Winning hygienists
We sit down with the two winners of the Pros in the Profession award and find out just what makes them tick.

»page 6

Get passionate
Remember how excited you were about dentistry back in the beginning? Make sure you always feel that way.

»page 4

The science behind the pain
Ever thought about how to prevent pain you sometimes have to cause it? Well, now you don't.

»page 13

Time to get started
More than 300 C.E. courses and 450 exhibitors will help you kick 2014 off right

Flash your badge to save on Boston attractions

- Once the 2014 Yankee Dental Congress is over, there is no better time to get out and explore the city of Boston. Be sure to take your badge along with you, though. Showing it will save you lots of money.

Freedom Trail Run
Meet every Saturday and Sunday on Boston Common and run a 5K course that passes landmarks from America’s Revolution. Stop at more than 16 sites to learn interesting facts. Registration includes 5K guided run, water, return harbor ferry ride and “Freedom Trail Run” T-shirt.

- Where: Boston Common (corner of Park and Tremont streets)
- Discount: $5 off registration (original price $35, YDC attendees $30) www.freedomtrailrun.com/ydc

Skywalk Observatory
The observatory offers a 360-degree panoramic view of Boston and beyond. Built in 1965, the observatory, located on the 50th floor, offers views of the Boston skyline and the Charles River.
- Where: Prudential Center, 800 Boylston St.
- Discount: $2 off adult admission. topofthehub.net/skywalk_home

Improv Asylum
Voted Boston’s best comedy club, the Improv Asylum features improvisation and sketch comedy. Performances are Wednesday through Sunday evenings.
- Where: 216 Hanover St.
- Discount: $5 off using promo code Yankee 14 at the box office or online improvasyllum.com

Boston Celtics
The Boston Celtics and Yankee Dental have teamed up to reserve a limited number of 18-person luxury suites for Yankee Dental members who attend a 2013-2014 Celtics game event. Enjoy the game while enjoying a number of

Boston’s first skyscraper, the 16-floor Customs Tower, was built at the end of the city docks to facilitate inspection and registration of cargo. (Photo/Provided by the Massachusetts Office of Travel & Tourism)
Key Features of Giomer Materials
S-PRG filler material clinically:

- Recharges fluoride when treated with fluoridated products
- Decreases acid production of cariogenic bacteria
- Neutralizes acid on contact
- Demonstrates an anti-plaque effect
Yankee Dental Congress — Jan. 30, 2014

YDC 2014 features more than 300 continuing education courses spanning a variety of subjects. For example, John Sorensen, DMD, PhD, and Sam Simos, DDS, will focus on restorative dentistry. Bart Johnson, DDS, will work on bringing the intersection of overall health and oral health to light in his general dentistry seminar.

For those looking to increase their practice-management skills, courses will be offered by Kirk Behrendt, Jennifer Blackmon, Mark Hyman, DDS, Lisa Gualtieri, PhD, Rachel Mele and Chris Scappatura.

In addition, William Wilson, DDS, will cover prosthodontics, and Chris Baker, DMD, RN, and Wick Alexander, DDS, will discuss topics in orthodontics.

Over in the exhibit hall, 450-plus exhibitors await your visit. Some highlights: Attendees can find a flossing system resembling miniature nunchucks at GumChucks at Oral Wise, booth No. 2423. The Stick, a division of RPI of Atlanta, booth No. 1047, has a “toothbrush for your muscles, a self-massaging tool that provides relief for muscle pain and soreness. And Philips Sonicare & Zoom Whitening is introducing its new black electric toothbrush at booth No. 613.

In addition to products and services, the exhibit hall offers continuing education courses right on the show floor. Catapult Continuum is new to YDC and covers wide-ranging, relevant topics brought to Yankee by the Catapult Group. There is no cost to attend.

Also new is the Social Media Hot Spot, a program for dentists to learn about where the future of dentistry is headed, with courses highlighting the use of social media to market dental practices.

As for those social events, head over to Going for the Gold at Yankee tonight at 5:30 p.m. in the convention center ballroom. This free event features lights snacks, interactive games, music, stage acts and more.

On Friday, Dan Abrams presents “Man Down” at 3 p.m. in the Seaport Hotel, Plaza Ballroom. Abrams, a legal analyst and broadcaster, will talk about how he tackled the toughest case of his career and turned conventional thinking upside down.

For more information, pick up the official program or download the YDC 2014 app on your smartphone or tablet.
Renew your passion

By LVI Staff

Welcome to the Yankee Dental Congress, and congratulations on actively moving your understanding and professional success forward! It is only through excellent education that we individually grow and develop as dental health professionals and, through that, build a practice that is not just successful but delivers comprehensive and high-quality care.

As a patient, I expect the best care I can find. As a dentist, I want to deliver the best care possible. That takes us to the power of continuing education and, as dentists, we are faced with many choices in continuing education.

As a way to introduce you to the Las Vegas Institute for Advanced Dental Studies, or LVI, I want to outline what LVI is about and what void it fills in your practice. The alumni who have completed programs at LVI were given an independent survey, and unlike the typical surveys of dentists, 99.7 percent love being a dentist, and of those surveyed, 92 percent enjoy their profession more since they started their training at LVI. That alone is reason enough to go to LVI and find out more.

While the programs at LVI cover the full breadth of dentistry, the most powerful and life-changing program is generally reported as being Core I, or “Advanced Functional Dentistry — The Power of Physiologic Based Occlusion.” It is a three-day course that is designed for clinicians and their teams to learn together about the power of getting their patients’ physiology on their side.

In this program, clinicians can learn how to start the process of taking control of their practice and start to enjoy the full benefits of owning a practice and providing high-quality dentistry. Regardless of whether it is a solo practice or a group setting, every dentist can start the process of creating comprehensive care experiences for their patients.

We will discuss why some cases that dentists are asked to do by their patients are actually dangerous cases to restore cosmetically. We will discover the developmental science behind how unattractive smiles evolve and what cases may need the help of auxiliary health-care professionals to get the patient feeling better.

The impact of musculoskeletal signs and symptoms will be explored, and we will look at how the supporting soft tissue is the most important diagnostic tool you have — not simply the gingiva but the entire soft-tissue support of the structures and not just in the mouth but also in the rest of the body.

A successful restorative practice should not be built on insurance reimbursement schedules. An independent business should stand not on the whims and distractions of a fee schedule but rather on the ideal benefits of comprehensive care balance by the patients’ needs and desires.

Dentistry can be a challenging and thankless business, but it doesn’t have to be. Through complete and comprehensive diagnosis, there is an amazing world of thank yous and hugs and tears that our patients bring to us when we change their lives.

The Core I program at LVI is the first step on that journey. That’s why when you call, we answer the phone: “LVI, where lives are changing daily!”

For more information

For more information on the Las Vegas Institute for Advanced Dental Studies, visit www.lviglobal.com.
Dual Stability Mechanism
High primary and mechanical stability combined with accelerated osseointegration, for rapid biological stability.

Platform Switching
Minimizing bone resorption and allowing more vital growth of soft tissue.

Color Coding
For simple and immediate identification of platform size during procedures.

A Conical Connection Implant MAKE IT SIMPLE

The C1 implant system is the result of an extensive research and development process that offers a unique combination of surgical and restorative benefits; a differential thread design to ensure superior initial stability in different clinical situations; platform switching and a conical connection. To learn more, visit our website: www.misimplants.com or call us: 866-797-1333 (toll-free)
Crest + Oral-B names winners in the Pros in the Profession award program

Nominations open until Feb. 15

Crest® + Oral-B continues to recognize registered dental hygienists (RDHs) who go above and beyond the call of duty with the third year of the Pros in the Profession award program. This award acknowledges the pivotal role hygienists play in their patients’ lives, in addition to their unwavering personal commitment to promoting good oral health.

“We have seen extraordinary entries over the past several years, which is why we must continue to honor those hygienists whose passion shine through in their everyday work,” said John Scarchilli, Global Scientific Communications for P&G Oral Care. “These individuals dedicate countless hours to furthering the oral health cause, so we are pleased to be able to applaud them publicly.”

Two winners have been named thus far for the Pros in the Profession year three award, Michelle Vacha and Heather Steich.

Michelle Vacha, winner one

Vacha, RDH, BS, received her degrees from Northern Arizona University and has been practicing in Colorado Springs, Colo., for the past 24 years. Here is what she had to say.

Why did you nominate yourself for the Crest + Oral-B Pros in the Profession award?

I am passionate about our profession and want to show that dental hygienists are capable of. I am one person making a difference for an underserved population, but we hygienists are capable of providing so much more to our communities through our valuable work.

What do you plan on doing with the award?

I am so honored to be receiving this award. I am hoping the attention from it will bring awareness to the public and other hygienists who care for older adults. Through my work, I help seniors deal with specific dental support. We want to ensure all of the good work to maintain oral health throughout one’s life is also preserved once insurance is no longer available through retirement or fixed income.

What fuels your fire to be the best dental professional possible, both in the office and out?

A majority of the general public does not realize all that hygienists do, all that we encounter and practice on a daily basis. We have similar training as other medical professionals, yet still maintain a lower overall recognition profile. I, for one, take such pride in my degrees that I’ve placed RDH, BS after my name on my personal checks, and I appreciate it when others ask what they stand for. My goal is to one day see the hygiene profession become self-regulated, like the nursing profession.

What is the No. 1 product you recommend to your patients? Why?

Oral-B power brushes! When power brushes came onto the market, the improvement in plaque and calculus control was immediate. Without asking, I could tell which patients were using an Oral-B power brush and which were not. The mechanics of Oral-B power brushes take the issue of manual dexterity out of the equation. Combine that with the Pro-Health line of products and the alcohol-free benefit of the rinse on a population whose mouths are already altered with the medications, it’s a win/win solution.

What are you most looking forward to now that you are a Crest + Oral-B Pros in the Profession winner?

I look forward to re-energize my passion for the profession. This award is a testament to the contributions of all dental hygienists and increases visibility to the profession.

Heather Steich, winner two

Steich, RDH, received her degree at the University of the Pacific, Arthur A. Dugoni School of Dentistry, and has been practicing in San Francisco for the past five years. Here is what she had to say.

Why did you nominate yourself for the Crest + Oral-B Pros in the Profession award?

I nominated myself for the Crest + Oral-B Pros in the Profession award because I am dedicated to oral health care, and I’m excited to represent the profession. This award is a testament to the contributions of all dental hygienists and increases visibility to the profession.

What do you plan on doing with the award?

I will be taking my second oral health service mission trip to Honduras this year. Last year I used my own funds for the trip, but this year I plan on using the award to put toward the expenses of the trip. In effect, the award will be going back to the community I love to serve!

What fuels your fire to be the best dental professional possible, both in the office and out?

Science is ever-evolving, and I find it fascinating to stay on top of the latest research. I also love attending national and international continuing education courses and conferences to re-energize my passion for the profession and for my patients. My patients deserve the best, so I strive to have the best information to provide them with outstanding patient experiences.

What do you choose the career path you are on?

I chose the profession of dental hygiene because I love making people smile. I strive for positive health outcomes for each patient. When they feel confident in their healthy mouth, they smile more, share more and get closer to others.

What is the No. 1 product you recommend to your patients? Why?

The No. 1 product I recommend to my patients is an Oral-B power toothbrush. There are a variety of options for them, depending on their preferences and pricing needs. They will get the value of a healthier smile, which is rewarding for both of us.

Here in Boston

Nominations for the Pros in the Profession awards program are open until Feb. 15. To learn more about the program, including how to nominate yourself or a colleague for consideration, along with rules and regulations, visit www.facebook.com/professionalcrestoralb or stop by the Crest Oral-B booth, No. 1006.

Nominees must be:

• RDHs with work that goes above and beyond the products!
• RDHs who participate in community service.
• RDHs with two or more years of clinical/ professional experience after graduation from dental hygiene school.

Nominees for the Pros in the Profession award program are open until Feb. 15. Crest Oral-B will identify one last exceptional RDH in the coming month. The winner will receive:

• An all-expense paid trip to visit the Procter & Gamble German Innovation Center in Kronberg, Germany.
• A $1,000 monetary prize
• A recognition plaque
• Recognition in dental periodicals and announcements on the Crest Oral-B for Dental Professionals Facebook page and on www.dentalcare.com.
MACRO™
1/4 in x 1/4 in implant*

MULTI-APPLICATION SHORT/WIDE IMPLANT

- Perfect for sinus & nerve avoidance cases
- Designed for extraction/immediate placement in molar areas
- Minimizes the need for additional grafting & sinus augmentation procedures

Why 1/4 in x 1/4 in?
Because we’re AMERICAN, that’s why.

Designed and Manufactured in Albuquerque, NM

COME SEE US AT BOOTH 429

*Also available in 6.0mm diameter & 6, 8, 10, 12mm lengths if you’re into that metric system sorta thing.
Now in capsule form

Shofu announces new delivery system for two of its products

By Shofu Staff

The CX-Plus capsule: A glass ionomer luting cement

Shofu Dental is announcing the launch of its GlasIonomer Luting Cement CX-Plus — now in a capsule form.

CX-Plus is an ideal, self-curing, glass ionomer luting cement designed for minimally invasive dentistry.

Indicated for cementing crowns, inlays, long span bridges and orthodontic appliances, CX-Plus has a high compressive strength, low film thickness and is radiopaque. It is resistant to water contamination and can exist in a moist environment.

CX-Plus Capsules bond to both enamel and dentin to provide an excellent marginal seal, thus minimizing postoperative sensitivity. Additional features are its high fluoride release and low levels of acid erosion. These, combined with its superior handling, fast setting time and three-year shelf-life, make CX-Plus an ideal luting cement.

Shofu’s GlasIonomer Cement CX-Plus is available in powder/liquid form and now comes to you in a more convenient delivery system—the capsule. For application, simply shake the capsule to loosen the powder, push in the plunger to activate and mix for 10 seconds. Total setting time is four minutes, 10 seconds from start of mixing.

Dr. Fred Margolis, DDS, a pediatric dentist from Highland Park, Ill., who has used CX-Plus in a recent clinical case, said: “I have used CX-Plus Luting Cement for stainless-steel crowns and zirconium crowns for children. This cement is one of my favorites; it saves time and is reliable. Shofu’s CX-Plus Luting Cement is great for pediatric crowns and works well, even for difficult moisture-control situations.”

The GlasIonomer CX-Plus Capsules are available through your local dealer in a box of 50 for $227.99 or $4.56 per capsule. Stop by the Shofu booth, No. 1229, for a demonstration.

The GlasIonomer FX-II Capsule: a glass ionomer direct restorative

Shofu Dental is also announcing the launch of its new direct restorative, GlasIonomer FX-II Capsule. Those interested in seeing the material are encouraged to visit booth No. 1229 for a first-hand product demonstration.

The GlasIonomer FX-II Capsule is an esthetic, all-purpose, glass ionomer direct restorative, designed for minimally invasive dentistry. As a restoration, the material is shown to have superior levels of fluoride release/rechargability and compressive/tensile strength in comparison to other leading glass ionomers, making it ideal for high caries pediatric and geriatric patients.

In addition to this, adhesion to enamel and dentin is consistently stable at equal levels, creating a stronger marginal seal. The restoration experiences far less strain because of the adhesive strength, and the thermal expansion properties are very similar to natural teeth. The radiopaque qualities of the new GlasIonomer FX-II display a highly favorable natural fluorescence.

The application benefits of GlasIonomer FX-II are equally noteworthy. One key benefit is there is no conditioner required for this material, resulting in faster application time. Simply prepare the cavity using the conventional method, mix the capsule for 10 seconds and apply. Net setting time is two minutes and 30 seconds. The combination of a fast setting time and no conditioning requirement greatly reduces valuable working time and allows one to see more patients within a day.

Unlike many other glass ionomer restoratives, the new GlasIonomer FX II Capsule demonstrates excellent handling and packability. Indications for use include non-load bearing C I and C II restorations in permanent dentition, restorations of C III and C V cavities and wedge shaped defects, pediatric/geriatric restorations and core build-up and base/liner material. Offered in shades A2, A3, A3.5 and B2, the material is simultaneously translucent and opaque, creating an aesthetic appeal and beautiful vita shade matching abilities.

Shofu Dental’s GlasIonomer FX-II Capsule is overall stronger and more durable and is a highly therapeutic, minimally invasive restorative, but the most impressive point of all is its price point — only $4.54 a capsule, packaged in a kit of 50 with a total cost of $227.70.

Stop by the Shofu booth, No. 1229, to experience the new GlasIonomer FX-II Capsule.
Healthgrades: Where prospective patients go to find a dentist

By Sesame Communications Staff

When consumers fire up their web browsers, the vast majority of them start at a search engine. According to research from Pew Internet, 93 percent of online activities begin with a search. Health is a popular topic: 72 percent of Internet users looked online for health information within the last year.

Today, the No. 1 source for new patients searching and scheduling appointments with health-care providers in the United States is Healthgrades.

Each year, more than 225 million visitors use the Healthgrades.com website to search, evaluate and connect with health-care providers. Healthgrades.com visitors represent the ideal demographic for dentistry—they are overwhelmingly female (72 percent), highly educated (84 percent have some post-secondary education) and affluent (52 percent have annual household incomes greater than $75,000).

Healthgrades offers dental practices a large, highly focused audience of prospective patients. During the past 12 months, Healthgrades tracked more than 20 million searches for dental care providers. Most importantly, Healthgrades users don’t just search—they schedule appointments. More than half (54 percent) of Healthgrades visitors will schedule an appointment.

Any way you slice it, Healthgrades visitors are an ideal target audience for growth-minded dental care providers. So what should your practice do to harness this traffic and fill your schedule?

Healthgrades has established a partnership with Sesame Communications, and dentists can now secure an enhanced profile, which will offer several strategic advantages over a standard Healthgrades profile. A Healthgrades Enhanced Profile from Sesame provides practices with:

• Preferred provider placement in searches. A Healthgrades Enhanced Profile gives your practice higher placement and greater visibility to patients searching for a dentist in your area. Having increased exposure to prospective patients ready to schedule an appointment will drive more new patient appointment requests.

• Click-to-request appointments. Enhanced profiles allow patients to request an appointment with your practice by simply clicking a button on your Healthgrades profile. This quick, automated process removes a potential barrier for patients looking to make an appointment, allowing your practice to optimize your conversion of new patients.

• Complete, practice-branded profile. Enhanced profiles offer comprehensive doctor and practice branding, including full bio, address, procedures, location directions and detailed contact information.

New patient acquisition is the bloodstream of practice growth and profitability. For many practices, online search has become a primary source for new patient opportunities. Healthgrades is a compelling channel, with millions of prospective patients ready to schedule an appointment the moment they find the right dentist. A Healthgrades Enhanced Profile is your best opportunity to engage this audience and fill your schedule with new patients.

References
2. www.pewinternet.org/Reports/2013/Health-online/Summary-of-Findings.aspx

Here in Boston
To learn more about getting a Healthgrades Enhanced Profile of your own, stop by the Sesame Communications booth, No. 1835.
Creating the ideal treatment plan for implant placement

The MGUIDE Guided Implantology System helps ensure implant survival rates remain high

By MIS Implants Technologies Staff

With the MGUIDE Guided Implantology System (Fig. 1), a single CBCT scan and an impression of the relevant full arch is all that is required before the process may begin.

A stone model and diagnostic wax-up of the patient are fabricated by the MCENTER for scanning and are displayed digitally on the CBCT data within the implant planning software.

This allows us to see the current soft-tissue contour, the future prosthetic plan, the patient’s bone volume, the implants and even the abutments. With this information, we can now create the ideal treatment plan.

In fact, by using the surgical template, we can create a model of the post-operative condition, complete with analogs, prior to the surgery (Fig. 2).

By doing this, we can fabricate temporary components to be immediately loaded after implant placement, so the patient can go home having his or her teeth.

The surgical template is printed with the latest 3-D printing technology without any human intervention. It features a unique open design, which allows an optimal line of sight, as well as excellent irrigation. Within a few days, we can have the surgical template in your practice, ready for surgery.

Case planning

The latest CBCT scan data is used for case planning, allowing the location of the implant to be positioned with the precision of one-tenth of a millimeter. This reduces the risk of error tremendously and also the risk of damaging any proximal anatomical structures.

Because of the precise orientation, any bone replacement may be avoidable. In situations where bone grafting is unavoidable, then the primary fixation of the implant can be strengthened with correct placement in the existing bone.

Clinical decisions such as this can be thoroughly discussed during the treatment planning stage.

Planning for implant placement with our system allows informed decisions to be made prior to the surgical procedure (Fig. 3).

This preparation helps ensure the implant survival rate remains extremely high.

By way of prosthetic-driven planning, actual surgery time can be reduced, and optimal implant placement results in simpler prosthetic work. Why? Because you can analyze the bone, the soft tissue and the proposed tooth placement during the planning stage. The ideal solution can be realized right from the beginning.

In overdenture cases, the axial positioning of the implants can be automatically made parallel. This allows better fixation of the prostheses, resulting in better comfort and durability.

Surgery

Our newly designed MGUIDE Guided Surgical Kit and Tools Kit (Figs. 4, 5) work seamlessly within our system.

Unlike traditional guided surgical kits, our system has eliminated the need for guidance keys or spacers. The drills and sleeves work together to center and stop at the precise depth and positioning that was planned. Our innovative drills are sequenced according to our implant lengths, so sleeve heights are not required to be raised or lowered to achieve accurate depth.

These features not only allow you to change implant sizes at the time of surgery but also to ensure that clearance never is a problem.

Raising the flap is not required, as tissue punches are provided to perform minimally invasive procedures. This means minimal or no suturing, faster healing time and esthetically pleasing restorative results, all of which lead to greater patient and clinician satisfaction.

The MGUIDE System goes beyond the guided surgical procedure, providing you with tools specifically designed to place the implants through the template. This ensures that the actual treatment goes precisely as planned, from pilot drilling to placement.

What makes the MGUIDE System so special?

We have created a system that simplifies the workflow for everyone involved.

The clinician now has the ability to responsibly plan his or her case using all of the resources available. Bone quality, tissue height and prosthetic plan information aid us in treatment planning, taking most of the guesswork out of the surgical procedure.

We know going in what the final outcome should resemble, and from that knowledge, we create a precise and safe surgical plan that can be executed with the utmost ease.

Our tools are designed to allow you the most comfort and control during the procedure, vastly shortening actual surgery time.

This can allow greater patient satisfaction, minimal pain and the opportunity to treat more patients in one day. Shorter chair time equals more turnaround.

Being able to conceptualize the treatment plan and present it to your patient allows you to keep them informed about what is going to happen. This increases their comfort and enables them to be on board.

Our system allows you to map out the road to success. The collaborative efforts of MCENTER USA, the clinician and the lab allows all avenues to be explored and agreed upon with precise knowledge.
Endodontic System

Can you tell the difference?

Come and see for yourself at

Booth #2135

PRECISE • RELIABLE • EFFICIENT
By Henry Schein Dental Staff

Progressively tapered NiTi rotary files have represented a significant improvement in root canal preparation procedures. These files were specifically designed to provide flexibility, efficiency and greater safety. The unique design features of the NiTi rotary files enable clinicians to more consistently create uniformly tapered shapes in anatomically difficult or significantly curved canals. The flexibility and the instrument design allow the files to closely follow the original root canal path. Studies have consistently shown root canal preparation in permanent teeth with NiTi is efficient and effective.1–3

What’s so special about nickel titanium (NiTi) alloy? It is an alloy that exists in two crystal structures, austenite and martensite; thermal transitions from one crystal to the other make NiTi super elastic and allow it to hold its shape. Highly elastic instruments reduce the forces between the file and the canal wall during instrumentation. This results in the file remaining within the center of the root canal space and reducing the risk of canal straightening or other preparation errors.

Henry Schein Dental is launching Insight Endo™ and the new Channels™ product line, an endodontic system that features nickel-titanium rotary files, advanced carrier-based obturators, stainless-steel hand instruments and accessory products. The system was designed with the clinician in mind, making endodontic procedures more efficient and cost-effective. The products combine time-tested foundational methods with cutting-edge technological advancements to enhance precision and efficiency.

With enhanced flexibility and the intelligent tapering design of our NiTi rotary files, along with the seamless compatibility of the system’s other components, Channels will enable you to navigate with confidence. Channels instruments are smart, versatile and easily adapt to navigate any root canal, no matter how complex.

Channels is accessible to all who wish to improve the endodontic experience for dentist and patient. Efficiency is important, technologically and financially, which is why Channels products are offered at a significant savings to the dental practice. You can experience the entire Channels Endodontic System from Insight Endo by visiting booth No. 2135 while you are here in Boston.

Here in Boston
Check out the new Insight Endo and its product line, Channels, at the Henry Schein Total Health booth, No. 2135.

References
Injection pain is perceived in the brain

By Steven G. Goldberg, DDS

As dentists, it is our great fortune to have acquired the necessary skills to help alleviate the pain of those who are suffering. Isn’t it ironic that the beginning of each dental procedure to alleviate pain begins with a needle injection causing tissue damage resulting in additional pain?

How injections cause pain
• Transduction: A needle injection of local anesthetic becomes a noxious stimulus as it pierces the oral mucosa, causing tissue damage as well as tissue distention and tearing with the submucosal deposition of anesthetic solution. Nociceptors, specialized primary sensory neurons located under the surface of oral tissues, encode this noxious stimuli, converting it into nerve impulses known as action potentials.
• Conduction: The impulses travel along A-delta and C nerve fibers to the spinal cord. It is in the dorsal horn of the spinal cord where it undergoes synaptic transmission and then continues on to the brain. Note: In the case of orofacial pain, the signal passes through the trigeminal ganglion and then on to the brain.
• Perception: Once in the thalamus, nerve impulses are directed to the somatosensory cortex of the brain. This is where the occurrence of tissue damage is perceived as pain, emotionally processed and acted upon, a process known as nociception.

The Gate Control Theory
Thanks to the work of Drs. Ronald Melzack and Patrick Wall in 1965, we know that there is a “Gating” mechanism located in synapses within the dorsal horn of the spinal cord and similarly in the trigeminal ganglion. This “gate” can either block pain signals or permit them to travel to the brain.

When a counter-stimulation (in this case, vibration) is applied in close proximity during a painful occurrence (e.g., a dental injection), the sensation of vibration reaches the sensory area of the brain first, resulting in a closure of the synaptic pain gate to the sensation of pain – a process known as modulation.

DentalVibe blocks injection pain
I invented the DentalVibe to tap into the merits of the Gate Control Theory by effectively stimulating cutaneous mechanoreceptors, Pacinian and Meissners’ Corpuscles, as a counter-stimulation to injection pain. It is a patented, handheld, cordless device that delivers soothing, pulsed vibrations via a disposable, bifurcated, latex-free comfort tip to the site where an injection is simultaneously administered.

This specialized tip is laser calibrated to a specific frequency and amplitude, sending the sensation of vibration to the brain along A-beta nerve fibers, effectively closing the pain gate.

I have personally received the ultimate compliment from Melzack himself, with gracious permission to publish this quote: “Dear Dr. Goldberg, You’ve found an interesting and clinically useful way to diminish pain! Good for you! Best Wishes, Ronald Melzack.”

Dr. Steven G. Goldberg, DDS, FADFE, graduated from New York University’s College of Dentistry and has been in private practice for more than two decades. He founded Bing Innovations to bring to market the DentalVibe Injection Comfort System, which is being used by dentists in private practice and in dental schools in the United States and in more than 25 other countries.

Ad

Here in Boston
For more information on DentalVibe, stop by the booth, No. 2033.

About the author
Dr. Steven G. Goldberg, DDS, FADFE, graduated from New York University’s College of Dentistry and has been in private practice for more than two decades. He founded Bing Innovations to bring to market the DentalVibe Injection Comfort System, which is being used by dentists in private practice and in dental schools in the United States and in more than 25 other countries.

Breakthrough science of blocking pain
OCO Biomedical is a worldwide leader in immediate-load dental implant technology. Its Dual Stabilization™ implants achieve a biomechanical lock at placement and are engineered to stimulate bone growth via patented implant features. The system can be used for a variety of implant needs.

According to the company, the proven implant body design enables practitioners to Logically Progress™ from 2.2 mm to 6 mm implants for virtually any clinical indication—and “complete packaging” makes the system simple and economical.

Here in Boston
For more information or to check out the Dual Stabilization implants, stop by the OCO Biomedical booth, No. 429.

OCO Biomedical’s ‘dual-stabilization’ implants achieve a biomechanical lock at placement and are engineered to stimulate bone growth via patented features.

(Department Provided by OCO Biomedical)

Dentin hypersensitivity is a prevalent condition with one in three people suffering from it at some point in their life. Despite this, many sufferers do not seek dental advice. Sensitivity can have a lifestyle impact and even lead patients to neglect their oral hygiene or avoid dental appointments. For this reason, it is important to identify these potential sufferers in your patients and help them to treat the pain.

Studies have shown that the formulation of Sensodyne® Repair & Protect toothpaste can both repair exposed dentin and protect patients from future sensitivity. The stannous fluoride formulation forms a reparative layer over and within the exposed dentin tubules and works to block painful stimuli from reaching the nerve. The result of this innovative science is effective, lasting relief for your patients.

For more information or to pick up some Sensodyne Repair & Protect toothpaste, stop by the GSK booth, No. 2203, here during the Yankee Dental Congress.

References
2. GSK data on file. Revised Sensitive Teeth AU. Age sub-group analysis.
The Greater New York Dental Meeting (GNYDM) has announced it will introduce a World Implant Expo at this year’s meeting, taking place Friday, Nov. 28 to Wednesday, Dec. 3. The World Implant Expo will facilitate the education of dental professionals in all aspects of implantology. The GNYDM will subsequently expand its exhibit floor to include companies involved with implant products, technology, bone-replacement materials and equipment.

The GNYDM will use its expertise in educational programming to include sponsored implant programs through an opening day symposium on Sunday morning, corporate forums on Sunday afternoon, a clinical innovations session on Wednesday, three additional days of seminars and hands-on workshops and a research poster competition.

There will also be new products, live patient demonstrations and technology pavilions, all featuring implants. All together, this will serve to increase the market for implant solutions through multimedia event programming.

The GNYDM is not only the largest dental event in the United States but it is also one of the largest health-care conferences throughout the country. The GNYDM is a chosen member of the U.S. Department of Commerce’s International Buyer Program.

Both companies and dentists are encouraged to participate in this opportunity. Dana Soltis, sponsorship and advertising manager, is available to answer questions. Contact her at dana@gnydm.com, or you can reach Implant Expo Chairman Dr. James Doundoulakis at implants@gnydm.com.

**Coming to N.Y.: World Implant Expo**

**Here in Boston**

For more information on the 2014 Implant Expo and other features of the meeting, stop by the Greater New York Dental Meeting booth, No. 1839.

**New England Aquarium**
The New England Aquarium features a new Caribbean coral reef teeming with sharks, sea turtles, stingrays and thousands of tropical fishes. The aquarium also houses a penguin habitat and Simons 3-D IMAX Theater.

- Where: Central Wharf
- Discount: $5 off gate rates
  [www.neaq.org](http://www.neaq.org)

**Blue Man Group**
If you haven’t seen Blue Man Group, you haven’t seen Boston. Signature Blue Man Group moments combine with new pieces for an evening of entertainment. Discounted Blue Man Group tickets are on sale now for Yankee attendees and can be purchased until Sunday either online at [blueman.com/boston](http://blueman.com/boston) or by visiting the Charles Playhouse Box Office. Use promo code TEETH for discount pricing (for up to 14 tickets).

- Discount: $56.50 for all performances from Thursday through Sunday.

**John F. Kennedy Presidential Library and Museum**
The JFK Presidential Library portrays Kennedy’s life, leadership and legacy in 21 exhibits, three theaters, 20 video presentations and more.

- Where: Columbia Point
- Discount: $2 off adult general admission
  [www.jfklibrary.org](http://www.jfklibrary.org)

**Institute of Contemporary Art**
Located on the South Boston Waterfront, the Institute of Contemporary Art is Boston’s first new art museum in more than 100 years. It features contemporary paintings, sculptures and photographs, in addition to live dance and musical performances.

- Where: 100 Northern Ave.
- Discount: $2 off admission
  [www.icaboston.org](http://www.icaboston.org)

For even more discounts, visit [www.yankeedental.com](http://www.yankeedental.com) and click on “Attraction Discounts” located under “Travel & Housing.”
BruxZir® restorations, a more lifelike emergence profile

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— Michael C. DiTolla, DDS, FAGD

Another BruxZir Award

PFM Crown

This image represents the typical PFM prep we receive with a conservative feather-edge margin. When a PFM is fabricated for this prep, there is a bulky 1 mm margin on the PFM that catches on the explorer. Even if the margin is sealed, the emergence profile is unacceptable.

BruxZir Crown

This image represents the typical PFM prep we receive with a BruxZir crown in place. Because it is a monolithic crown and can be milled to a feather edge, there is no bulk of material, or “speed bump,” at the margin. Dentists tell us their explorer cannot detect where the tooth ends and the BruxZir crown begins.

*Price does not include shipping or applicable taxes.

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