shaping the dental student experience

Eliminating needles for enhanced care 33

Taking the DAT — while pregnant 08

Use Instagram to build your brand 30

The dentist’s role in
INTERDISCIPLINARY HEALTH CARE

Understanding the connection between dentistry and medicine 12
Which surgical specialty has the most experience placing dental implants?

The answer is oral and maxillofacial surgeons. OMSs are integral members of the dental implant team who:

- Achieve excellent functional and esthetic results
- Excel at soft tissue management
- Are experts at bone grafting
- Possess a long and successful record of surgically placing implants

We invite you to visit MyOMS.org for more information.
A lot of treatment planning means thinking two or three steps ahead.

THE DENTIST’S ROLE IN INTERDISCIPLINARY HEALTH CARE

EXECUTIVE COMMITTEE
President
Tanya Sue Maestas, Texas-Houston ’18
Vice Presidents
Danielle Brambila, M.S., Roseman ’18
Alex Mitchell, Temple ’18
Executive Director
Nancy Honeycutt, CAE

IMMEDIATE PAST PRESIDENT
Dr. Sohaib Soliman, Washington ’17

DISTRICT TRUSTEES
District 1
Molly Conlon, M.S., Boston ’19
District 2
Nancy Mo, Columbia ’19
District 3
Roopali Kulkarni, Pennsylvania ’19
District 4
Alexandra Howell, Georgia ’19
District 5
Jeffrey Kerst, Louisiana ’19
District 6
Justine Bednarski, Ohio State ’18
District 7
Sean Aiken, MSOB, M.S., Louisville ’18
District 8
David Casteel, Missouri-Kansas ’18
District 9
John Luke Andrew, Colorado ’18
District 10
Christine Chen, Washington ’19
District 11
Emily Yang, San Francisco ’19

EDUCATIONAL BOARD
Editor-in-Chief
Stephen Rogers, M.S., Buffalo ’18
Contributing Editors
David Danesh, Harvard ’20
Neil Thomas, M.S., Michigan ’19
Sean Lee, Stony Brook ’18
Chi-Joye Ulasi, MPH, Alabama ’19
Angela Walter, Temple ’20
Electronic Editors
Rachel Bush, Las Vegas ’18
Jerad Servais, Minnesota ’18

“Instagram ... offers great potential for building [your] personal brand and attracting a patient population who needs you.”

HOW INSTAGRAM CAN HELP YOU BUILD YOUR BRAND

PAGE 30

“Are you maximizing your workspace?”

ARE YOU MAXIMIZING YOUR WORKSPACE?

PAGE 34

© Copyright 2018 American Student Dental Association. All views are the author’s and do not necessarily represent those of the American Student Dental Association (ASDA), unless such statements have been adopted by ASDA.

ASDA reserves the right to reduce, revise or reject any material submitted for publication. Articles and photos published in ASDA publications become the property of ASDA and may be reproduced or reprinted only after written permission has been granted. The editor reserves the right to accept, reject, discontinue or edit any advertising offered for publication. Publication of advertising materials is not an endorsement, qualification, approval or guarantee of either the advertiser or product.

ASDA makes every effort to publish photos that demonstrate proper use of personal protective equipment (PPE) in clinical settings. Any photo not displaying proper PPE is published at the discretion of the editor-in-chief.
The dentist’s role in interdisciplinary health care

BY DAVID WEISSMAN

With patients becoming more medically complex, today’s generation of dentists needs to expand their knowledge about overall health and their role as providers of basic primary care screenings.
Embracing a team mentality

BY EMILY MARTIN
For dental students, it's never too early to start cultivating an interprofessional mindset.

Treating a child with a craniofacial difference

BY ANGELA WALTER
The Children's Hospital of Philadelphia exhibits the importance of having a multidisciplinary approach to care when caring for patients with a craniofacial difference.
‘You’re a doctor, Harry’

Maybe you’ve muttered that phrase in microbiology or pharmacology. I liken this circumstance to Harry Potter’s course in “potions.” J.K. Rowling admitted that her least favorite subject was chemistry, and when determining her protagonist’s scholarly scorn, potions was the perfect analogue. But microbiology and pharmacology to a dentist, like potions to a wizard, are essential to our knowledge base in medicine. We aren’t training to be physicians, but we’ll be doctors deserving the title. And that means we must be able to communicate and work effectively with other health professionals.

Perhaps you want to become involved with a cleft palate (CP) team. Comprehensive treatment of CP requires a multidisciplinary approach. The American Cleft Palate–Craniofacial Association mandates that teams must consist of a speech pathologist, surgeon and orthodontist, and they must also have access to an audiologist, otolaryngologist, general and pediatric dentist, among others. Members collaborate and treatment plan in-person because communication is a significant challenge in the management of CP.

I’ve witnessed these groups operate. They work quickly and decisively because just down the hall, there are 10 infants and their parents who are, frankly, terrified.

Dentists treating patients with CP must understand the role and language of the other health professionals. It’s a high-intensity and high-stakes environment, and comprehensive education across all health disciplines is essential. Teams such as these will become more common as a new generation of providers partial to collaboration enter the workforce.

This issue of Contour was built to help you treat the whole patient. We discuss how one hospital is using integrated teams — such as the CP panel mentioned above — to manage patients with craniofacial differences. Our cover story dissects the relationship between dentistry and medicine. Also, delve into Texas’s history of its Sunset Commission, which managed to abolish the state dental board in 1993.

Professors are keen to remind me that I’m “not yet a doctor” (check out the December 2016 ASDA News archives for that story). Patients will ask you to define your qualifications and whether or not you’re a real doctor. Plainly, you’re a health professional in training. And if Hagrid can confidently refer to Harry as a “wizard” before even stepping foot in Hogwarts, then I’ll be comfortable donning a new prefix come graduation day.

Stephen Rogers
Buffalo ’18, Editor-in-Chief

If you’re headed to Annual Session...

The happiest place on earth will be right in your backyard, and if you’re looking to get your Mickey fix, here are a few of the must-see attractions and activities.

1. Space Mountain. This ride sends you zooming through the galaxy at 35 mph for an adrenaline rush that will leave you eager for a second run.

2. Haunted Mansion. Take a ride through a mansion filled with dark humor and meet its “999 happy haunts.”

3. Fireworks. Shows vary seasonally but remain the hallmark of any Disneyland visit. Go early to stake out a good spot on Main Street for a perfect view of Sleeping Beauty Castle, and watch the magic unfold.

4. Food. Everywhere! From churro stands to Mickey Mouse-shaped beignets, the snacks found around the park are in a category of its own. My personal favorites include the Little Red Wagon corn dog and the Tiki Juice Bar Dole Whip.

Read more about the Annual Session location in this issue’s “City Guide” on page 38.
WHY DISABILITY INSURANCE NOW?

Because injuries or illnesses can be disabling and prevent you from attending dental school for extended periods of time.

Because if you do become disabled, it could delay your graduation or even keep you from becoming a dentist.

Because if you’re disabled, you could receive payments to help cover living expenses and student loans.

Because ADA student members disability insurance is offered at no cost as a benefit of your ADA student membership.

Because it’s one of the most powerful ways to help protect yourself, your family and your future.

Ensure you’re covered with the ADA student members insurance today:

1. **REGISTER OR LOG ON**
   at insurance.ada.org/whydisability

2. **CHECK**
   see if you have ADA Insurance. If not, request activation.

3. **DONE**
   it’s that simple!

ADA American Dental Association®

Visit www.insurance.ada.org, call 855.411.5198 or email planspecialist@greatwest.com for more information and to learn about coverage provisions, limitations, terms for keeping coverage in force and the option to convert to member coverage after graduation by paying ADA member-only premiums and maintaining ADA membership.

Student coverage is issued regardless of your condition if you are under 45. If you are 45 or older, you can apply for the no-cost coverage and all student program features by providing proof of good health. Coverage renews automatically each academic year. Individuals may convert coverage to the plans for practicing dentists after graduation by paying ADA member premiums and maintaining ADA membership.

This material is not a contract. Benefits are provided through a group policy (No.1105GDH-IPP Disability Income Protection) filed in the State of Illinois in accordance with and governed by Illinois law, issued to the American Dental Association, and underwritten by Great-West Financial. All ADA-sponsored coverage is subject to underwriting and is not guaranteed issue unless specifically stated otherwise. Coverage that is guaranteed issue is subject to a pre-existing condition limitation. Coverage is available to eligible ADA members and student members in all fifty states and US territories under the aforementioned group policy. Each insured will receive a certificate of insurance explaining the terms and conditions of the policy. Great-West Financial, Empower Retirement, and Great-West Investments are the marketing names of Great-West Life & Annuity Insurance Company, Corporate Headquarters: Greenwood Village, CO; Great-West Life & Annuity Insurance Company of New York, Home Office: NY, NY, and their subsidiaries and affiliates, including Advised Assets Group, LLC and Great-West Capital Management, LLC. GWL&A is not licensed in New York, but eligible members residing in New York may request and ultimately receive coverage under the aforementioned group policy. ©2018 Great-West Life & Annuity Insurance Company. All Rights Reserved. AM343442-0218

ADA® is a registered trademark of the American Dental Association and Great-West Financial® is a registered trademark of GWL&A.
IN MANY CLASSROOMS, student-run clinics, community settings and practices throughout the United States, dental students are introduced to collaborative practice with other health professionals. While many dental students enjoy learning with medical, nursing, social work and other professional students, others may question why. In practice, though, except for a few instances, dentists mostly work with other dental professionals and are not in clinics with different health professions. So, what is interprofessional education (IPE), and where did the idea come from?

**Transforming health care around the patient, not professionals**

The World Health Organization defines IPE as “when two or more professions learn with, about, and from each other to enable effective collaboration and improve health outcomes.” Many health delivery systems are reorganizing their physical spaces and practices of care around patients, families and communities in new ways. This provides opportunities for different health professionals to come together to more effectively solve complex health challenges such as medical errors and patient safety.
Many patients have conditions and problems that are too complex for one profession to solve. And much of health has little to do with health care but rather with the social determinants of health — or the circumstances of a patient’s economic and social situation in life.

Some U.S. dental students are working in interprofessional student teams in communities to make a difference in people’s lives. A visiting dental faculty member came to my office to discuss the opioid crisis and what she learned from visits to dental practices in her state. She is becoming aware of how dentists routinely prescribe pain medications for procedures. As a faculty member charged to develop IPE, she recognized the opportunity to form teams of pharmacy and dental students to learn collaboration skills and hone their clinical knowledge in communities around opioid use.

**Dental students’ role in the development of IPE**

Because health systems are rapidly changing due to efforts to improve safety, care outcomes and the patient’s experience, as well as to lower costs, we are starting to learn how to develop effective IPE programs to give students the teamwork skills they need. As with creating teams of dental and pharmacy students, we are reimagining new solutions to problems. While some health systems are asking health professions schools and programs to develop students into agile, collaborative clinicians, others are not. For many students, IPE is just a fulfilling academic activity. We hear from students who find that their clinical settings are not ready for team-based, collaborative care.

Yet, you are the drivers of the future of health care and how you play a role in it. Consider the role of a dental professional in a larger context: How does oral health impact general health? What is the relationship of your patients’ oral health conditions to other issues in their lives? Should other health professionals be engaged because you are the frontline provider who recognizes a larger health issue? Are there opportunities for interprofessional experience, such as case competitions or student-run free clinics, in your area? What is your role in the community to create a healthy environment because of your expertise in oral health?

As students, you see the pros and cons of IPE in different settings. Learning how to do this well — together — can only benefit health care overall.

**You are the drivers of the future of health care and how you play a role in it.**

---

**Dental educators as IPE leaders**

The National Center for Interprofessional Practice and Education recognized the American Dental Education Association and five other health professions education associations with the Pioneer Award for their role to set national standards for IPE, known as Interprofessional Education Collaborative (IPEC) Competencies. The original IPEC group included dentistry, allopathic and osteopathic medicine, nursing, pharmacy and public health. It now includes 20 professions and fosters a national environment where students learn about roles and responsibilities of individuals on the health care team, interprofessional collaboration and communication skills, interprofessional ethical issues and teamwork.

To learn more about IPE, visit the ADEA Charting Progress blog at adeachartingprogress.wordpress.com.
Taking the DAT — while nine months pregnant

JOCELYN LIMERICK
Arizona '19

I SIT AT MY COMPUTER, trying to write my best advice for mothers in school like me. I am also checking my bank account, responding to my sister’s text messages and helping myself to an entire bag of peanut butter M&M's. Am I qualified to give advice to other mothers when I just slammed my son’s finger in a door? Sometimes, I feel like I’m holding on by a thread.

Four years ago, my plan was to finish my undergraduate degree and apply for dental school. So, it came as a shock to my husband and I when we learned that we would be having a baby. When we received the news, I was one week into chemistry labs. Instructors cautioned me against taking the courses and, in my last semester of college, I contemplated dropping out. Somehow I mustered up the determination and, at nine months pregnant, I sat for the DAT. Three days after he was born, I stayed up all night writing my personal essay. At 3 months old, my son traveled with me to my first interview.

The first few months of didactics, my husband stayed home with our son while I went to school and worked between classes and on lunch breaks. If class released early, I’d put in more time at work while my classmates enjoyed the afternoon off. For a year, I had a ritual: Wake up at 4 a.m., study, go to school/work, come home to play with my son, take the dog for a walk, make dinner and study again.

Currently, my husband and I are both students, and our schedules are anything but organized. Yet the one thing we try to keep consistent is the weekend. I try to finish my school responsibilities early to have uninterrupted weekends with my son. We take trips to new places, which helps us get away and stay less distracted with our phones, homework or housework.

It’s important to fit in as much quality time where you can. During our 20-minute drive to daycare in the mornings, instead of listening to the radio, I spend the car ride asking my son about his friends, dinosaurs and what he wants to do when he gets home. Some days, that quality time means ordering pizza for dinner, so that instead of cooking, we’re spending time with each other. Other nights, it means sleeping in his bed, simply because I’ve missed him all day.

You also have to find people to vent to. I often talk with school counselors, clinical directors, friends and family. Take a weekday off, and use it to sleep in, exercise, get a massage, catch up on homework and housework, or binge watch Netflix. Don’t ever compare yourself to other students. While it’s easy to make your standards the same as your classmates without children,
Don’t ever compare yourself to other students. While it’s easy to make your standards the same as your classmates without children, your responsibilities and lifestyle are different. People have their own obstacles and struggles, and often find joy in different things.

While people tell me that I’m a “superwoman” for being both a mom and a student, I remind them that even a superwoman has her weaknesses. If you’ve had a mental breakdown, so have I — and probably a few more. If you are afraid of failing an exam, I’ve failed several. If you’ve thought you aren’t good enough, I’ve thought it, too. Part of being a mom is making sacrifices and holding back emotions because we think we can’t be weak. But we can, and we will.

The funniest part is that the very person I try to hide my weaknesses from is the one who makes me a stronger, better version of myself — my son.
EFFICIENCY — often a word used without reason. But here in Texas, the Sunset Commission was created to reduce costs and increase efficiency by setting every state agency on a review countdown with the possibility of termination. The 12-member board has cut 79 agencies since its creation in 1977. Our state dental board was abolished, too.

Since 1897, the Texas Dental Board regulated the practice of dentistry and appointed state board examiners. The dental board came under review in 1993 as part of a 12-year cycle. However, in 1993, the commission abolished the dental board by allowing the “sun to set” on congressional approval.

According to a Jun. 4, 2017 article from The Dallas Morning News, fighting among dental providers scuttled a bill that would have renewed the State Board of Dental Examiners, and the governor refused to call lawmakers back for a special session to prevent the shutdown of critical state agencies. The dental board was given a year to shut down and transfer investigations over to the attorney general’s office, making Texas the only state without a board to license and oversee dentists. Because the agency could no longer issue new licenses, the state was sued by several 1994 dental graduates over the delay. Problems from the board shutdown showed the need for a regulatory body that addresses dentist-specific issues, like the state dental board.

According to The Dallas Morning News article, State District Judge Scott McCown told legislators they had to reauthorize the agency or risk invalidating the licenses of all dentists in Texas, along with regulations that set standards for dental practices. The Texas Dental Board reauthorization was quickly passed in 1995 as an emergency legislative item.

While we learned an important lesson about dental regulation from this fiasco, there are lessons related to government efficiency. The Sunset Commission terminated several unnecessary agencies and streamlined state agencies overall. But legislative skirmishes leading to the unintentional termination of critical agencies are common. Party lines are more important than compromise, and critical agencies are used as the bargaining chip.

The critical nature of the state dental board became indisputable after the 1993 abolishment. The Texas Dental Association (TDA) played a large part in advocating for proper regulation of dental practice, particularly anesthesia. And, as the Sunset Commission does not include a dentist member, the TDA and other dental organizations provide input into the final recommendations to the legislature.

Our ASDA chapters make our voices heard at TDA Lobby Day every other year when the state legislature convenes with Texas dentists. In 2017 the 85th legislature proposed sunset recommendations in Senate Bill 313, which would have ended dental assistant licenses completely and cut the number of dentists on the dental board in half, while increasing hygienist and public member representation. After countless hours at the Capitol, the final passing bill was amended to strengthen authority over anesthesia regulation, streamline assistant certification (instead of ending it) and ensure a dentist majority on the board to continue proper regulation.

Organized dentistry and ASDA provide a strong voice in public policy for our profession and the public, fighting for priorities such as student debt reform, workforce issues and overcoming access barriers to dental care. Advocating in legislative efforts such as the Sunset Commission bill will ensure responsible regulation and protect our future profession.
WHEN VIOLINIST and composer Kai Kight was in his last year of college, he started to envision the future he wanted for himself. His vision: to combine his musical talent and his background in innovation (he has an engineering degree from Stanford University's d. school) and speak to companies around the world, using music as a metaphor to inspire creativity. To do this, Kight realized that he had to rethink how he spent the remainder of his time in school — he had to "create the sounds of tomorrow" in order to bring his unique idea to fruition. Here, he discusses how he was able to do that, as well as why he thinks students need to maximize their time in school by trying new things.

CONTOUR: In your "Why Majors Don't Matter" TEDx Talk, you discussed the importance of students crafting their own roadmap while in school. Why do you think it’s important for them to do this?

KAI KIGHT: Oftentimes, we go into the school setting looking for a certain outcome — a salary we want to make, a certain job we want. You don’t fully realize that you’re in a place where your No. 1 job is to invest in yourself, to transform yourself. So keep your eyes open to experiences that might not be on that typical, set path because those will differentiate you and provide you with more opportunities. Look for ways that you can learn something new and expand yourself that might not be obvious. And we have access to so many different resources while in school — take advantage of those.

You talk about how we sometimes make a “choice of inaction” — that we wait and wait to go after what we want in life. How can we start pursuing those dreams now?

One thing that helped me was rethinking what I needed to survive and get by. If you really examine that, most of it comes down to social comparisons. You look at the people around you and think about what you have in comparison to them, but if you consider it from a basic standpoint, there’s little that we actually need such as shelter, food, a few good friends.

Once I realized that, it gave me a lot of freedom, which meant that I didn’t have to make decisions based on money or what other people were doing. I realized if I limit what I think I need, I can live in this space where I’m making decisions based on what I’m curious about and what I really want to learn. I wanted to live my life based on creativity, not just things you can measure. And I found that once you do that, the things you can measure grow more than they could before because you’re living a more authentic and engaged life.

What’s your biggest piece of advice for new professionals who want to get their ideas into the world?

Make sure you’re based in reality. Your grand ideas are only as powerful as your ability to see when you’re missing a step. You also have to be based in the reality of others. In order to get any new idea or thought across, you can’t just come in and do it all at once. People have systems and processes that they’re used to, especially if they’re more traditional, so be really curious about those things, learn them and then find a way to bridge that gap.

For me, it’s about being connected with your own reality, your own weaknesses and then how other people are viewing what you’re bringing into the world.
THE DENTIST’S ROLE IN INTER
It was bad enough that the 27-year-old woman who came to the Cambridge Health Alliance clinic in Cambridge, Massachusetts, would end up losing all her teeth.

Her gums were inflamed, and the tissue surrounding her teeth was so badly infected — so soft and decayed — that restoration was out of the question. The worst part, says Dr. Lisa Simon, the dentist who treated her during her general practice residency, was that the woman’s lack of dental insurance coverage or doctor referrals had kept her from seeing a dentist for so long.

“It would have been great to be able to see her long before her condition became a problem,” she says.

Dr. Simon, who calls the 2014 experience “emotionally devastating,” says it’s one of the reasons she entered Harvard Medical School after earning her dental degree. Her lament is for a health care system that she says still separates medicine from dentistry in ways that leave patients vulnerable to crucial gaps in electronic health records, insurance coverage and, to some extent, how dentists are trained.

“The system has failed them,” she says.

Now in her second year of medical school, Dr. Simon says her research will target how electronic health systems can help improve communication between the two disciplines, which she hopes will usher in a new era of collaboration with regard to dental training.

“For most people at the highest risk of poor oral health, it’s easier to see a doctor or visit the

Understanding the connection between dentistry and medicine
ER than to see a dentist,” she says. “The way health systems are designed, it’s easier for a doctor to put in a referral for another doctor.”

Dr. Andrew Read-Fuller is a full-time faculty member at the Texas A&M School of Dentistry. The oral surgeon, who also has a medical degree, says future dentists should expect to find themselves at the intersection of dentistry and medicine with respect to primary care screening.

“If a patient comes in and says, ‘I had a heart attack five months ago, but I’m fine now,’ that should trigger a series of questions, such as, ‘Did they put you on any blood thinners? Are you still taking them? How will that affect our surgery?’” he says.

Diabetic patients who need treatment should raise similar questions: Is the patient controlling blood sugar levels through diet, oral medications, insulin or a combination of all three? How often do they follow up with their physician?

Dr. Read-Fuller says that today’s generation of dentists needs to keep pace with an aging population of increasingly complex patients. That means expanding their knowledge about overall health and their role as providers of basic primary care screening.

“There has been an increase in awareness and emphasis on teaching about the entire body and body systems,” he observes. “Even though dentistry is independent, the mouth and teeth aren’t independent systems. As more of those links are better understood, teaching about the pathology of the human body in dental education is more relevant today than ever before.”

Dr. Read-Fuller points to research that suggests that implants are more likely to fail in patients with a long-term history of diabetes, for example. A Hemoglobin A1-C test would show how well blood sugar is controlled over a three-month period.

“A lot of treatment planning means thinking two or three steps ahead,” he says. “There’s even more emphasis in oral surgery because we deal with patients with complex medical histories, and perform surgeries that have a more profound effect on the body and require a more robust ability to heal.”

---

Even though dentistry is independent, the mouth and teeth aren’t independent systems.” —Dr. Andrew Read-Fuller
Texas A&M School of Dentistry faculty member

Dentists’ unique position in primary care

Data from the Centers for Disease Control and Prevention show that in 2015, roughly the same percentage of patients visited a dentist as a doctor in the past year. That makes dentists well-suited to notice serious health problems during routine exams.

Dentistry already offers a wellspring of examples, such as the dentist who found an irregular heartbeat during a patient’s blood pressure check, or the student hygienist who ordered panoramic X-rays for a patient complaining of headaches that revealed a jaw tumor, or the dentist who diagnosed sleep apnea based on a few routine questions about bruxism.

A study published in the June 2013 Journal of Primary Prevention makes the case for dentists as “oral physicians” who are uniquely positioned to offer primary care screening. Periodontists, who already emphasize the relation of oral to systemic disease, can be watchful for periodontitis as a factor for diabetes, coronary artery disease, structural heart disease and premature birth. Orthodontists and pediatric dentists, who see patients often during their formative years, could screen for developmental, psychiatric and eating disorders, domestic violence and substance abuse, and behavioral problems such as autism spectrum disorder and attention deficit hyperactivity disorder.

The study’s authors pointed to surveys that found that 18 percent of adult dental patients who reported no cardiac risk factors had a 10-year cardiac risk of more than 10 percent. Additional surveys showed that 28 percent of dental patients who reported no risk factors had undiagnosed hypertension, and 45 percent of the men had low HDL-cholesterol levels. Glucose screening revealed 7 percent of patients with previously undiagnosed diabetes.

Interprofessional studies at school

A growing number of dental schools are integrating medical and dental training into their general practice residency programs. At the Harvard School of Dental Medicine, for example, students serve rotations in the medical emergency department and outpatient internal medicine clinic.

During her anesthesia rotation at Harvard, for example, Dr. Simon says she could see it would be
harder to intubate a patient with badly broken teeth. She could tell doctors that patients with badly decayed teeth would be at higher risk for pneumonia. She also knew that patients with bad teeth and gum disease scheduled for heart surgery would need a more detailed screening first.

Along with Harvard, Nova Southeastern University’s College of Dental Medicine offers a combined medical/dental degree program.

Dr. Michael Siegel, professor and chair of the department of oral medicine and diagnostic sciences at Nova Southeastern, says the school’s internal medicine courses focus on the relationship between the mouth and all major organ systems of the body. Courses teach students to diagnose and treat the patient’s whole body. A senior-level capstone course requires all D4 students to present a case where they found something unexpected in the course of patient treatment.

Case Western, Columbia University, University of Connecticut and Stony Brook also combine medical and dental education.

Helping the medically complex patient

Dr. Read-Fuller says the combination of medical and dental training will only help dentists play a bigger role as primary care screeners, even if they sometimes refer patients to others for treatment.

“The challenge for dental educators is to distill the things most likely to affect the patients that students will see,” he says. “There are about 10-15 conditions and two or three dozen drugs that account for about 90 percent of all patient problems they’ll encounter.”

A relatively new class of drugs — bisphosphonates — presents special challenges for dentists who treat patients with osteoporosis. A growing body of research suggests that these drugs can slow bone metabolism and compromise blood supply, which can affect bone healing. The effect has become profound enough for the American Academy of Oral and Maxillofacial Surgeons to issue written guidelines for the condition known as medication-related osteonecrosis of the jaw (MRONJ).

“The problem with this class of drugs is that the half-life is about 10 years,” Dr. Read-Fuller says. “Someone can say, ‘I was on this medication for X number of months two years ago. Yeah, you stopped taking the drug two years ago, but it’s still affecting what you’re doing now.”

Dr. Read-Fuller concedes that treatment planning for an implant candidate who takes these types of drugs isn’t easy. He says there’s not a lot of good evidence on what to tell a patient. The decision is based on a percentage of risk and guidelines based on theoretical knowledge of how bisphosphonates work. Still, Dr. Read-Fuller says that cases such as these should encourage dentists to expand their medical knowledge and embrace their growing role as screeners of primary health care.

“A patient may come in with a toothache but may have chest pains and have trouble breathing,” he says. “Dentists need to be able to pick up on those hints and be able to treat everything that’s going on. We’ve got to be responsible for what’s going on in the rest of the body.”

Dr. Simon agrees, adding that more integration between the two disciplines will only improve the quality of care for all patients.

“For me, I know I’ll be better able to understand how medicine works and how to be a better advocate for the things that affect their whole bodies,” she says. “Integrated systems that ensure people can take care of each other is where the real magic happens.”

—Dr. Lisa Simon
Harvard School of Dental Medicine faculty member
EMBRACING A TEAM MENTALITY

The importance of developing interprofessional relationships while in dental school

Picture this: An elderly woman presents to your office for a dental extraction. You take her blood pressure, and it reads 158/93. You explain to her that she has a high blood pressure and recommend she sees her doctor for management. At a follow-up visit, her blood pressure is still elevated, and you reiterate the importance of getting this checked out by her physician.

Four months later, your patient has an ischemic stroke, and she now experiences weakness in her extremities and difficulty with her speech. You liaise with her multidisciplinary team that includes a primary care physician, physical therapist, occupational therapist, nurses and a speech pathologist.

After speaking with her primary care physician, you learn that she struggled to understand the information presented to her about the ramifications of high blood pressure. At your next dental visit, you explain this to her in a more straightforward way. You communicate any subsequent high blood pressure readings observed in your office to her physician. Her physical therapist alerted you to weakness in her extremities, so a member of your dental team walks with her from the parking lot to prevent a fall.

This scenario exemplifies the benefits of interprofessional health care. It is easy to see how several medical professionals must work together to provide optimal care; however, it can be more challenging to understand a dentist’s role in multidisciplinary care.

Dentists are on the frontline of health care and can recognize signs
Dietitians are on the frontline of health care and can recognize signs of systemic disease such as diabetes before formal diagnosis.

Developing an interdisciplinary mindset in dental school

Like many dental schools in the nation, the Medical University of South Carolina (MUSC) is situated within a large multidisciplinary medical campus. At MUSC, the colleges of dental medicine, medicine, nursing, pharmacy, graduate studies and health professions are relatively close. First-year students enroll in a course called Transforming Healthcare, which allows students from each college — across all health professions — to discuss how to handle health care dilemmas, coordinate care properly and manage the complexities of holistic care. Students have the chance to not only explore teamwork and communication through an interprofessional context, but they also learn cultural competency, ethics and more. This course provides a framework for interdisciplinary health care and collaboration.

Courses such as this one allow us to understand the complexity and interdependence of the different health care professionals, which is the first step to forging interprofessional relationships while in school. Take advantage of any electives that focus on interprofessional study and reach out to students in other programs, if possible. Ask them what their biggest questions are related to patients receiving dental care. For instance, when talking to a physical therapy student during the Transforming Healthcare course, she shared her concerns about the position of

MEDICAL PROFESSIONAL GLOSSARY

One of the advantages of health care is the variety of career options. Understanding the roles of different health care professions is a vital step in practicing interprofessional health care delivery.

DENTITIAN AND NUTRITIONIST: Gives food and nutritional counseling to promote health and manage disease. Dietitians’ roles are more regulated than nutritionists’ and typically require higher education and/or certifications.

EMERGENCY MEDICAL TECHNICIAN AND PARAMEDIC: Responds to emergency calls, performs medical services and transports patients to medical facilities. Paramedics typically have an advanced education and a broader scope of practice than EMTs.

HOME HEALTH/PERSONAL CARE AIDE: Assists people with disabilities, chronic illnesses or cognitive impairment by assisting in their daily living activities.

MEDICAL AND CLINICAL LABORATORY TECHNOLOGIST/SCIENTIST AND TECHNICIAN: Collects samples and performs tests to analyze body fluids, tissue and other substances. Technologists typically have advanced degrees and increased job responsibilities.

MEDICAL ASSISTANT: Completes administrative and clinical tasks in the offices of physicians, hospitals and other health care facilities.

MEDICAL RECORDS AND HEALTH INFORMATION TECHNICIAN: Organizes and manages health information data.

NURSE ANESTHETIST: Provides anesthesia and related care before, during and after surgical, therapeutic, diagnostic and obstetrical procedures.

NURSE MIDWIFE: Provides care to women, including gynecological exams, family planning services and prenatal care.

NURSE PRACTITIONER: Serves as primary and specialty care providers, delivering advanced nursing services to patients and their families.
a patient’s neck during dental treatment and the length of time they are in this position. Once you enter your clinical years, use your interprofessional mindset, and do not hesitate to call your patients’ other health care providers if there are any questions.

The benefits of interprofessional teams
If the interprofessional teams function properly, increased job satisfaction is noticeably evident. An article published in the July/August 2015 issue of Canadian Pharmacists Journal compared desirable team characteristics in sports to desirable team characteristics in health care teams: clear and equal roles, trust and confidence, the ability to overcome adversity and personal differences, and assuming collective leadership. However, what is of primary importance is what this means for patients. The article says that interprofessional health care teams and collaborations lead to better outcomes and improved mortality and morbidity rates.

When starting practice, be proactive and reach out to the primary care physicians and other health care professionals in the area to begin building a relationship. Adopting an interprofessional mindset early is a healthy practice for dentists, and we should start this practice now as dental students.

Interprofessional health care teams and collaborations lead to better outcomes and improved mortality and morbidity rates.

TREATING A CHILD WITH A CRANIOFACIAL DIFFERENCE

The impact of providing well-rounded care

ANGELA WALTER
Temple ’20
Contributing Editor
Operation Smile Vice President
A child plays with a dog that has similar differences as he does at the Best Friends Bash, held at the Children’s Hospital of Philadelphia.
Forty-two years ago, Diana Sweeney was a new mother. Her son was born with a craniofacial difference. Not sure what to do, they went to the Children’s Hospital of Philadelphia (CHOP).

Founded in 1953, CHOP is one of the few centers to offer a fully integrated craniofacial orthodontics clinic, one that specializes in patients with congenital or acquired deformities of the face and jaw, as well as patients with special needs. Its multidisciplinary team consists of plastic surgeons, pediatricians, orthodontists, pediatric dentists, speech specialists, otolaryngologists, audiologists, genetic counselors, nurse team coordinators and social workers.

Sweeney’s son underwent plastic surgery and neurosurgery at 4 months old. She didn’t know at the time how many other lives would change because of her own. Today, she is the only parent liaison in pediatric plastic surgery in the country, a nonmedical person advocating for children with craniofacial differences and their families.

“They need a voice,” she says.

Sweeney meets with every new parent who walks through the same doors she did decades ago. “The thought of this surgery is overwhelming. I am their advocate,” says Sweeney, who is available to patients 24/7 by phone. “When it’s a Friday night at 10 p.m., and they are coming apart at the seams, they should call me, and they do.”

After volunteering for six years, she was invited to join the staff, and she orchestrates dozens of events to build a strong support system at CHOP.

The fifth annual Best Friends Bash, held in June 2017, was one of those events. Its founders, Sweeney and John Lewis, DMD, dipl. AVDC, designed it to bring together children with craniofacial differences as well as dogs with similar differences. Alexander M. Reiter, dipl. Tzt., DVM, director of the Dentistry and Oral Surgery Residency Program at University of Pennsylvania School of Veterinary Medicine and their head of service, helps maintain the relationship between CHOP and the university. Reiter calls it a “best friends’ bash family.” Another Bash team member, Maria Soltero-Rivera, DVM, travels every year from San Francisco to see the 350 patients who are invited.

Maryelena Baldassarre was one of those invitees. The 10-year-old was born with frontal nasal dysplasia, no nasal bridge and an unfused skull. She shared her own struggles of bullying and the strength she found through her CHOP family.

“Anyone with a facial difference is going to go through something like bullying because kids just don’t really understand,” she says.

There is also strength built between generations of patients. A lot of Sweeney’s teenagers come back after treatment to inspire the younger families. Sweeney says it doesn’t get any better than seeing people connect with others who have similar differences. “You’re either crying or kind of laughing,” she says. “It’s that sort of fine edge.”

Sweeney organizes these events to include a beauty day with free salon care, plastic surgery awareness day, a Dave & Buster’s-sponsored Christmas party and an annual retreat.
sponsored by the Children’s Craniofacial Association of Dallas, going on its 28th year.

Gabriella Baldassarre, Maryelena’s mother, understands the need for an integrated team to serve a family dealing with craniofacial difference. Maryelena started going to CHOP at 3 months old. She is surrounded by people she trusts, which has made the entire process easier. Baldassarre says it’s like their “second home and second family.”

Maryelena continues to see her ophthalmologist and ENT at CHOP. In June 2017, she saw her craniofacial orthodontist for upper and lower expanders to adjust her U-shaped palate. She continues to need medical maintenance and social support, yet she is thriving.

“The thought of this surgery is overwhelming. I am their advocate.”

—DIANA SWEENEY

It is our responsibility as health care providers to ensure that a child with a craniofacial difference receives well-rounded medical care and social support — starting from the first consultation and lasting into adulthood. Sweeney says, “Every craniofacial center should have a parent liaison.”

After walking this journey with hundreds of families for over 28 years and having experienced it herself, she knows what these families need for full recovery.
The state of dental care in federal prisons

A closer look at prison dental health care

The average citizen may argue that prisoners get better health care than a majority of the general population; however, it all comes down to perspective. Imagine that you needed to go to the dentist but weren’t permitted to or had to wait a few years before being seen. Imagine you were in excruciating pain and had a fellow inmate pull your tooth. Imagine going to your dentist and being stared at or treated as less than human. This is the plight of health care in the Federal Bureau of Prisons.

ACCORDING TO A MARCH 2008 STUDY by the Journal of Correctional Health Care, dental care is one of the most critical medical needs in correctional facilities. Incarcerated individuals often face mandated copays, extra fees and limited care options, and they lack necessary oral health supplies including toothpaste and toothbrushes. Many of us who remain outside its walls become desensitized and oblivious to the issues and people inside them.
The 1976 landmark Supreme Court case Estelle v. Gamble addressed the rights of U.S. prisoners, affirming their constitutional protection to adequate health care. The court’s decision guaranteed to protect prisoner’s human rights and to provide access to proper medical care. Despite this ruling, an estimated 2.3 million incarcerated Americans continue to face limited access to periodic health examinations and prescription medication.

The concept of “routine care”
Annually, billions of dollars are invested in the nation’s prison systems and facilities. This is where the problem lies. Late Columbia University Professor Manning Marable stated in a December 2000 Along the Color Line report: “It costs about $70,000 to construct a typical prison cell, $25,000 annually to supervise and maintain each prisoner.” The amount of money spent on the construction and maintenance of a prison does not translate to the state’s health care budgets for prison facilities. Inmates are required to pay copays and other fees in at least 35 states, according to a September 2015 National Public Radio report. The inmate copays have little effect on health care budgets for state facilities. Thus, these copays serve as a financial burden with only marginal benefit.

As outlined by Wexford Health Sources President Mark Hale, privatization succeeds as a model for correctional health care providers because “health care is required by the Constitution but is not a core competency of [state departments].” The cost of maintaining inanimate prison walls exceeds that of supporting its actual living prisoners. Having inadequate and limited health care in these facilities provides a cheap and feasible option to alleviate cost and spending. Today, one of the largest private prison companies, CoreCivic, is known for facing public lawsuits and deadly prison riots for inadequate access to medical care. The list of cases and complaints is extensive, but the lack of competency and persistence of denial and delay in regards to prison health care is a cause for concern.

Correctional facilities tend to operate under the policy of “routine care.” In the prison environment, inmates get a bed, meals and basic health care. Yet, far too often, standards of care in the general community do not match care in correctional dental care practices. For example, extraction-only policies can be standard treatment rather than restoration. In prison dentistry, preventative measures are rarely taken. Thus, prisoners continue to have poorer oral and systemic health compared to individuals in the general population.

Moving the bar in prison health care standards
Attention and innovation are needed to improve health care delivery in the prisons. Changing the way inmates receive medical and dental care is not a widespread political issue due to the expense and lack of general public concern. However, shedding light on the current state of dental health care in prison is a needed step towards policy change on this issue.

It is best to find and evaluate alternative ways to fund and organize quality prison health care. Perhaps, offering 24-hour emergency dental services, placement of culturally competent prison dentists and developing a standard for early diagnosis and prevention could serve as small steps. Improving patient-provider communication and treating your inmate patients fairly as mandated by the ADA Code of Ethics are vital in breaking down barriers.
The other side of international dental service trips

SEAN LEE
Stony Brook ’18
Contributing Editor

MUCH OF TODAY’S dental school experiences are characterized by participation in service trips. A 2010 Annals of Emergency Medicine study found that these trips provide necessary services to populations with insufficient practitioners, equipment and education. According to the 2013 issue of the Southwest Respiratory and Critical Care Chronicles, up to $250 million is spent a year to support overseas outreach trips today. Searches for service trips reveal a deluge of opportunities to treat areas with high unmet needs and low access to care. The prospect of providing care, expertise and mentorship to the impoverished is irresistible to eager students.

Yet what happens when teams return home? Post-experience reflections gravitate toward the self, leaving consideration of patients and communities after service trips more easily overlooked. Why are some trips more successful than others? And what are the long-term implications of your weeks of service?

The answers are not always clear. According to a 2009 study in Globalization and Health, perception of service in the short-term is beneficial. Instant access to care in the form of free services, access to highly trained dentists and to procedures otherwise unobtainable is evident. Exchanges ranging from cultural interactions to medical supplies take place.

However, free care provided by service trips can dramatically shift patient volumes away from existing local health care providers. This can lead to the closure of government-run clinics. Local private physicians can also leave their areas of practice to avoid competitors who provide free care. Over time, that increases dependence on care from foreign sources and increases the gap between those able and unable to receive care.

Some have cast aspersions toward the temporary nature of treatment and whether volunteers can provide long-term health improvements in foreign communities. A 2010 Public Health Nursing study argues that service trips that are not designed as
A service program is more likely to last if it works in a single location over time and uses local resources.

long-term interventions provide less benefit to target communities than to visiting practitioners themselves. Medical anthropologist Patricia Townsend comments that surgical procedures and dental treatment alone repair the “consequences of poor health conditions” rather than administering preventative care that would greatly improve the incidence of these conditions. Unite for Sight, a global health institution involved in outreach trips, echoes this sentiment. They consider these efforts as delaying morbidity or mortality rather than reducing them.

Service trips that are knowledgeable about the communities they serve and incorporate local resources may be more likely to achieve long-term benefits. A July/August 2007 article published in Ambulatory Pediatrics describes critical applications implemented in their yearly one-week service trips to rural El Salvador that allow their programs to have sustainable impact. Identifying the community’s medical needs by understanding how the socio-political context of the community contributes to those needs was essential.

Members of the outreach trip could identify dental health, intestinal parasites and nutrition as the three primary health priorities in a community ravaged by civil war and with little access to clean water. They could educate community teachers and physicians on evidence-based public health interventions, which included providing fluoride varnish, toothbrushes, iron supplementation and anthelmintic treatment. This paved the way for establishing community health programs that make use of local personnel and resources when the service team was not present.

The Ankizy Madagascar Program launched by the Stony Brook School of Dental Medicine integrates community resources to establish long-term interventions. Dr. David Krause, who founded the program in 1999, stresses the impact of incorporating the local Malagasy community in year-long education and public health works to maximize the impact of annual three-week dental service trips. A series of six primary schools established by the program form the basis of an educational system that also teaches essential oral hygiene and provides toothbrushes and toothpaste. Stony Brook also teams up with Madagascar’s only dental school in a professional and cultural exchange, leaving it better equipped to handle local inadequacies in oral health.

The El Salvadorian and Ankizy Madagascar programs integrate local resources, establishing long-term public health interventions and improving care. The 2013 Americares Medical Outreach: Best Practices Study says that a service program is more likely to last if it works in a single location over time and uses local resources. These concepts, if more widely applied, may redefine the designs, contributions and implications of future service trips.
MOST OF THE GOVERNMENT’S REVENUE comes from taxable income. This not only includes salaries but also interest, dividends, rents, royalties, lottery winnings, unemployment compensations and earnings from businesses you own. Many states impose a similar form of taxation on people and entities with a large connection to the state. Residents of Alaska, Florida, Nevada, South Dakota, Texas, Washington or Wyoming are not subject to state taxes.

**Tax basics for students**

Dental students are subject to income tax if they earn a certain amount in a year. Is your income equal to or less than the sum of your exemption and standard deductions? If the answer is no, then no filing is required. As of 2017, if you are under age 65 and single, you must file a tax return if you earn at least $10,400.

**STUDENT LOANS**

Student loans are different. When you take out a student loan, such as a Stafford loan, you must pay back the full amount with interest. Even though loans are listed as an award, they are never treated as taxable income.
FILING WHEN MARRIED
If you are married, you can file your tax returns separately or jointly with your spouse. The IRS encourages most couples to file jointly because they’ll more easily qualify for a number of tax credits including the Earned Income Tax Credit and the Child and Dependent Care Tax Credit. There are some instances when filing separately is better, though, such as if your spouse has a high amount of out-of-pocket medical expenses to claim.

NON-TRADITIONAL STUDENTS
Non-traditional students who previously paid taxes because they worked full-time jobs but are now in dental school may not need to pay taxes. This is determined by how much taxable income was earned in that tax year.

Paying taxes as a dentist
Paying taxes as a practicing dentist will depend on whether you’re an employee (who receives a W-2) or an independent contractor (who will receive a 1099 form).

As an employee, you will receive a W-2 form from your employer. The IRS requires that your employer records your salary and tax information and report it to you in this format. Your W-2 shows how much money you earned from that employer during the year and how much of your paycheck has already been withheld in state and federal taxes.

As an independent contractor, the 1099 form records income you received. The IRS requires businesses to issue you a Form 1099 if they’ve paid you at least $600 that year. Taxes are not usually withheld by the employer for a 1099 employee. You are responsible for estimating your taxes and paying the self-employment tax. You’ll make these payments quarterly based on your estimated annual tax liability.

This is a brief explanation of taxes and is not meant to replace the advice of a professional. Students should consult a certified public accountant (CPA) who works specifically with dentists and dental students.

Financial topics should not intimidate you. Understanding them will be to your advantage. Look to the guidance of experienced dental colleagues and financial experts. With the proper knowledge and planning, you’ll be empowered to achieve financial success.

SAVE THE DATE!
WHAT: ADA Dentist and Student Lobby Day
WHEN: April 8-10, 2018
WHERE: Washington, D.C.

For the second year, dental students and dentists will present a unified front as we lobby our national representatives.

GET SOCIAL WITH ASDA!
Facebook.com/ASDAnet
Twitter.com/ASDAnet
Instagram.com/dentalstudents
Snapchat.com/add/asdanet

Plus, find a variety of resources on the new ASDAnet.org.
How Instagram can help you build your brand

RENZ ANTONIO
Pacific ’19
Chapter President

I LOVE INSTAGRAM. From my own feed to the Explore page, I could spend hours browsing the photos and videos. Every now and then, I’ll even post a photo, probably using the Lark filter and adding my favorite hashtags (such as #asdafever).

Instagram is one of the fastest growing social media platforms, with more than 500 million daily active users as of September 2017. According to the Pew Research Center, a large portion of its users are millennials. Almost 60 percent of all 18 to 29-year-olds who are online use Instagram. While Facebook still commands a larger market share (88 percent), Instagram shines as the preferred social media platform for teens and young adults.

Investment firm Piper Jaffray conducts semi-annual surveys on social media consumption in teens, and in fall 2017, found that 24 percent of them prefer Instagram over other social media platforms, compared to Facebook’s 9 percent. Instagram is capturing the attention of young adults, an age group that only has 30 percent going to the dentist, according to the ADA Health Policy Institute.

The Yellow Pages has given way to sponsored Instagram ads, Yelp reviews and Facebook pages. Among the most used social media platforms, Instagram shows the greatest potential for brand building and patient acquisition, especially in millennials.

Dr. Brian Baliwas, a 2014 University of the Pacific Arthur A. Dugoni School of Dentistry graduate, is now part-time faculty at the university and maintains a private practice in San Francisco. However, most people know him from Instagram as @sfidentalnerd. He has more than 17,000 followers and has reposted a multitude of content online. He started his Instagram page in dental school and noticed his peers were responding positively to his posts.

“People liked seeing my progress through dental school,” he says. “They wanted to see the process of my journey.”
Before Baliwas graduated, he deleted his personal posts and focused his page on dentistry. Now his posts include patient cases, discussions about dental techniques and even dental memes.

Overall, his Instagram experience has been positive, but he also says, “One of the main cons is being in the public eye constantly. A lot of patients like how genuine I am on Instagram, though. They’re comforted when they come to my office and find out I’m exactly the same in real life as I am on social media.”

Baliwas says that he attracts patients through Instagram all the time. He even uses the platform to inspire case acceptance or habit changes.

“Patients see their cases on my page with comments from tons of dentists, and it makes them more willing to accept a treatment plan or floss more.”

Baliwas also direct messages a lot of other dentists for advice on cases, and he receives questions as well.

“I am part of this online community of dentists whom I have never met in person, but we share a common interest in learning more about the profession,” he says.

As future dentists, mentorship is critical during our first few years in practice. Instagram proves to be a good supplement for learning more about dentistry after we graduate, and it offers great potential for building that personal brand and attracting a patient population who needs you.

Among the most used social media platforms, Instagram shows the greatest potential for brand building and patient acquisition, especially in millennials.

### Make the most of Insta in dental school

Looking to create a brand-building Instagram page of your own? Dr. Brian Baliwas has some tips.

1. **Focus on the process of dental school, not just your highlights.**
   Baliwas says he sees some students only highlight their best cases but what interests people is the process. “People want to see how you got to where you are — that’s what moves people,” he says.

2. **Be yourself.**
   Being yourself will attract people who agree with your personality, which will fill your patient population with people who are more likely to listen to what you have to say.

3. **Be open and honest.**
   Baliwas says being so open has helped him develop a patient base that has a mindset similar to his own.
The World Health Organization says we ingest 1.5–14 mg of formaldehyde per day, most of which comes from food. So why aren’t we all dying from formaldehyde exposure? A study in the November 2005 issue of the Journal of Canadian Dental Association describes how the body distributes and stores formaldehyde systemically. But much of the time our bodies can break it down to formate, which is further broken down into carbon dioxide.

The more pressing concern is that only 2 percent of dentists who use formocresol actually use a 1:5 dilution. Children with severe childhood caries may receive multiple pulpotomies. The dose can vary greatly between patients.

Formocresol has a 70–90 percent success rate and is still considered the gold standard of care. Despite possible safety concerns, formocresol is an effective treatment.

Formocresol has two major actions within the pulp. It kills bacteria, making it bactericidal, but it also fixes the pulp material, making it inert. Authors of the study in the Journal of Restorative Dentistry describe how the devitalizing action protects the pulp from enzyme breakdown. But even with its high success rate, histologic findings have shown chronic inflammation, necrotic tissue and cysts in treated teeth, plus enamel defects in permanent teeth. From a systemic health standpoint, formocresol may pose carcinogenic, inflammatory or restorative risks. For these reasons, the authors describe alternatives, each with their own set of benefits and risks.

Electrosurgical pulpotomy has similar clinical and radiographic success as formocresol therapy, although it is more technique sensitive. Ferric sulfate also has good clinical and radiographic outcomes but causes local inflammation. Calcium hydroxide may be an option, but it strongly initiates either repair or destruction of the pulp. MTA is more biocompatible, less cytotoxic and faster to use than formocresol but may cause discoloration and isn’t available everywhere.

While other treatment protocols may be just as effective as formocresol and may reduce certain risks, formocresol is inexpensive, easy to use and easy to obtain. So perhaps, even as other therapies become more widely used, formocresol will remain as part of pediatric care into the future.

Formocresol has a 70–90 percent success rate and is still considered the gold standard of care.
FOR SOME PATIENTS, the most anxiety-inducing part of a dental visit is the initial injection of local anesthetic. This fear can keep patients from seeking necessary treatment and lead to poorer results overall. To improve patient care, we must make every effort to improve patient comfort. Luckily, there have been many advances made in dental anesthesia as alternatives to standard injectable local anesthetic.

Gel anesthetic
Oraqix is a non-injectable local anesthetic developed specifically for scaling and root planing procedures. It is a carpule of liquid containing 2.5 percent lidocaine and 2.5 percent prilocaine. Unlike conventional local anesthesia, Oraqix liquid is deposited directly into the sulcus of the teeth to be treated, where it transforms into a gel. The anesthetic takes effect within 30 seconds and lasts about 20 minutes. In addition to the lack of needles, Oraqix includes a shorter duration of action and the ability to use only on the areas needed, decreasing residual numbing effects after the appointment.

A 2004 study in the Journal of Periodontology compared patient preferences of standard injection anesthesia (2 percent lidocaine) and Oraqix. It found that while the level of anesthesia was less profound with the gel, Oraqix was preferred over injectable due to lower levels of post-procedure problems such as soreness, pain or lingering numbness.

Nasal mist anesthetic
An additional non-injectable anesthetic is Kovanaze, a nasal mist containing 3 percent tetracaine anesthetic and 0.05 percent oxymetazoline, a vasoconstrictor to increase efficacy. The product is a single-use nasal spray used during restorative procedures on teeth Nos. 4-13. Kovanaze is administered via two 0.2 mL sprays four to five minutes apart. The patient should feel the onset of anesthesia within 10 minutes; it lasts one-and-a-half to two hours. A 2013 study in the Journal of Dental Research found that for 83 percent of patients, Kovanaze provided sufficient anesthesia for restorative procedures in maxillary anterior teeth.

Needleless jet anesthetic
Jet-injector technology uses force to penetrate soft tissue and insert liquid medication through a small orifice. Jet injectors have been previously used for intramuscular injections, so their use in delivering dental anesthetic is new. Because of this, studies on efficacy and patient satisfaction are lacking. A 2014 study in the Journal of Conservative Dentistry found that while pressure anesthesia was preferred by 70 percent of patients, for longer and more invasive restorative procedures, needle anesthetic was more effective.

In addition to non-needle anesthetics, there have been various advances that serve to decrease discomfort associated with local anesthesia as a whole.

- **EUTECTIC MIXTURE OF LOCAL ANESTHETICS (EMLA):** 5 percent cream of lidocaine and prilocaine applied as a patch for two-and-a-half to five minutes prior to needle anesthesia.
- **VIBROTACTILE DEVICES:** Attachments for a traditional syringe that use vibration to interfere with pain signals at the cortex.
- **COMPUTER-CONTROLLED DELIVERY:** Computers aid in anesthetic delivery, controlling the flow rate to minimize patient discomfort.
- **REVERSING ANESTHESIA:** The reversal anesthetic OraVerse reduces unwanted post-treatment effects of residual local anesthetic, such as lip, tongue and cheek numbness.

Even the smallest changes can make a huge difference in improving a patient’s dental experience. Putting patients at ease makes them more comfortable, compliant and likely to return for follow-up treatment and oral hygiene needs. ❯
Are you maximizing your workspace?

DR. GABRIEL B. HOLDWICK
Detroit ’14
Speaker of the House 2013–14

THE ANCIENT CHINESE PHILOSOPHY of feng shui says that energy flows between people and their environment. The balance of this energy is critical to happiness and health. I am no expert on the tenets of feng shui, but I do know that our workspaces affect our health and well-being. ASDA defines environmental wellness as “your relationship to your surroundings, both your immediate surroundings and the world at-large.” The physical and psychological impact of office design on our bodies certainly connects to our environmental and overall wellness.

When I started working full-time in private practice, I realized how physical dentistry can be. My father was a machinist and many of my relatives are farmers — I had never considered that dentistry could make you physically tired. Sitting in the same position for long periods of time and the inherent challenges of the job itself make dentistry hard work. To make our lives a little easier, we can maximize our physical workspace with the following approaches.

Ensuring your environmental wellness will make your career longer, healthier and happier.

Be aware of unsafe materials
Determine if there is anything dangerous in your workspace. Noxious furnace fumes, black mold, lead paint, improper disposal of hazardous chemicals or infectious materials, exposure to sharps — these directly impact your health. Don’t work in an environment that will poison you. Sometimes these dangers are hard to spot, as they are often concealed in mundane items we consider to be normal. Always keep your eyes and ears open for something that doesn’t seem quite right.
Consider the ergonomics in your workspace

We often contort our bodies to get a better look in those upside-down and backwards dark nooks and crannies in our patients’ mouths. Are your loupes set so your head is tilted forward less than 20 degrees? Does your lighting allow you to maximize what you see? I was surprised to find that using a loupe light improved my ergonomics and my dentistry because I could better see what I was doing. Are you sitting correctly in the operator stool? I noticed that I often sat in positions that caused me pain by the end of the day. I have been using a saddle stool to improve my posture and, hopefully, extend my career.

Think about your operatory design

The physical construction of operatories presents its own challenges. The position of handpieces, cabinetry and location of the dental chair all play a role in your musculoskeletal health. While the occasional lean or twist doesn’t cause too much concern, compounded over decades, those positions can lead to debilitating and potentially career-ending injuries. Is your container of new burs in the back of the bottom drawer? Put instruments or supplies in places where you don’t have to reach, twist or turn to access them.

Add decorations to your space

We spend a lot of time at work, and it can be stressful. Spending those hours in a friendly space goes a long way in making that time more enjoyable. We ensure that our offices are welcoming to our patients, yet we spend much more time there than they do — the same logic extends to us as well. Photos, birthday cards, music and other small personal effects at your desk or in the operatory can give you more ownership of your space. I own my office, so I have a lot of control over the decorations. I keep family photos, awards, small gifts from patients and drawings from my pediatric patients. They make me smile when I see them, and patients often ask about them, further putting them at ease. These are small details, but since we spend so much of our lives at work, adding a few things that make you more comfortable can make it a bit less stressful.

Considering the tenets of feng shui, the environment of our dental workplace does affect our body and mind. There are many aspects of dentistry over which we have little or no control. Take these few items that you can control to maximize your workspace. Ensuring your environmental wellness will make your career longer, healthier and happier.

Find more resources on environmental wellness at ASDAnet.org/wellness.
Each issue of Contour highlights your life as a dental student.

“Student Life” shows your fellow ASDA colleagues how you’re living, from the events you hold at your chapter to the service activities you participate in — even the amazing places you’ve traveled.

Want to share a slice of your life? Email your high-resolution photos and captions to editor@asdanet.org, and they may be featured in an upcoming issue of Contour.

---

STUDENT LIFE

Photo submitted by Palmer Jeppesen, Midwestern-Arizona ’20

Pictured left to right: Bryce Church, Weston Vern Frandsen, Ricky Andreasen and James Nnah.

---

DO-GOODERS

The Midwestern University–AZ ASDA Community Service Committee is all smiles after its annual Super Sealant Saturday. Dental students provided free dental care, including prophylaxes and sealants, to children in the surrounding community. More than 250 children were treated, with an estimated $33,000 worth of treatment donated.

Pictured left to right: Palmer Jeppesen, Justin Firth, Scott Rode, Carly Boudreaux and Andrew LaPray.

Photo submitted by Palmer Jeppesen, Midwestern-Arizona ’20

---

OPEN WIDE

Roseman D2 students are instructed to administer an IA block during their anesthesia rotation.

Photo credit: Carol Chavez, Roseman ’20
FORE!

Case Western hosts its annual Castellarin Open: Golf Scramble at The Historic Tanglewood Club in Chagrin Falls, Ohio.

Pictured left to right: D2s Nate Andrasik, Michael Somma, Kris Hyatt and Ian Canepa prepare for a day of golfing.

CHEERS!

Case Western ASDA recently held a faculty bartending event at Tavern of Little Italy in Cleveland.

Photo credit: Amy Melok, Case Western ’20

Dean Kenneth B. Chance, DDS (center), is pictured with D3 students Elizabeth Ly, chapter president, and Neil Tenn, event coordinator.
Anaheim, California: Home of the ‘happiest place on earth’ and the 2018 Annual Session

WHERE DREAMS COME TRUE

Orange County, California, has miles of pristine coastline, numerous plazas of boutique shops and gorgeous weather year-round. But my favorite part of sunny Southern California isn’t the designer shopping, the surf or even the California burritos. For me, it has always been about the “happiest place on earth.” Even as an adult, when I step through the gates of Disneyland, I still get the feeling that anything is possible there. So, grab a two-day park ticket and your Mickey Mouse ears and experience the magic of Disney!

Friday

Staying at one of the three Disneyland Resort Hotels will give you access to extra hours in the park, special dining reservations and magical touches throughout your stay. Mickey Mouse will even give you a wake-up call in the morning when it’s time to head to Disneyland. There are also plenty of budget-friendly and Disney-approved “Good Neighbor Hotels” within walking distance of the parks.

Once you’re settled in, make your way to downtown Disney for some dinner. There are a variety of cuisines available, and many restaurants have themes that will transport you to another world. ESPN Zone caters to the sports fans, and kids will love the animals at Rainforest Café. After dinner, stroll through downtown Disney and browse the shops on your way to Trader Sam’s Enchanted Tiki Bar. Finish off your night by sipping on a tropical cocktail or smoothie, and take in the bewitching ambiance inspired by the world-famous Jungle Cruise ride.
Saturday

Rise and shine! Start your morning at Disney’s CALIFORNIA ADVENTURE PARK. Lines are shortest first thing in the morning, so arriving when the gates open will let you experience as many of the attractions as possible. If you’re a thrill seeker, GUARDIANS OF THE GALAXY: MISSION BREAKOUT is California Adventure’s newest ride. If you have little ones with you, head to CARS LAND for some family-friendly fun. The theatrical interpretation of the movie “FROZEN” at the HYPERION THEATER is a musical stage show that all ages will love.

Escape the afternoon crowds in the park and venture into downtown ANAHEIM to visit the HISTORIC ANAHEIM PACKING DISTRICT. Formerly a Sunkist citrus packing house built in 1919, the beautiful Spanish Colonial Revival building was restored into an upscale dining hall in 2014. It now features more than 20 artisan vendors and eateries. Customize your own gelato popsicle, sample wine and cheese in a converted 1920’s railroad car, and relax and enjoy the live music on the mezzanine stage. Advanced reservations will get you directions to the secret entrance of THE BLIND RABBIT speakeasy.

Head back to Disney’s California Adventure in the evening to catch the WORLD OF COLOR show and enjoy a few rides before turning in.

Sunday

Start your day with an early reservation for a CHARACTER BREAKFAST at the PLAZA INN inside Disneyland. Feast on Mickey Mouse-shaped waffles, and enjoy the plentiful photo and autograph opportunities with some character friends. This dining experience is fun for all ages and is a great way to meet a menagerie of your favorite classic characters such as MINNIE MOUSE, CHIP AND DALE, TIGGER and RAFIKI without waiting in long lines.

Once you’ve finished breakfast, take a walk through the iconic SLEEPING BEAUTY’S CASTLE and head off to explore DISNEYLAND PARK. Take in the rides, snack on some Dole Whip pineapple ice cream, and believe in the magic of Disneyland. It may even become your new favorite place.
I picked up photography after a high school friend showed me his new camera. After seeing some of his photos and trying it myself, I used all of my birthday savings to purchase my own camera. A few years later, I was able to purchase a digital single-lens reflex (DSLR) camera, and after taking an introduction to photography class at the University of California San Diego, I fell in love with it. I love that a photo can bring back memories and emotions, and I’ve been blessed to travel the world and pursue my hobby. These are some of the photos I took while on my most recent trips. There are tons of editing apps on the market these days, but most have the same basic settings so you can apply these foundational rules however you decide to edit your photo.

Framing your subject

The level of your horizon should be in the top or bottom third of the photo. This gives your photo a good balance of background and subject matter. This one might be obvious, but don’t always put your subject in the middle of the picture. Placing the subject in the bottom third of the picture, while facing the middle of the photo, is one of my favorite spots (see image 1).

Diagonal lines should meet near the corners of your photo. Your eyes naturally follow lines. By placing them in the right way, your viewer’s eyes will be directed to the center of the photo or toward your subject (see image 2).
Temperature

Temperature controls the yellow and blue tints in the photo. Increasing the temperature gives your photo a warmer, happier and nostalgic feeling (see image 3).

Decreasing the temperature results in a colder, rainy-day feel (see image 4).

Saturation/Vibrancy

Both saturation and vibrancy increase the intensity of your colors, but vibrancy will not affect skin tones as dramatically. Unless you are going for a bad spray-tan look, avoid oversaturating your photos with people.

I love that a photo can bring back memories and emotions, and I’ve been blessed to travel the world and pursue my hobby.

iPhone Professional

You don’t need to buy an expensive camera to take good photos. Here are a few example shots I took on my iPhone 4 in 2013. Using framing and editing techniques makes a big difference. The more pictures you take, the more comfortable you’ll be with editing and framing (see images 5–6).
Just as I enjoy comparing my photos before and after I edit them, I can’t wait to see the difference I can make in someone’s smile and confidence before and after my dental work.

Editing your photos

The combination of traveling and photography is my idea of a perfect vacation. Being in a foreign place and soaking in all the new scenes is an incredible feeling. With those emotions in mind, I try to recreate them with my camera and editing programs. The editing process is similar to a puzzle, slowly changing settings and adding effects until all the pieces come together. Eventually, you are left with a picture reminding you of how beautiful that moment was.

As I continue my second year in dental school, I’m realizing how many aspects of photography actually relate to dentistry. The many hours I’ve spent editing and deciphering between minor details has improved my meticulousness. It’s helpful in self-assessing my preparations and restorations, and just as I enjoy comparing my photos before and after I edit them, I can’t wait to see the difference I can make in someone’s smile and confidence before and after my dental work.

Photography is a skill you are constantly changing and improving. With all the resources available on the internet and social media today, it’s easy to stay inspired to find your next destination or new editing styles. If you’re picking up a camera for the first time, get out there and keep shooting. As you get more comfortable, the settings will become second nature. Critiquing my own work and being critiqued by a trusted friend showed me where I needed to improve. Following photography accounts on social media is also useful. Find the ones that post pictures with the exact settings they used. Most importantly, have fun and don’t be afraid to step in front of people to get the perfect shot (see image 7).
February 2018

Visit ASDAnet.org/trustees to contact your district trustee and find out more about local ASDA events.

Feb. 2
Groundhog Day

Feb. 14
Valentine’s Day

Feb. 19
President’s Day

Feb. 21–24
ASDA Annual Session
(Anaheim, California)
ASDAnet.org/AnnualSession

Feb. 22–24
2018 Midwinter Meeting
Chicago Dental Society
cds.org

BRACE YOURSELF FOR THE
ASDA BRACKET CHALLENGE!

The competition kicks off in March, and the chapter that recruits the most new predental members will be crowned the national champion.

- Cash prizes for winning chapter and district.
- New predental members and renewals both count.
- Face-off against other ASDA chapters and advance through the bracket to win.

Details at ASDAnet.org/bracket-challenge.
PROBING QUESTION

If you weren’t going to be a dentist, which health profession would you pursue?

“Anaplastology. They design and build prosthetic body parts. It’s very artistic.”
_Nadia Bahramnejad_  
_Texas A&M ’19_

“Cardiology — so I can fix your broken heart.”
_Anthony Chen_  
_Los Angeles ’19_

“Phlebotomy because it is fun to say.”
_Neil Thomas_  
_Michigan ’19*  
_Contributing Editor_

“I’d go into nursing because my mom is a nurse, and I have great respect for the profession.”
_Sarah Strickland_  
_North Carolina ’19_

JUST FOR LAUGHS

_Airy Choi_  
_Tufts ’20_
You could save even more money
with a special discount on
GEICO auto insurance
for being an
American Student Dental Association
member.

Tell us you’re an ASDA member today.
MORE NEW DENTISTS CHOOSE MEDPRO THAN ANY OTHER MALPRACTICE INSURANCE PROVIDER.

- 115+ Years of experience
- Pure consent to settle provision
- National coverage
- Dental advisory board
- 95% dental trial win rate
- Financial strength rating
- Experienced staff
- $50 Occurrence policies as low as $50 with exclusive ASDA member discount
- 79% of dental claims closed without payment

MedPro is the recognized leader for dental malpractice insurance. In fact, more recent graduates choose MedPro over any other carrier. Connect with us to discover why you should join the crowd.

Take advantage of our unique coverage options and competitive pricing today.

MEDPRO.COM/DENTAL  TEL (800) 4MEDPRO  FAX (866) 417-5068

A.M. Best rating as of 7/21/16. All data MedPro internal data (2006-2015). All products administered and underwritten by MedPro. Product availability is based upon business and regulatory approval. As used herein, MedPro is the marketing name for The Medical Protective Company. © 2017 MedPro Group Inc. All rights reserved.