom should have the opportunity to feel close to their babies in this way."

The problems don't end at breast-feeding, she says. Older children may have trouble chewing solid food or have a lisp or other speech problems. Kids with a lip-tie can develop a gap between their front teeth. Because the baby is unable to push the tongue against the roof of the mouth, it can lead to the development of a narrow upper palate, which, Rosenberg says, can cause breathing problems.

Although she has corrected tongue- and lip-ties on patients of all ages, including adults, Rosenberg believes early treatment is best. "The younger

they are, the faster they heal, and some of the real young ones will actually sleep through the procedure," she says.

Postfrenectomy, Kaplan and Rosenberg stress that parents must do exercises with their infant to prevent the frenum from reattaching and to train the newly mobile tongue. This includes having the baby suck on a finger and lifting and stretching the tongue four or five times a day.

Dentists who perform laser frenectomies need to have extensive training, says Kaplan, who is working on a book about the procedure with Alison Hazelbaker, a lactation therapist, and Robert Convissor, the director of laser dentistry at New York Hospital Medical Center of Queens. The continuing education classes the three of them are teaching on the subject at Tufts School of Dental Medicine quickly sold out.

ANOTHER VIEWPOINT

Not everyone has embraced the dentist's role in infant frenum surgery. The American Academy of Pediatrics says that tongue-tie "usually resolves over time with tongue use" and "does not usually present a problem for speech or eating." Rosenberg has had parents cancel frenectomy appointments after meeting with their family doctor.

Andrew Scott, a pediatric otolaryngologist at Tufts Medical Center and an assistant professor at Tufts School of Medicine, approves of frenectomies for tongue-tied babies who have trouble breast-feeding, but he is not sold on the value of using a laser. Using a scissors, he says, has the same benefits: little-to-no bleeding, low risk of infection, a quick procedure and no anesthesia needed other than sucrose solution. "We cut ties in the nursery on babies who are hours old this way," he says. Children older than 4 to 6 months he treats under general anesthesia.

Scott also disputes the claim that tongue-ties can cause speech or airway problems, noting that the body of



Courtney Baker holds her baby, Scarlett, who underwent frenum surgery.

“The younger they are, the faster they heal, and some of the real young ones will actually sleep through the procedure.”

—Fawn Rosenberg, D85

research does not support this, except in severe cases.

Some medical providers even disagree about what constitutes a tongue-tie. Ear, nose and throat physicians, Rosenberg says, will often treat an anterior tongue-tie that is close to the tip of the tongue, but not a posterior tongue-tie, which is less obvious, or a lip-tie.

As for lip-ties, “there is no evidence out there that these interfere with nursing,” Scott says. “Most of the anecdotal stories of improvement in nursing after cutting a lip-tie are clouded by the fact that a tongue-tie was also released at the same time. I have never seen an isolated lip-tie cause nursing impairment. It does lead to gapping in the front teeth, however, and intervening for that is completely reasonable.” He defers to dentists and orthodontists on when

that is indicated for older children.

Sara Ryans of Plainville, Massachusetts, noticed early on that her son Alexander did not breastfeed the same way her first child had. He needed to be nursed on a pillow in order to get a good latch. But Alexander continued to grow at a fast pace. It wasn’t until the family went on vacation and she needed to breast-feed him on-the-go that things became more difficult. Suspecting a tongue-tie, she went to an ENT, who was reluctant to do anything because 5-month-old Alexander was gaining weight. He said he would have to use general anesthesia and do the procedure in an operating room.

When Ryans read about laser frenectomy, she decided that was the better option, and made an appointment with Kaplan for August. Minutes

after Kaplan completed the procedure, releasing both a lip-tie and a tongue-tie, Ryans says she was glad to be nursing Alexander rather than waiting for him to awaken from anesthesia.

She says she noticed a difference right away. “The suction was definitely better, like he was in a better position,” she says. Alexander, who was smiling broadly, seemed to agree.

As for little Scarlett, she wasn’t interested in nursing immediately after her procedure, and was uncharacteristically fussy that night. “But the next day, she was perfectly fine, back to her normal, happy self,” says her mother, Courtney Baker.

“I wish this was something I did from day one, had I known.”

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Bringing Quidditch Down to Earth

Ethan Sturm, D17, is a wizard at promoting a sport inspired by fiction

BY JULIE FLAHERTY ILLUSTRATION BY CHRISTOPHER THORNOCK

WHEN ETHAN STURM, A13, D17, TALKS ABOUT QUIDDITCH to people who have never watched the sport, he usually gets two responses: “How do you fly?” or “You guys run around with, like, brooms all the time?”

Quidditch, for those not familiar with the books or movies about the boy wizard Harry Potter, is the national pastime of that magical world, a game played entirely on flying broomsticks with enchanted balls that have minds of their own. Muggle quidditch, first played at Middlebury College in 2005, is the earth-bound version (“muggle” being the Potteresque term for nonwizards). Players hold sticks between their legs to symbolize brooms, and the five balls in the game are propelled by muscle, not magic.

Sturm, a third-year dental student, began playing

quidditch with high school friends in 2010 and joined the Tufts team, the Tufflepuffs, as an undergraduate in 2012. He has become one of the sport’s biggest proponents. He founded and is managing editor of a website about the nascent sport called, in a nod to the seven players on a team, The Eighth Man (www.eighthman.com), and this summer cofounded Major League Quidditch, which, while not a professional organization, is attracting some of the best players from both college and community teams.

He’s trying to grow quidditch into a serious sport, and in that regard, the esteemed fantasy novels are both a help and a hindrance. The Harry Potter angle definitely gets people’s attention, Sturm says, particularly on college campuses.





At Tufts, “we always have someone running around as a snitch at the [student] activities fair,” he says, referring to the yellow-clad player who represents the elusive, golden-winged ball in the books. “It draws people in really well.”

But Sturm could do without the perception that quidditch is soccer for nerds. While he is a fan of the books and has read them multiple times, he is foremost a sports junkie, both playing and watching. He wrote for the sports section of the *Tufts Daily* all four of his undergraduate years. It was quidditch’s mix of rugby, lacrosse and dodge ball elements that drew him in. He also likes that the game is decidedly coed, with each team allowed no more than four players of the same gender on the field at a time.

The sport has certainly shed some of its fantasy trappings from its early days. Eight years ago athletes wore capes when they played, and loose broom bristles littered the field at the end of every game. Now team uniforms mimic soccer gear, and functional

“They are just in incredible shape,” he says, which certainly helps when you are dodging bludgers (red kickballs), lunging for the quaffle (a slightly deflated volleyball) or being tackled by a keeper (goalie). Players do get hurt, Sturm notes in trying to point out how physically demanding the game is without sounding proud of the injury rate.

THE MAGIC GROWS

By all accounts, quidditch has spread like fiendfyre. Over the summer, Europe held its first international championships, with 12 countries competing. Australia has a huge league. It’s starting to pop up in Asia and South America. “A few people who have done some volunteer work in Africa have brought it over there,” Sturm says. “You compare that to the growth of almost any other sport. They all have slow upswings. But then we have this Harry Potter connection, and boom! We are on five continents in 10 years.”

So how do you turn a fictional game into reality? In the books, a match would end when the seeker, usually

in a tube sock that dangles from the back of the snitch’s shorts like a tail. Practical or prosaic, depending on your point of view.

In the early days of muggle quidditch, the snitch runner could hide anywhere on campus. He or she might put on a sweatshirt and hide among fans in the bleachers. In most modern versions, the snitch runner must stay on the playing field, but doesn’t join the game until 18 minutes in, giving each team a chance for some serious play first. (Sturm campaigned for the rule when he served in the game play department of the International Quidditch Association, having seen too many three-minute games because the snitch wasn’t a good hider.)

Watching a game is a bit like watching a three-ring circus. With up to five balls in play at a time, it is hard to know where to look, and it takes four or five referees to officiate.

The chaos was part of the enticement for Damaris Pock, 22, an au pair from Austria who was among the couple hundred spectators who turned out for a Major League Quidditch game between the Boston Night Riders and the New York Titans in August. She heard about the game from a friend and decided to bring the two boys she babysits. An avid Harry Potter fan, she showed up wearing a Hogwarts T-shirt and her Deathly Hallows earrings and not really knowing what to expect. Within minutes, she was hooked. “I would totally play,” she said.

But does it look like the quidditch described in the books? Her ward Ezra, 7, the only one in the crowd wearing a Harry Potter cloak, scanned the field where the athletes were running, jumping and dodging, but undeniably not flying.

“A little bit,” he said amicably, “but not a lot.”

Sturm would be OK with that.

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“We have this Harry Potter connection, and boom! We are on five continents in 10 years.”

brooms are being replaced by sleek PVC sticks. (“It’s very uncomfortable to play with a real broom,” Sturm explains, referencing an ailment called “bristle burn.”) But brooms could never leave the game entirely, Sturm argues, as they are a defining handicap, like dribbling in basketball.

Some of the best players, he says, have never even read a Harry Potter book. They come to it from a variety of sports backgrounds: softball, football, basketball. The best teams are in Texas, he says, where four practices a week plus workouts are typical for players.

Harry Potter, caught the snitch and earned 150 points for his team.

“Obviously, we don’t have a 150-point snitch. That was just so that Harry Potter could be the most important person on the field. We all know that,” says Sturm, who himself has always played the position of chaser, similar to a forward in soccer.

In muggle quidditch, catching the snitch still ends the game, but it is worth a reasonable 30 points. The snitch is a neutral player who tries to avoid capture by either team; “capture” means grabbing the tennis ball

From All Corners

UNIVERSITY, SCHOOL & ALUMNI NEWS



MAMMOTH MOLAR

At approximately 10 feet tall, this daunting piece of dentition stands outside the Stoughton, Massachusetts, pediatric practice of Martin Kaplan, D75A. It was carved by “The Machine” Jesse Green, star of the National Geographic Channel TV show “American Chainsaw,” from a centuries-old beech tree that was toppled during Hurricane Irene in 2011. The molar is based on Happy Tooth, a character in a coloring book Kaplan created when he was a dental student.



Professional relationships among faculty, students and staff are being recognized as vital in the clinic and classroom.

That Human Touch

Creating a culture of respect emerges as a national priority in dental education **BY EMMA JOHNSON**

TWO YEARS AGO, the Commission on Dental Accreditation (CODA) sent a message to dental schools around the country: don't forget the human element.

The 2013 revisions to CODA's standards for predoctoral dental education included new requirements for dental schools to document their commitments to creating and maintaining a "humanistic culture" that ensures "collaboration, mutual respect, cooperation and harmonious relationships between and among administrators, faculty, students, staff and alumni."

Tufts School of Dental Medicine successfully met the new requirement during its accreditation review this year—and is using the standard as a launch pad for curricular innovation and faculty development designed to promote humanism in the school and in their professional lives.

"Quite simply, humanistic culture means treating everyone with respect and dignity," says Robert Kasberg, associate dean of admissions and student affairs. "We're striving for a place where everybody, from dental assistants to secretaries, students, residents, faculty members and administrators—everybody treats each other with respect and dignity."

In describing the dental school's commitment to a respectful culture, CODA pointed to the ethics and professionalism curriculum already in place for D.M.D. students as well as an initiative called Respect in the Workplace, established in 2013 by the school and Tufts Human Resources, to refine policies related to employee and faculty interactions. That effort has led to the creation of school staff and faculty advisory councils.

While students are taught a formal curriculum of ethical and professional behavior, there is also an informal curriculum, modeled by faculty members, staff and administrators in the way they conduct themselves on a daily

basis, says Nadeem Karimbux, associate dean of academic affairs, who led the accreditation process.

“When we think about humanism, you can talk to students about codes of ethics and ideal behaviors, but oftentimes students observe contradictory behaviors that we would not consider humanistic,” he says. This “hidden” curriculum can take many forms, Karimbux says, from a faculty member berating a student, to a staff member making unpleasant comments about a patient.

“It’s easy to have a confused view of how we are supposed to be treating each other and our patients. Being aware of that as a faculty member or an administrator is very important,” he says.

CODA decided to implement the humanistic culture standard in response to a recommendation from the American Dental Education Association’s (ADEA) Commission on Change and Innovation in Dental Education.

“The primary motivation was the belief that a culture that promotes collaboration, mutual respect, cooperation and harmonious relationships is a better place to learn than one that lacks these values and characteristics,” says Karl Haden, former associate executive director at ADEA and a member of the Commission on Change and Innovation. “A humanistic culture also connects to professional ethics, which is particularly important in the caring professions.”

“Anyone who’s a health-care professional recognizes that there’s a lot of stress and issues to deal with in private practice,” Karimbux says. “How do you, as the leader of a health-care team, create that culture where people with very diverse views, opinions and different expectations can work as a team? I think when students are exposed to different aspects of humanism, they can reflect back on that training to promote that environment once they’re in practice.”

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TWO TRIPLE JUMBOS JOIN ALUMNI BOARD

JOY E. KASPARIAN-FEDERICO, J92, D97, DG01, and ANCY VERDIER, A96, D03, DG06—both of whom received their undergraduate, D.M.D. and specialty degrees from Tufts—have been elected directors on the executive board of the Tufts Dental Alumni Association.

Kasparian-Federico hails from a family of Tufts alumni; she was inspired by her father, Frank Kasparian, D61, to pursue a career in dentistry. As a dental student Kasparian-Federico was elected to Omicron Kappa Upsilon, the national dental honor society, and received the Maury Massler Award in Restorative Dentistry.



After practicing general dentistry for two years, Kasparian-Federico returned to Tufts to complete her training in orthodontics. She founded Mystic Valley

Orthodontics in Medford, Massachusetts, in 2006. She is a diplomate of the American Board of Orthodontics. She is a member of the Massachusetts Dental Society (MDS), the American Dental Association and the American Association of Orthodontists. She is an active volunteer with MDS, serving as secretary and chair of the East Middlesex District and participating in the MDS Leadership Institute



and Guest Board Member programs. She is on the East Middlesex executive committee and is chair of the committee on access, prevention and interprofessional relations. In 2007, she received the MDS Ten Under Ten Award, recognizing outstanding young dentists, and in 2008, she received the Volunteer Heroes Award.

Kasparian-Federico has served as secretary of the Tufts Association of Orthodontists and co-chair of her class reunion committees. She is a member of the Dental M Club Executive Committee.

Verdier is the founder of East End Periodontics and Worcester Periodontics, with offices in East Hampton, New York and Worcester, Massachusetts, where he practices periodontology and implant dentistry. As an undergraduate at Tufts he was president of the student body. As winner of the Wendell Phillips Award, he gave the student address at the baccalaureate ceremony in 1996. Verdier completed the postbaccalaureate program at Harvard University before matriculating at Tufts School of Dental Medicine. He went on to complete a three-year residency in periodontology at Tufts, after which he was awarded diplomate status by the American Academy of Periodontology.

Verdier is a former clinical associate professor at NYU School of Dentistry and is an attending dentist at Interfaith Medical Center in Brooklyn, New York. He is a frequent speaker at national dental meetings and oral health seminars. He is the young alumni chair for Tufts School of Dental Medicine, an ambassador of the American Academy of Periodontology Foundation and a trustee of Evidence, a Dance Company, based in Brooklyn. He has been recognized by the trustees of the Southampton (New York) Library and Bridgehampton (New York) Child Care/Recreational Center for his support of those organizations.

LESS STRESS

Emphasis on mind-body wellness aims to ease the path for busy students

CHRISTINA PASTAN'S ROAD to becoming the dental school's first director of mind-body wellness began three years ago, when the assistant clinical professor of endodontics watched one of her students, a second-year resident, prep for surgery. The very competent student was having a panic attack. Pastan, a longtime practitioner of mediation and yoga, asked, "Would you be open to me teaching you how to breathe?" Together, they went through a calming breathing exercise.

The surgery went smoothly, and the student thanked Pastan, saying, "In all my years of dental training, no clinical instructor has looked at me as a human being with a struggle. You may have taught me today the most valuable skill I've learned in dental school."

At the time, Pastan, D91, DG94, had been a volunteer instructor at the dental school for more than 20 years, but the experience with this particular student convinced her that she had something else she could give back.

Pastan completed a yoga instruction certification program at the prestigious Kripalu Center for Yoga and Health and then approached Robert Kasberg, associate dean of admissions and student affairs, with the idea of introducing dental students to this ancient healing practice. Soon she was a guest speaker in Pamela Maragliano-Muniz's "Introduction to the Dental Patient III" class, leading the lecture hall full of students in a session of meditation and chair yoga.

Embracing the idea of helping students manage the inherent stresses of pursuing a dental degree, the school hired Pastan and made mind-body wellness part of the course of study for

all students. She is collaborating with Ellen Patterson, director of interprofessional education, on threading wellness throughout the four-year curriculum and developing student research projects around the effects of mind-body practices on student stress.

Pastan knows all too well about the stress of being a dentist. A few years into her dental career, she began to feel burned out. "I hit a wall," she says. A family friend referred her to the physician and researcher Herbert Benson, an expert on the negative effects of stress on the body and how to counteract them. Benson taught her about meditation and self-regulation. "It got me at a point early in my professional life to use these practices to ground me." One of Pastan's first moves in her new role was to bring Benson to speak to the newest dental students, the Class of 2019, in August.

Did every student enjoy meditating? No, says Pastan, and that's normal.

"Most people are going to say it's difficult, or it's not comfortable, because they are not used to it. The first time you pick up your dental instruments, that feels uncomfortable as well." That, she says, is why it is called a "practice." But whether or not students go on to be yogis, knowing some basic techniques can help them learn how to breathe through cutting their amalgam preparation, or to stay calm during a practical.

To introduce the curriculum to faculty and staff, the clinic was closed on August 26 for a development day, when international Kripalu yoga teacher, researcher and author Stephen Cope talked about the ways that such programs have benefited health-care providers and educators. Pastan followed the presentation with a chair yoga class. She will be leading more yoga classes—starting with a weekly class for students—throughout the year as well as optional meditation sessions before final exams.

First and foremost, Pastan wants students—and faculty—to know that good health-care providers need to pay attention to their own health. Stressed doctors will have stressed patients. "You have to take care of yourself in order to take care of others," she says.

-JULIE FLAHERTY





The Smile Squad, a student group that promotes oral health awareness throughout the Boston area, used Dental Central to solicit volunteers for its booth at Tufts Community Day on the Medford/Somerville campus.

Got Connections?

Along with classroom work and clinical practice, dental students are encouraged to engage in community service. A joint effort between the School of Dental Medicine and the Jonathan M. Tisch College of Citizenship and Public Service at Tufts is helping to make service activities more accessible and to promote civic engagement.

The centerpiece of the collaboration is a website called Dental Central (sites.tufts.edu/dentalcentral), launched in 2014 as the go-to place for information on volunteer opportunities, group activities and other community-focused extracurricular events. Student groups are encouraged to use the site to list events or calls for volunteers and to post photos and follow-ups afterward. Individual students are also invited to write about their experiences. Recently, for example, Dental Central informed students about activities as diverse as yoga classes from the Health and Wellness Club; an Asian Health Symposium sponsored by the Tufts Clinical and Translational Science Institute; volunteer opportunities at a women's shelter and a presentation on licensure from the American Student Dental Association.

"The operative word is connection," says Nancy Marks, the dental school's community-service learning coordinator. The website is a place for students to connect with each other, with

Tufts' other schools and with the broader community, she says.

Each week, the dental school community receives a Dental Central email newsletter detailing upcoming events. Some items are submitted by students, who can use a form on the Dental Central website, and Marks culls others. There are also pages on the website devoted to each of the four dental classes and to international outreach work students are involved in, such as the long-standing service trips.

An advisory board of dental students, faculty and staff, along with staff from Tisch College, oversees Dental Central, and students maintain the site. Innovations, such as an Instagram feed from events and plans for a mobile app, evolved from student suggestions.

"The thing for students is they are getting barraged with so much stuff," Marks says. Dental Central is intended to be a way to manage that. "It started out as more of a billboard, but now it's becoming more of an organizing tool." A recent survey of students showed one of the most-used features on the site is the calendar, which allows them to sign up online for activities.

Dental Central "shows that community service is not some sort of one-off that's over to the side," Marks says.

-HELENE RAGOVIN

LEADERS IN DEVELOPMENT AND ALUMNI RELATIONS

Two new members have joined the leadership team in development and alumni relations at the School of Dental Medicine. **ELIZABETH (BETTY ANN) KEARNEY**



was appointed director of the department, and **NATALIE LEWIS** became associate director of alumni relations.

Kearney has more than 20 years of professional

experience in development. She was the director of development for the Rhode Island Philharmonic Orchestra and Music School, responsible for leading a team that raised nearly 50 percent of the operating budget each year. She also led



a successful capital campaign that is on track to raise nearly \$9.5 million.

Kearney has worked at the Emma Pendleton Bradley Hospital and the United Way of Rhode Island. Over her professional life she has helped to secure five grants from the Kresge Foundation.

“Betty Ann impressed faculty, staff, board members and me with her authenticity, warmth and genuine enthusiasm for the mission of the school,” Dean Huw Thomas said.

Kearney has both a bachelor of arts and an M.B.A. from Providence College. She is active in the community, working with Special Olympics and the Down Syndrome Society of Rhode Island.

Lewis brings more than 15 years of experience to Tufts, most recently as donor relations and stewardship manager at Boston University School of Medicine. She has a B.S. in management from Lesley University and has an extensive background in operations, event planning and volunteer management.



REUNION 2015

OVER THE SUNNY spring weekend of April 24-26, more than 700 dental alumni celebrated their class reunions in Boston. Participating in on- and off-campus activities gave alumni and their families a variety of opportunities to connect with other alums, colleagues and friends.

Many alumni joined members of the Tufts dental community, leadership donors and graduating dental students on Friday evening at the annual Toast to Tufts gala, held in the grand ballroom at the Park Plaza Boston Hotel. Dean Huw F. Thomas served as the evening’s emcee. A highlight of the evening was Tufts President Anthony P. Monaco’s toast to the school and dental profession; he invited the attending students to stand and be acknowledged by all.

On Saturday, the continuing education program featured presentations about implant overdentures, why a dentist needs a good back and on the future of dentistry.

At the Dental Alumni Association annual luncheon and meeting, two alumni were honored with lifetime achievement awards: Gerald Carrier, D60, for 55 years of service, and James B. Hanley, D75A, DG79, for 40 years of service. (Hanley, the former associate dean of clinical affairs died in May; see story, page 42.) Katherine Vosker, director of student affairs, received the staff service award.

Reunion wouldn’t be a celebration without the traditional dining and dancing on Saturday night. At the Four Seasons, classmates attended a cocktail reception, mingled in private class dining rooms and danced late into the night. The celebration was especially sweet for the reunion classes that won class gift awards: D80 won both the Cusp of Excellence and Golden Crown; D65 won the Porcelain Bridge; and D10 won the Impression award. The Reunion Giving Challenge was met with more than 407 gifts that raised \$494,919—a reunion record.



You can see photos of each reunion class at go.tufts.edu/reunion2015.

Devoted Teacher and Mentor

Faculty development fund honors oral surgeon Richard Sorbera

HOW DO YOU best recognize a beloved professor who taught the science and craft of oral surgery with patience, skill and more than a dash of humor? For Maria Papageorge, D82, DG86, DG89, A12P, M18P, the answer was clear: set up an endowed faculty development fund in his name.

Papageorge, a professor, chair and director of the advanced education program in oral and maxillofacial surgery, created the fund to honor Richard J. Sorbera, DG65, who died in May 2014. “Truly to the day he passed away, he was a vital part of this program,” she says. “He was involved in all aspects of it and was committed and loyal, to Tufts in particular, and to all his students. He loved to teach.”

Sorbera was a clinical professor in the department of oral and maxillofacial surgery for more than 40 years.

“He taught me outpatient oral surgery, and he taught me general anesthesia and safe sedation, which he did, literally, to every resident who came through the program,” Papageorge says. Sorbera is remembered as a kind, humble, gifted mentor—and generous provider of doughnuts. For as long as any can remember, he brought the sweet treats every Tuesday to share with residents, students and staff.

The endowed faculty development fund in Sorbera’s name will be used at the discretion of the department chair. It will allow the department to train faculty in new surgical procedures, to send them to meetings to stimulate research development and to encourage collaborative research with other institutions. “And that, in turn, benefits our residents and our patient care,” Papageorge says.

The response to the fund by Tufts faculty and alumni speaks volumes for the deep affection many felt for Sorbera. The fund was set up in February and the \$50,000 goal was surpassed by June. “I felt that he was such an inspirational force in this department that we had to honor a person like that,” Papageorge says. “And people responded.”

—BRENDA CONAWAY



Richard J. Sorbera with his wife, Lee.

ORAL HEALTH GRANTS SUPPORT LITTLE SMILES

Two dental school programs that provide care for underserved children have received grants and gifts to help fund their work. The nonprofit Oral Health America awarded a \$15,000 grant to the Tufts Statewide Community Dental Program, which cares for kids with special needs and those in Head Start or other programs for children from low-income households. The grant will be used to expand the number of children served by 10 percent and to increase the number of sealants and referrals. American Dental Partners is also supporting the Community Dental Program with a \$10,130 gift to purchase a portable patient chair with a hydraulic base for the Lee Elementary

School in Boston’s Dorchester neighborhood. The program serves 200 children, 25 percent of whom have special needs or are on the autism spectrum. The National Children’s Oral Health Foundation made two “Tooth Fairy Gifts” to the dental school totaling \$10,000. The support will enable the Community Dental Program to collaborate with the Women, Infants and Children program to expand preventive dental care in the Springfield, Massachusetts, area. The second gift was used to sponsor Healthy Teeth/Healthy Body oral health education training for 200 youths participating in the Josiah Quincy Elementary School after-school programs in Boston’s Chinatown neighborhood.



Onward

Graduating class leaves Tufts with the charge of forging the future of dentistry

AT TUFTS SCHOOL of Dental Medicine's 147th commencement ceremony, Dean Huw Thomas praised the graduates for their academic achievements as well as their commitment to the underserved and their loyalty to each other and the school.

"The future of our profession is in your hands," Thomas said, noting that the Class of 2015 matriculated at Tufts the same year he became school dean. "Lift your sails, be engaged in facing the many challenges of that future and be leaders in effecting changes."

The dean also commended the graduates for their class gift, a scholarship that will be awarded to a student who has faced adversity and has persevered to finish dental school. The

students said it symbolizes their class's unity. Thomas called it "an outstanding example of paying it forward."

In a heartfelt moment that brought tears to many, Robert Kasberg, associate dean for admissions and student affairs, asked every parent in the audience to stand up and be recognized. After praising the graduates for their work serving the underserved abroad and at home, caring for U.S. military personnel and volunteering to teach and mentor each other, Kasberg asked the students to "think about at least one person who encouraged you when you needed encouragement, who picked you up when you needed it. If you can, reach out to them and share your success with them."

Class president Austin L. Perera reminded his peers to be unabashed advocates for their patients, the health-care system and the scientific method. "[Patients] trust us with the one face that they have," he said. "Be among those to burn the snake oil. Evidence-based research must be at the heart of everything that we do. Every decision you make has to be one we could all stand behind."

At the ceremony, 192 students were awarded Doctor of Dental Medicine degrees, and 15 students received Master of Science degrees.

Nadeem Karimbux, associate dean for academic affairs and professor of periodontology, received the Provost's Award for Outstanding Teaching and



Far left: dental school faculty members Cheen Loo, D110; Noshir Mehta, DG73, D177, and Mary Jane Hanlon, D97, with D15 graduate Joseph De Leon. Above: D15 students Sameer Kashyap, Naushin Khandaker, Tracy Tat Kheradpour and Edwin Kim.

Service. Ala Omar Ali, assistant professor of prosthodontics and operative dentistry, received the Dean's Award for Excellence in Clinical Teaching, and Robert Amato, professor of endodontics, received the Dean's Award for Excellence in Preclinical Teaching. Jeffrey Marchant, a research assistant in integrative physiology and pathobiology at the School of Medicine, received the Dean's Award for Excellence in Basic Science Teaching.

-JACQUELINE MITCHELL



To learn about what Tufts' newest dentists are doing now and for a list of those who received senior awards, see go.tufts.edu/2015dentalgrads. For an adaptation of Austin Perera's speech, see page 44.

SEEDING GREAT IDEAS

Four research projects for which dental school faculty are principal investigators have received seed grants from the Tufts Collaborates and Tufts Innovates programs.

They are among more than 100 research projects across the university that have been supported by the two programs—one to support interdisciplinary collaboration, the other to encourage educational innovation, as the names suggest—since the offices of the Provost and the Vice Provost for Research introduced them four years ago.

Some of the dental projects involve translational science—research that yields results that make an immediate clinical impact, says Jennifer Towers, director of dental research affairs.

Twenty-two research proposals received Tufts Collaborates funding this year, among them three dental school projects that involve collaborations with colleagues at Tufts School of Engineering.

Jake Chen of the department of periodontology and Qisheng Tu of comprehensive care are studying craniofacial bone regeneration with Qiaobing Xu, a biomedical engineer. Jonathan Garlick, who studies 3D human tissue models in the department of diagnostic sciences, is using novel imaging platforms to study fibrotic diseases in partnership with Irene Georgakoudi, another biomedical engineer. Gerard Kugel, Driss Zoukhri and Ronald Perry, all of the department of comprehensive care, and Athena Papas, of the department of diagnostic sciences, are examining tooth cleansing on the nanoscale with Igor Sokolov, a mechanical engineer.

One of the four Tufts Innovates-funded projects could serve as an important resource for interdisciplinary work for generations to come. A team of educators from across the university, including John Morgan, professor of public health and community service, seeks to build web-based interactive technology to provide medical, dental and veterinary students at Tufts with problem-based learning cases to help them understand how the health of people, animals and the environment are interconnected—a concept known as One Health.

In addition to fostering novel ideas and discoveries, the seed grants also give first-timers the chance to flex their research muscles, says Towers. Her office helps dental researchers leverage findings from these initial studies into applications for larger, external grant funding.

This isn't the first year the dental school has been well represented among the recipients of the seed grants. Towers herself, along with her colleague, Margie Skeer, an assistant professor at the School of Medicine, received a Tufts Collaborates grant last year to develop a methamphetamine-abuse intervention program that dental hygienists can use with their patients. Towers began the work as a master's degree student in health communications at Tufts School of Medicine; she received her degree in 2013.

The seed grant “gave me the opportunity to bring on a collaborator and build upon work I had already invested in,” she says. “It really allowed me to take my research to a different level.” -JACQUELINE MITCHELL



Derek Wolkowicz, D97, DG00, president of the Tufts Dental Alumni Association, center, and Neil Oliveira, D03, second from right, with the team from tournament sponsor New England Orthodontic Laboratory.



Wolkowicz, presents Pasquale Eckert, D17, with the trophy for closest to the pin for his incredible hole-in-one on the 12th.



Wolkowicz presents the team from tournament sponsor CCR Wealth Management with the award for longest drive.



Ancy Verdier, A96, D03, DG06, out on the fairway.



Peter Delli Colli, A69, D73, with Dean Huw Thomas.

IN THE SWING OF THINGS

The 33rd annual Wide Open Golf and Tennis tournament drew more than 100 golfers and tennis players to the Wellesley Country Club on September 28 and raised more than \$19,000 for the Student Loan Fund. Over the past three-plus decades the annual event has raised more than \$400,000 to support students.

A highlight of this year's tourney was a hole-in-one by Pasquale Eckert, D17, president of his class. Mary Jane Hanlon, D97, assistant dean of predoctoral clinic administration, walked away with the tennis championship. Winners of the longest drive and net foursome were CCR Wealth Management and Sentient Jet, respectively.

FROM THE ALUMNI PRESIDENT

COME JOIN US



IT WAS AN honor to be inducted as president of the Tufts Dental Alumni Association in April. The moment was particularly meaningful because it took place during my father's 60th reunion celebration. I am proud to be a part of the Tufts School of Dental Medicine family, but this connection isn't only because of my family's legacy at the school. It started with the bonds we all started building while learning the profession of dentistry at Tufts. Through these connections, both well established and created since graduation, we help each other in our professional and sometimes personal endeavors.

The association's budget is fully supported by your dues, and I encourage you to take an active role by becoming

dues-paying members in support of the school. One way the association gave back this past year was by endowing a student scholarship—something we all can be proud of for many generations to come.

I look forward to seeing many of you at the various events we sponsor throughout the year. I encourage you to check out the schedule: dental.tufts.edu/alumni.

Whatever reason you have chosen to remain engaged with Tufts School of Dental Medicine, the Alumni Association is here to represent you. Please reach out when you have ideas or information to share. We like hearing from you!

DEREK A. WOLKOWICZ, D97, DG00

President, Tufts Dental Alumni Association

derekwolk@verizon.net

Class Notes

D49

ESTHER WILKINS, D49, DG66, professor of periodontology emerita, was honored by the Lucy Hobbs Project, an organization created to empower women in dentistry. Wilkins was lauded as an exemplary member of the dental community during the organization's annual session, held in June at the National Museum of Dentistry in Baltimore.

D52

HOWARD MARK, J74P, became a grandfather twice this year. One granddaughter was born January 30 and another on April 24. He reports that both are doing well. On the professional side, Mark

received the Distinguished Service Award from the Connecticut State Dental Association in May and was elected vice president of the Foundation of the Pierre Fauchard International Honorary Dental Academy. He is a board member and founding president of the Connecticut Oral Health Initiative, a nonprofit advocacy agency.

D54

IRENE V. DOBROVOLSKY, V93P, co-chaired her 60th reunion last year with longtime friend and classmate **JOSEPH DIPIETRO, D81P, A86P, D87P**.

D59

ALBERT PEARLMAN, A96P, is widowed

and has been retired since 1999. He is living in Delray Beach, Florida. For his 80th birthday, he plans to go tandem skydiving.

D64

GERALD GUTTELL's daughter-in-law, Lisa Ansin, competed in the ITU Long Distance World Triathlon Championships in Motala, Sweden, in June, completing the race in 7 hours, 5 minutes and 30 seconds and finishing ninth in her age group (women 45 to 49). His eldest grandchild, Maya Shashoua, entered Tufts this fall as a member of the undergraduate Class of 2019.

RONALD MAITLAND, A60, J90P, is a full-time faculty member at

New York University College of Dentistry and has been promoted to clinical associate professor in the department of cariology and comprehensive care. NYU's graduating class of 2015 selected Maitland for the honor to "hood" the graduates as they received their degrees during the June 1 commencement exercises.

D66

WALTER GOLUB, CHARLES COLUMPAR JR., and **VINCENT ALVINO** have been rendezvousing in Florida the last couple of winters. All are in good health and still celebrating like they did in Posner Hall. They are looking forward to their 50th reunion weekend.

D71

BRUCE BAUM retired from the National Institutes of Health in Bethesda, Maryland, and was appointed a scientist emeritus at the National Institute of Dental and Craniofacial Research. In late May, he received an honorary doctorate from the Hebrew University of Jerusalem in recognition of his scientific accomplishments at NIH and his long friendship and work with the university and its dental school.

MARK SCHIFF exhibited his artwork in New York City at Agora Gallery. The exhibition featured his paintings in watercolor and acrylic pigments. Schiff started painting in watercolor after visiting an artist's studio on vacation.

He is now a sustaining associate member of the American Watercolor Society and was awarded best in category for watercolor at the 2011 Westport Arts Festival.

D72

JERRY COHEN and **STEVE SCHWARTZ** celebrated the 40th anniversary of the opening of their dental practice. After all those years, Jerry and Steve, along with wives Lynne and Helen, remain the closest of friends. At each reunion, the comment was always, "You guys are still together?!" You bet!

BETTINA LAIDLEY retired from private practice. While still in practice, she collaborated with

the PEARL Network (Practitioners Engaged in Applied Research and Learning) under the supervision of former classmate **RICK CURRO**. Laidley also collaborated and reconnected with classmates **KENNETH GOLDBERG** and **DREW MITTELMAN**. Laidley continues to be connected with the Academy of General Dentistry, as the former president of the Vermont chapter and as Region 1 director for the past year.

WILLIAM LOBEL, co-authored an article in the May 2015 issue of *Compendium of Continuing Education in Dentistry* titled "Predictable Technique to Register Retruded Contact Position Using a Disposable Jaw Relation Recording Device."

D73

PAUL COHEN has retired from active patient care. He says he will miss his patients and the students he mentored in the APEX Program at Boston University. He is looking forward to coaching dentists in his role as a transition advisor, both in Florida and Massachusetts. He welcomes fellow Tufts dental alumni to contact him if you are living or visiting in the West Palm Beach area.

ALLAN DEUTSCH has launched Tango-Endo, his new endodontic instrumentation system. Tango-Endo is a two-instrument endodontic system that is used in reciprocation; it was designed and developed in collaboration with a research team at Essential Dental Systems.

D75A

BILL MCDONALD completed the challenge of a lifetime—a 3,400-mile bike trek across the continent.

D76

Col. **KEVIN M. GURECKIS** is a full-time tenured associate professor at the University of Texas Health Science Center School of Dentistry and a general practice group leader. He serves as president of the Texas Academy of General Dentistry, which represents more than 2,800 dentists. He is a master in the Academy of General Dentistry, a fellow of the International College of Dentists and a fellow of the American College of Dentists. He is certified by the American Board of General Dentistry. Gureckis and his wife, Kathy, have been married for nearly 40 years and reside in Boerne, Texas. He retired from the U.S. Air Force in 2004, and says he is busier than ever.



CENTENARIAN CELEBRATION

Salvatore DeCarlo, D41, marked a milestone—his 100th birthday—on August 20, with a party at Cantena's Market in Southampton Village, New York. DeCarlo is a regular customer of the market and can be found there daily, reading a magazine, helping stock shelves or even riding along on deliveries. Guests who joined in the celebration included DeCarlo's children; Bernard Schwartz, D58, DG62, J84P, G16P, at left, and a surprise appearance by New York Gov. Andrew Cuomo.

why do we have baby teeth? ever wonder?

Cheen Loo, D110, professor and chair of pediatric dentistry, explains why they're not "practice" teeth at everwonder.tufts.edu.

D77

CARL DRISCOLL coedited the book, *Clinical Applications of Digital Dental Technology* (Wiley Blackwell, 2015), with Radi Masri, an assistant professor at the University of Maryland School of Dentistry and School of Medicine. The book contains a detailed overview of many of the most important digital technologies in dentistry, including digital radiography, digital impressions and CAD/CAM. Tufts faculty members Hans-Peter Weber, Carroll Ann Trotman and Georgios Kanavakis and Francesca Bonino, D14, were contributors.

DG77

LEON KLEMPNER is founder of the nonprofit Smile Rescue Fund for Kids, which helps children with facial and craniofacial deformities so severe they cannot be helped by their families, government agencies or established charities. The organization is now helping a young boy from the Republic of the Congo who was attacked by a chimpanzee and left severely disfigured. Read more about Klempner's work with the Smile Rescue Fund in the Spring 2014 issue of this magazine: go.tufts.edu/dentalmag.

D79

JEFF PRINSELL was elected president of the Georgia Society of Oral and Maxillofacial Surgeons. He is a past president and Distinguished Service Award recipient of the American Academy of Dental Sleep Medicine, founding president of the American Board of Dental Sleep Medicine and past chair of the American Association of Oral and Maxillofacial Surgeons' obstructive sleep apnea (OSA) section. He served on the American Academy of

Sleep Medicine's Standards and Practices Committee task force to update the practice parameters for OSA surgery. He is a diplomate of the American Board of Oral and Maxillofacial Surgeons and lectures internationally. He maintains a private practice in Marietta, Georgia. He and his wife, Kim, have been married for 33 years and have two sons, Jeffrey and Eric.

D83

ALAN BUDD is program director of the Massachusetts Dental Society's Dentist Health and Wellness Committee, in addition to serving as chair.

D86

JEFFREY DODGE served as chair of Rhode Island's fourth Mission of Mercy free dental clinic. He is also president of the Rhode Island Oral Health Foundation, which sponsored the event, held at the Community College of Rhode Island

in late May. It drew 661 volunteers, including 97 dentists from Rhode Island, Massachusetts and New Hampshire, and provided more than \$497,000 worth of free dental care to 774 patients. Nearly 3,400 procedures were completed, including oral surgery, restorative dentistry, endodontics and hygiene. His wife, **MARY KARISH-DODGE, D87**, also serves on the board of the Rhode Island Oral Health Foundation and was colead in dental triage for large-scale clinical operations at the Mission of Mercy.

D87

MARY KARISH-DODGE, D87, see D86.

D89

LISA VOURAS will be general chair of the 2016 Yankee Dental Congress, which takes place January 28-30 in Boston. It is New England's largest dental meeting, with more than 25,000 dental professionals attending.

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D90

FRANK DIMAURO, see D15.

D92

WALTER KOSTRZEWSKI is now the Northeast regional administrator for Smile Source, an organization that supports independent private practices.

D95

JOSEPH ABATE is the lead dentist for the Department of Veteran Affairs' outpatient clinic in Broward, Florida. He holds the rank of lieutenant colonel in the U.S. Army Reserve Dental Corps.

DG96

NANCY ARBREE received the Dan Gordon Lifetime Achievement Award from the American College of Prosthodontists during the organization's 45th annual session in October. Arbree is a professor emerita and academic dean emerita at the School of Dental Medicine. In 2012, she was awarded the first Lifetime Achievement Award by the Georgetown University School of Dentistry Alumni. In 2014, she was the recipient of a Distinguished Service Award from the American College of

Prosthodontists. She has practiced at the Dental Group at Post Office Square in Boston since 1999.

D99

SONNY KHANNA, who has moved to Canada, has worked in dental health professional shortage areas for nearly two decades, as a public health dentist in the Northeast U.S. and northern Ontario.

D01

RYAN CLANCY received the Mastership Award, the highest honor of the Academy of General Dentistry, during the organization's annual meeting in June. He lives and practices in Medford, Massachusetts.

ROBERT S. LELAND has been appointed to the board of trustees of the Massachusetts Dental Society (MDS). He also serves on the board of the MDS political action committee and has been active in the South Shore District Dental Society and the American Dental Association.

D02

ABDUL "ABE" ABDULWAHEED, E97, a general dentist with a practice in Quincy, Massachusetts, was rec-

ognized as a William McKenna Volunteer Hero by the Massachusetts Dental Society (MDS). He chairs the South Shore District Dental Society and the MDS Council on Public Affairs. He is vice chair of the MDS Political Action Committee/MDS People's Committee Board of Directors. He is a participant in the annual Massachusetts Dental Society Beacon Hill Day and the American Dental Association Washington Leadership Conference. In addition, he sits on the board of the Better Oral Health for Massachusetts Coalition and is an instructor in the Boston University Henry M. Goldman School of Dental Medicine's Applied Professional Experience program. Abdulwaheed is a diplomate of the American Board of General Dentistry, master of the Academy of General Dentistry and a fellow of the American Association of Hospital Dentists.

D04

DANA BUSCIGLIO and her husband, A.J. Diaz, were thrilled to welcome Sofia Carolina Diaz on October 5, 2014; she weighed 6 pounds 15 ounces. Mom says, "Sofia is a blessing beyond words, and we are excited to share this wonderful news with the Tufts community. A big

thank you to the Tufts Dental Alumni Association for sending us Jumbo the Elephant. Sofia loves him!"

KATHARINE (KNOWLES) CHRISTIAN has taken over the practice of Robert Horchover in Seattle and has limited her practice to dental sleep medicine. She got married 10 years ago, and in the intervening years had two children, now 6 and 8 years old.

MIRLINA E. HILAIRE, J99, has been providing dental care to families in underserved communities for 10 years. Last year, she started No More Cavities (*no-more-cavities.org*), a nonprofit that educates parents and helps them prevent early childhood caries.

D08

MELISSA DENNISON moved her practice in New Hampshire from Newton to Plaistow. It is a brand-new, six-operatory facility.

DG08

NAIF BINDAYEL received an M.S. degree in health care management from the Harvard School of Public Health.

D09

STEPHEN GOLDSTEIN joined Holly Tree Dental in Hanover, Massachusetts, in December 2014, after practicing in Quincy, Massachusetts, since graduating from Tufts. He and his wife, Amy, were expecting their first child in September.

JAMES MURPHY graduated from his Air Force residency June 19 at David Grant Medical Center, Travis Air Force Base in California. He is stationed as a staff oral and maxillofacial surgeon at Malcolm Grow Medical Clinic at Joint Base Andrews in Maryland.

Tufts
Dental Medicine

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FAMILY AFFAIR. Anthony Paolucci Sr., D85, D11P, D15P, right, says he is proud to have two sons who graduated from Tufts School of Dental Medicine. In May, he got to hood his son, Mark, D15, center, at commencement. His other son, Anthony, D11, attended as well.

D10

GREGORY PALMER is celebrating the third anniversary of his dental practice this fall.

D11

SCOTT RECKSIEDLER received his prosthodontic certificate from the West Los Angeles Veterans Administration Hospital in June 2014 and finished his maxillofacial pros-

thetics training at UCLA School of Dentistry in June 2015. He is moving back to his hometown, San Diego, to start private practice.

D12

Lt. **ALYSE DASON** returned from a nine-month deployment on the USS George H.W. Bush. The ship spent most of its time completing missions in the Persian Gulf, but made

time for a few port visits in Dubai, Bahrain, Greece, Turkey, Oman and France. She and husband Lt. **TYLER FLEMING** reported for duty in Pearl Harbor, Hawaii, in July.

BRYAN FOLEY was married July 10 and fellow D12s were in his wedding party: **MAURO PERDOMO**, **BRIAN MCPARTLAND**, A08, **LILY HU** and **JESSE SNOW**.

AMY NGUYEN finished a case at the Austin Veterans Administration for a 91-year-old veteran who could not otherwise get dental treatment. A lab in Dallas provided free lab work, and Nguyen treated the patient pro bono.

RAQUEL ROZDOLSKI completed her dental anesthesia residency at Jacobi Medical Center/Albert Einstein College of Medicine, as chief resident. She will remain on the East Coast and begin practicing mobile dental anesthesia.

D13

U.S. Army Capt. **RACHEL MISURACA** served as President Obama's on-call dentist during his visit to Kenya in July.

DANIEL OREADI, DG05, D109, an assistant professor in the department of oral and maxillofacial surgery, had a chapter titled "Superficial Parotidectomy" published in the *Atlas of Oral and Maxillofacial Surgery*. The chapter details the history and evolution of surgical procedures for removal of the superficial lobe of the parotid gland for the treatment of benign and malignant tumors.

D15

ASHLEY LANGTON has joined the practice of **FRANK DIMAURO**, D90, in Middleton, Massachusetts. Langton, of North Andover, Massachusetts, was awarded the Osher Endowed Scholarship at Tufts. She grew up in Reading, Massachusetts, and graduated cum laude from Quinnipiac University in Hamden, Connecticut, with a B.S. degree in international business. She is a member of the Massachusetts Dental Society and American Dental Association and is working toward her fellowship in the Academy of General Dentistry.

In Memoriam

ALFRED L. NOVICK, D40
February 25, 2015
Newton, Massachusetts

DAVID F. GROGAN, D46
February 20, 2015
Bridgeport, Connecticut

HAROLD STEIN, D46
February 1, 2015
Ocala, Florida

JOSEPH F. MARCANTONIO, D47
February 24, 2015
Walpole, Massachusetts

MORRIS STONE, A44, D47, A78P, M82P
March 12, 2015
Newton, Massachusetts

ALBERT J. KAZIS, D49, J79P
April 23, 2015
Brookline, Massachusetts

LEVON CHERTAVIAN, D50
April 26, 2015
Seabrook Beach, New Hampshire

PETER J. MOGAYZEL, D50
August 2015
Edgewater, Maryland

BERNARD V. PHANEUF, A46, D50
March 29, 2015
Brewster, Massachusetts

FRANCIS T. SPATARO, D50
May 11, 2015
Troy, New York

EDWARD SMOOKLER, DG52, D57
March 7, 2015
Framingham, Massachusetts

NORMAN H. FARR JR., D53
July 25, 2015
Greenfield, Massachusetts

MILTON S. GLASSMAN, D53
February 21, 2015
Randolph, Massachusetts

DONALD F. KEMNITZER, D53
May 6, 2015
Bomoseen, Vermont

EDWARD J. KOCH JR., A51, D53
March 22, 2015
Sykesville, Maryland

CHARLES W. MCINNIS, D54
March 27, 2015
Amesbury, Massachusetts

DONALD N. STORY, D54
April 23, 2015

Exeter, New Hampshire

BRUCE M. TAIT, D55
June 30, 2015
Holyoke, Massachusetts

GEORGE ATKINS, D56
April 12, 2015
Newton, Massachusetts

JOSEPH V. COGNATA, D57
May 23, 2015
Everett, Massachusetts

JOHN E. FARNHAM, D59, DG62
March 16, 2015
Burlington, Vermont

W. LAWRENCE NANNERY JR., D59
June 27, 2015
Dedham, Massachusetts

ERNEST M. WALLENT, D59, D91P
August 3, 2015
Wilmington, Massachusetts

JOHN E. PERREAULT, D60
March 16, 2015
Lancaster, New Hampshire

JOHN KOVALIK, D61, D87P
March 24, 2015
Berlin, New Hampshire

ROBERT G. RAFFERTY, D61
April 11, 2015

Dorchester, Massachusetts

HARVEY N. WAXMAN, A59, D61
July 15, 2015
North Kingstown, Rhode Island

RAYMOND J. BOWEN, D62
June 19, 2015
Contoocook, New Hampshire

ROBERT SPETTEL, DG63
August 16, 2015
Naples, Florida

JOHANNES VAN HOUTE, D63
June 12, 2015
Boston, Massachusetts

MARSHALL A. GLASSER, D65
April 16, 2015
West Stockbridge, Massachusetts

DANA R. LEVINE, D65
April 7, 2015
Concord, Massachusetts

M. JEAN CLARE EASON, D68
April 14, 2015
Ibadan, Nigeria

THOMAS J. FOLEY JR., D68
February 18, 2015
Winchester, Massachusetts

CORNELIA P. ANDERSON, D72
July 1, 2015
Cumberland, Rhode Island

SYLVELLIE R. CLOUD, D75
July 10, 2015
Raleigh, North Carolina

THOMAS K. HAWLEY, D75
August 23, 2015
Walpole, Massachusetts

KERRY C. CALLERY, D83
February 13, 2015
Portsmouth, New Hampshire

James Hanley

Former Associate Dean for Clinical Affairs

JAMES HANLEY, D75A, DG79, dean of the University of New England College of Dental Medicine and former associate professor and associate dean for clinical affairs at Tufts School of Dental Medicine, died on May 24 at his home in Concord, Massachusetts.

He was a committed member of the Tufts dental community from the time he started dental school in 1972. He graduated from what was then a three-year D.M.D. program in 1975 and returned to complete a residency in periodontology in 1979. He worked as a volunteer faculty member until 1986, and then returned in 1993 as a half-time faculty member. He was appointed to the full-time faculty in 2000. Though he also maintained a private practice in Concord until 2006, he said that working with students brought him the most joy in his career.



As associate dean, he was a stalwart supporter of technology enhancement at the school and was instrumental in bringing on board an electronic patient-records system.

Even after he left Tufts in March 2014 to become dean at University of New England, Hanley maintained his deep connections with Tufts. This past April, he received the Dental Alumni Association's Lifetime Achievement Award during reunion weekend. "Tufts, University of New England and the dental profession as a whole have lost a great leader and a tremendous friend," said Huw F. Thomas, dean of Tufts School of Dental Medicine.



CONTINUING EDUCATION

FEBRUARY 27

Controlled Substances and Their Alternatives for Pain:

Medical Marijuana

Ronald J. Kulich, Ph.D. et al

MARCH 5

Suture Materials and Techniques: Learn from the Experts

Mohamed Maksoud, D.M.D.;

Kevin Guze, D.M.D., D.Med.Sc.

MARCH 11

A Comprehensive Overview of Removable Prosthetics:

William A. Lobel, D.M.D., F.A.C.D.;

David R. Cagna, D.M.D., M.S.

MARCH 12

Contemporary Multidisciplinary Management of Clinical Challenges

Howard D. Hill, D.D.S.;

James M. Stein, D.M.D.;

Roger J Wise, D.D.S.

MARCH 16

Introduction to the Practice of Dental Sleep Medicine

Leopoldo P. Correa, B.D.S., M.S.

MARCH 18

"Pearls" of Pediatric Dentistry: Twenty-two Clinical Concepts for Every Practice

David Tesini, D.M.D., M.S.;

Arnold Weiss, D.D.S., M.Sc.D.

MARCH 19

Concise Health Information for You and Your Patients

James Lichon, R.Ph., D.D.S., NCCM

MARCH 25

Employee Embezzlement and Fraud: Protection, Detection and Prosecution

Donald P. Lewis Jr., D.D.S., C.F.E.

APRIL 1

Self-Medication and Substance

Abuse: Clinical Dental Considerations

Thomas Viola, R.Ph., C.C.P.

APRIL 2

Denture Fabrication and Dental Implants, Art, Science and Business

Jeffrey C. Hoos, D.M.D., FAGD

APRIL 6

Implant Placement: A Surgical and Prosthetic Overview with Live Patient Treatment

Maria Papageorge, D.M.D., M.S.

APRIL 9

Botulinum Toxin and Dermal Fillers: An All-Inclusive Cosmetic Course

Constantinos Laskarides, D.M.D.,

D.D.S., Pharm.D.

APRIL 15

11th Annual Head and Neck Cancer Symposium

Mark Lerman, D.M.D.

APRIL 22-23

The Tufts Headache and Face Pain Symposium

Egilius L.H. Spierings, M.D., M.P.H.;

Brian E. McGeeney, M.D., M.P.H.

APRIL 22-24, JULY 8-10, OCTOBER 14-16

The Business of Dentistry:

The Complete Leadership and Management Tool Chest

Amy Morgan, CEO of Pride Institute

MAY 13

The Medical History

Steven J. Scrivani, D.D.S.,

D.Med.Sc.

MAY 14

Clear Techniques:

Invisalign Explained

Jonathan Nicozisis, D.M.D., M.Sc.

MAY 20

Dr. Waldermar Brehm Continuing Education Lectureship: The "Six Elements" Orthodontic Philosophy

Will A. Andrews, D.D.S.

MAY 21

Pediatric Tongue- and Lip-Ties: Diagnosis and Treatment with Soft-tissue Lasers

Robert A. Convissar, D.D.S.;

Martin Kaplan, D.M.D.;

Alison Hazelbaker, Ph.D., IBCLC, FILCA, CST, RSST

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A NEW DENTIST'S VIEW

The Decisions That Let Us Sleep At Night

The importance of earning, and keeping, our patients' trust

BY AUSTIN PERERA, D15

I DON'T KNOW IF I ever truly appreciated a smile until I rushed to deliver a temporary front denture to a patient before Christmas so that he would be able to smile for the holidays. I extended my hand to shake his. He teared up, gave me a big bear hug and said, "You're the man."

Dentists don't just treat patients' oral health problems. We coach them through their worries, fears and doubts as they lie under bright lights, trusting us with the one face they have to show the world.

Before applying to dental school, I spent time with a dentist in my family. When he worked, you could tell he had developed those tricks and techniques over many years of experience. I was eagerly trying to note them, thinking it might somehow be useful to me later, once I understood what was actually going on. He told me not to worry about that. Your dental school, he said, will

teach you everything you need to be a good dentist. He said the best dentists aren't the ones who have the tips and tricks; they're the ones who don't stray from what they were taught and who don't take shortcuts and make compromises.

And so it's going to be hard, and it should be. Who else will stand up for our patients? Not their insurance companies, not the manufacturers, not the authors of whatever blog post a patient read online before coming to your office. You must show your patients that we represent their best interests. Make the decisions that will let you sleep at night. No one else will do that for you. Think about what you've done to get here.

To my D15 classmates, we did not leave dental school as the same people we were when we arrived. We have been tested, fired and work-hardened in that crucible we call a clinic. So I offer you this advice:

BE PROUD. You are in a timeless

career, taught to you by a school that's been teaching it for nearly 150 years. But even 150 years is a blink of an eye compared to the thousands of years over which civilization has developed dental work. Everything that has been learned and experienced in that history, Tufts has attempted to distill and give you. Everything you have acquired you now carry inside you.

BE HUMBLE. It feels like we went through years of constant struggle, but it doesn't take long to scan the news and realize how incredibly fortunate we are. Remember the people without whom you wouldn't have gotten this far. Share the rewards of your career with the people who wanted nothing else than to see you here, and those rewards will never feel diminished.

BE A STUDENT YOUR WHOLE LIFE. Question the dogma. We live in a consumerist society, eager to be sold what they want us to hear. Evidence-based dentistry is not a trend; it's a value. It's a reminder that research and scientific justification must be at the heart of everything we do.

REPRESENT EACH OTHER. When you do excellent work, it not only reflects well on you, but on all of us. Every decision you make has to be one that any of us could stand behind. And our faculty have haunted us enough to know what those decisions are. Our work is our signature. And superior work must be our standard of care.

FIGHT FOR YOUR FIELD. We are custodians of this career. Do not let anyone question whether you are ambivalent about your field. Be active; be a spokesperson; be involved. Within any institution that shares our values and commitments, you will be welcomed.

I will see you in the field.

AUSTIN PERERA, a resident in the postgraduate endodontics program at Tufts, was president of the School of Dental Medicine's Class of 2015. This article is adapted from the speech he delivered at commencement on May 17.

“The dental school became my home while I was there as a special student. I had an excellent experience, both as a student and clinical professor, and now I hope to enhance the experience for future students and faculty.”



John Saunders, D52, considers himself lucky. A Holocaust survivor, he immigrated to the U.S. in 1950 with his doctoral degree in dentistry from the University of Erlangen in Germany, and a desire to become a dentist. During his first semester at TUSDM, he subsisted on a diet of tap water and bread. Thanks to a mix of scholarships, grants, and support from professors who paid John to tutor them in German, he was able to complete the dental training required for him to practice in the U.S.

After graduation and a stint assisting a dentist, John volunteered to join the U.S. Air Force. He was shipped as first lieutenant to Okinawa during the Korean War and was discharged with the rank of captain. After service, he bought an office in downtown Boston, where he ran a successful practice treating prestigious clients for 35 years. He also returned to Tufts in 1965 for a long teaching career as assistant clinical professor of prosthetics.

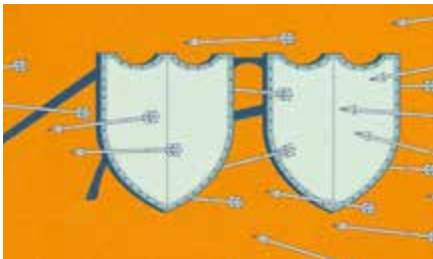
Grateful for their good fortune, John and his wife, **Annalie**, believe it is important to give back to the dental school. They have created a gift in their estate plans to support the school's needs.



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4 Eye safety



8 Replacement parts



31 We're all connected



MARATHON MEN

How does a dentist become part of Team Hoyt, the most famous duo in Boston Marathon history? Bryan Lyons, D95, talks about his friendship with Dick and Rick Hoyt, and running the 2015 race.

FOR MORE ON THE STORY, TURN TO PAGE 11