PUBLISHED BY THE AMERICAN ACADEMY OF IMPLANT DENTISTRY / SPRING 2017

# **Corporate Dentistry:** Some Dentists Swear by Them; Others Swear at Them

Memorial Tribute to Dr. Leonard Linkow See page 14

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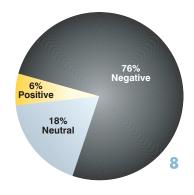
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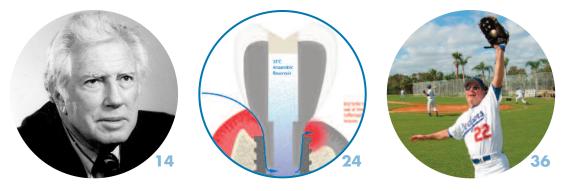






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# **EDITOR'SNOTEBOOK**



By James E. Ference, DMD, MBA, AFAAID, DABOI/ID Editor, *AAID News* 

# "On the shoulders of giants"

he just concluded Northeast / Southeast conference was a great success with most attendees rating it very favorably. Pittsburgh received praise as a pleasant destination built on the banks of the three rivers and surrounded by the Appalachian Mountains.

We were particularly fortunate to host a dinner where we honored an AAID veteran who has contributed much to the profession — **Dr. Burt Balkin.** He has played a key role in guiding the establishment of the American Board of Oral Implantology/ Implant Dentistry which now is a key component of implant dentistry allowing for the growth and maturation of the field to a specialty level. His foresight was one of the key components that has allowed the ABOI/ID to become so influential.

Sometimes we don't quite fully appreciate the personal strengths of those who can and do lead the way until they're gone. The younger members of an organization sometimes lose sight of the struggles that took place by leaders from a previous generation. The pioneers' efforts should be recognized lest we lose appreciation for the struggles that made our current successes possible.

Of course, another giant in our field was **Dr. Leonard Linkow.** To have the chutzpah to blaze trails like he did requires a personality uniquely strong and determined. Sometimes we don't quite fully

Do YOU have ideas, strategies, comments, or observations that you want to share with your colleagues? Send them to me at editor@aaid.com. appreciate the personal strengths of those who can and do lead the way until they're gone. Then, perhaps, we take the time to reflect on the difficulties they overcame. It is easy to enjoy the comfort zone associated with a respected and predictable field like implant dentistry. It wasn't always that way.

Isaac Newton famously noted that he stood on the shoulders of giants. In our own more humble way, we do too. As we add incrementally to the body of knowledge about implantology, we should respect those who paved the way and not fail to reflect on our appreciation for their efforts and when possible, express our gratitude.

James Exerce

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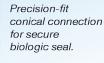
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### Hybridge XD: First Wave of Doctors Trained on Predictable, Digital Full-Arch Protocol

Hybridge has begun training on its digital full-arch protocol. The initial wave of doctors and specialists was trained in the first quarter.



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HybridgeNetwork.com/XD

### PreXion, Inc. announces launch of new PreXion **Excelsior CBCT and Change in Business Model**

PreXion, Inc., global provider of advanced CBCT equipment in the dental industry, has announced the launch of their new PreXion Excelsior 3D CBCT. Still having the smallest focal point in the industry, PreXion has also advanced all other core CBCT technologies including the X-Ray tube and the Flat Panel Detector (FPD). The new Excelsior CBCT couples the smallest focal spot (0.3 mm) with the following: a voxel size of 0.1 - 0.2; 1024 volume



size; 360° gantry rotation; and advancements in the PreXion software. Because of these advances, PreXion can deliver 30% lower radiation exposure without compromising the image quality.

The launch of the PreXion Excelsior will coincide with a change in business model from direct sales to dealer distribution.

Because PreXion has successfully sold direct in the U.S. dental market, their service, installation, and training infrastructure is fully developed to effectively service new customers and their existing customer base. This capacity of PreXion will be extended to support their new dealer partners - providing a seamless transition and ensuring a continuation of exceptional customer service. 650.212.0300

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### **Glidewell Dental Announced as Launch Customer** for New Structo DentaForm 3D Printer

partnership with Structo, a Singapore-



based dental 3D printing solutions provider, with an investment in two of Structo's newly launched DentaForm 3D printers.

After running three Structo OrthoForm printers in production over the last year, Glidewell has decided to further integrate Structo's Mask Stereolithography (MSLA) technology-equipped printers in order to expand the company's production capabilities.

The Structo DentaForm is capable of printing up to 30 dental models in approximately 90 minutes. Having just launched in February at the Association of Orthodontists Singapore Congress, Structo continues to make waves in the industry by partnering with the world's largest dental laboratory. structo3d.com glidewelldental.com

# Denbur Oral Hygiene Introduces EZ-Pik for Normal Spaces and EZ-Pik Plus for Extra Narrow Spaces

Denbur announces two new products: EZ-Pik for Normal Spaces and EZ-Pik Plus for Extra Narrow Spaces. EZ-Pik Interdental Pick for Normal Spaces features a knife-shaped tip which is designed to access spaces between teeth. Tip can be bent to any suitable angle to remove stubborn food particles in hard-to-reach areas. Indented back portion is friendly to the gum line. Ideal for pinpoint particle removal.



EZ-Pik Plus Interdental Brush for Extra Narrow Spaces features a flexible, wire free design. Perfect to clean between teeth, orthodontics, implants, crowns, or bridges. Both EZ-Pik and EZ-Pik Plus are packaged in an Easy-Shake Dispenser which dispenses one at a time. 40 per pack. Made in the USA.

800.992.1399 denbur.com

### Rodo Medical and Straumann Group enter into Distribution Agreement Outside North America

Rodo Medical and Straumann announced that Straumann has increased its stake in Rodo Medical Inc. from 12% (obtained in 2014) to 30%, for an undisclosed sum. The agreement between the two companies provides Straumann with exclusive distribution rights — except in North America and South Korea — and the option to increase Straumann's participation to 51% in 2021.

Founded in 2009, Rodo Medical is a privately-held U.S. company that develops and produces innovative retention devices for dental implant restorations. Its revolutionary Smileloc<sup>®</sup> device utilizes the shape memory properties of "nitinol," a nickel-titanium alloy, to attach crowns or dentures to implant abutments without cement or retaining screws. The system also allows quick and easy removal and replacement of a single crown, bridge, and full arch prosthesis. 408.245.7636

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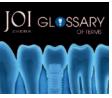
engineered to meet the exacting requirements of implant pioneer Dr. Jack Hahn, this advanced system addresses today's clinical challenges with a blend of time-tested features and innovation.

Hahn<sup>™</sup> Tapered Implants feature an array of sizes that allow for placement in all regions of the mouth, from tight anterior spaces to second molar sites. A pronounced thread pattern with self-tapping grooves is designed to facilitate swift, efficient delivery. The dual-lead thread design also enables precise directional control during placement, and has demonstrated excellent primary stability in all bone types — even in fresh extraction sockets. ●

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### Glossary of Terms available

The American Academy of Implant Dentistry (AAID) and Allen Press have published the JOI



Glossary of Terms, 2016 Edition — a specialized collection of words, phrases and definitions used in general dentistry, Implantology, and oral surgery. Updated with over 1,500 terms, it is the largest and most comprehensive edition of the Glossary yet. The Glossary is a publication of the Journal of Oral Implantology (JOI), which is co-published by AAID and Allen Press.

The Glossary is freely available in a digital flipbook format, which is enabled with HTML5 and easily accessible through a PC, tablet or smartphone device. It features an intuitive user interface along with search functionality, bookmarking and a web-based mobile app.

The JOI Glossary of Terms, 2016 Edition was developed by Journal of Oral Implantology Editor-in-Chief, Dr. James Rutkowski, and a team of JOI Associate Editors and contributors over the past two years.

The new digital flipbook format was developed with the goal of enhancing the Glossary's audience as well as improving content dissemination and ease of use. The tools and features of the digital edition allow readers to more easily find the terms and definitions they need in an online, searchable format.

The Glossary is a valuable resource for individuals looking to add implantology to their dental practice, students studying for standardized exams as well as veteran professionals within the community. The JOI Glossary of Terms, 2016 Edition can be accessed at joionline.org.



# Corporate Dentistry:

# Some Dentists Swear by Them; Others Swear at Them

### By Chris Martin

They are either the savior to the country's oral health care access challenge or the beginning of the end of private practice dentistry.

"They" in this case are Dental Support Organizations (DSO), also known as Corporate Dentistry. While they have been around for some time now, their growing prominence has dentists divided on their role in dentistry. Many dentists question the growing infiltration of corporate dentistry while others view them as a serious practice model that merits consideration. For some dentists, DSOs represent a viable career path or transition to retirement. For others, DSOs are intrusions into clinical care that interfere with the dentist-patient relationship.

The Association of Dental Support Organizations, which has 40 member companies operating in 44 different states, reports that it provides support to more than 13,000 dentists across the U.S., as well as Australia, Canada, New Zealand, and the United Kingdom. A recent study by the American Dental Association based on 2015 data estimated that seven percent of dentists now work in a DSO setting.

Predictions about future market penetration by DSOs vary. For example, in a report published by *Dentaltown* in April 2014, Rick Workman, DMD, who is CEO of Heartland Dental, believes that "in the next 20 years half of all dentists will be affiliated with a DSO-supported practice." Charles Blair, DDS, and CEO of Charles Blair & Associates, Inc., publisher of *Insurance Solutions Newsletter,* forecasted "corporations will be 20 percent of the market in ten years."

One thing that most dentists agree on is DSOs are a subject of heightened interest. Noted dental management consultant, Dr. Roger Levin of the Levin Group, moderated a session on Small Group Practices at the 2016 American Dental Association Annual Meeting that was well attended. Levin fielded several questions from attendees. "The most common questions I heard focused on the future of DSOs and where this trend might be headed," Levin said. "DSOs are a dental practice model that is now part of the profession and represents a career option for many new dentists."

# Retiring dentist finds new life with DSO sale

Perhaps no one dentist reflects both disparate world views about DSOs more than Dr. David Gimer, a 64-year-old dentist from Iowa Falls, Iowa. Like many of his colleagues, Gimer was skeptical of DSOs and viewed their presence at dental meetings in a detached and wary manner. He had heard stories about production rates and bad contracts and figured that DSOs were for the younger crowd. Indeed, statistics presented by the American Dental Association on a recent webinar suggest that is the case—16.3 percent of dentists age 21 to 34 report a DSO affiliation.

As Gimer neared retirement, he prepared his practice for sale so he could begin his transition to his golden years. He had his practice appraised and the broker put lowa Implant and Family Dentistry up for sale. Then he waited for the offers to pour in. And he waited. And waited. Six months after putting his practice up for sale, he realized there might not be any takers and he might have to either keep working or adjust his strategy.

Regardless of who you sell your practice to, Levin recommends you develop a five-to-eight-year plan that positions your practice in the best possible light.

"Many dentists lose between 30 and 40 percent of their practice's value in the time before selling," he said.

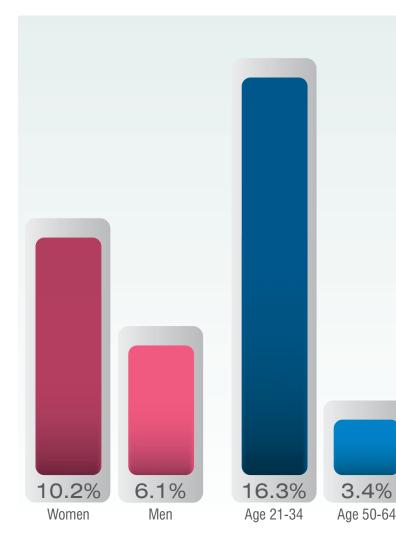
"I started to think that my practice might go the same way as my parents' business which had to be closed because they couldn't find a buyer," he said.

Then, he started to get offers from DSOs that were seeking dental practices in the Midwest, but he was hearing negative reports from his colleagues about these companies. Still, he was looking at a very real world situation—he was a 60-year-old dentist with a practice to sell. So, he examined the offers more carefully.

Gimer said that one company, Applewhite, offered him the appraised value of his practice if he would stay on as the practicing dentist. They did not change the name of the practice. Applewhite agreed to keep him on with a salary and commission based on production while also putting some money into the practice for upgrades. In 2011, Gimer signed on with Applewhite, making a 180-degree shift from DSO skeptic to Applewhite employee.

Why the sudden change?

"My practice is unique in that I offer implants, orthodontics, and general dentistry. So, it was unrealistic that someone was going to step in with a competitive offer and take over the practice," Gimer said. Between that reality and the offer from Applewhite, Gimer signed. Three years after signing that contract, Gimer signed another contract extending his employment for another three years.



# New dentists find DSOs to be good fits

"I didn't really think I'd be enthusiastic about my DSO experience, but it's been great for me so far," said Daryn Lu, a relatively new dentist now practicing in Shawnee, Oklahoma. He graduated from the University of Oklahoma School of Dentistry in 2015.

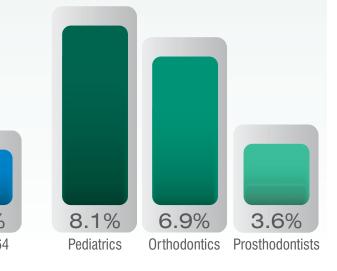
"There is a lot of talk about DSOs in dental school," Lu said. "Most people I talked to were skeptical of them." He said the talk was of production quotas and the pressure to meet those goals. But while he was serving on a Mission of Mercy dental charity event, he met a dentist who worked

### ADA: more than 7 percent of dentists affiliated with DSOs

A recent webinar hosted by the Health Policy Institute from the American Dental Association estimates than 7.4 percent of dentists are affiliated with a Dental Support Organization. The ADA's data is culled from its 2015 master data base. ADA considers a dentist to be affiliated with a DSO if one or more locations they practice in is a member of the Association of Dental Support Organizations or American Dental Partners, Kool Smiles, or Western Dental.

The report found that DSO participation skews slightly toward women (10.2 percent vs 6.1 percent) and younger dentists (16.3 percent of dentists age 21 to 34 report a DSO affiliation) compared to older dentists (3.4 percent age 50 to 64 are DSO-affiliated).

DSO penetration by specialty is more evenly spread out with pediatrics (8.1 percent) and orthodontics (6.9 percent) reporting the most DSO-affiliated dentists, while only 3.6 percent of prosthodontists work in DSO practices.



for one of the DSOs and she was more positive about her experience.

"In dental school, we are not taught much about business or practice management," he said. Unlike some of his fellow students, he did not come from a family of dentists and did not grow up in the field. But like virtually all his fellow new graduates, Lu graduated with heavy student-loan debt.

After his conversation at the Mission of Mercy event, Lu sought out some DSO recruiters and began to research this career option in greater detail.

Eventually, he settled on a Heartland practice in Shawnee, where he works with another dentist who graduated from the University of Oklahoma School of Dentistry. The practice he works in was purchased by Heartland from another DSO called My Dentist.

Another recent dental school graduate, Dr. Jason Watts, also did his homework before signing with a Heartland practice in Cape Coral, Florida.

"My mom is a practice consultant and a private practice dentist, so I had plenty of advice," he said. Watts is generally happy with his choice, saying that "I view it as a possible stepping stone to other opportunities."

Watt's echoed Lu's comments about the benefits of his DSO training, saying his Heartland practice has taught him about patient communication, treatment planning, and scheduling. Also like Lu, Watts said that Heartland has not displayed any top-down corporate control on his practice.

"I have not experienced any pressure from Heartland on how to practice or treat patients," he said.

Lu said he was not dissuaded by negative rumors about DSOs, saying his experience has been very positive and he believes that all the focus on DSOs will drive out the bad players.

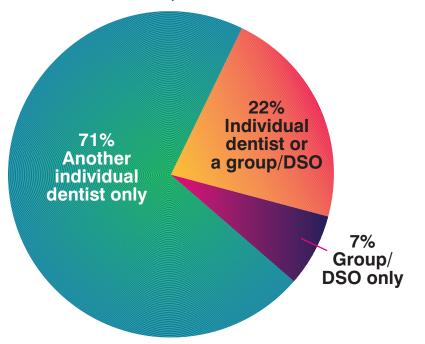
"A lot of the larger DSOs realize there is a negative perception out there, so they make sure these practices are led by doctors who have the final say," Lu said.

And what of the upsides he has experienced so far?

"The training has been great. The first three weekends I worked there, I spent receiving leadership training on case management presentation and front-office operations," he said. Lu said Heartland has recruited senior dentists to provide mentoring and guidance.

"I was at a leadership course this past weekend and was in a course taught by a former private practice dentist who had signed with Heartland, so we got the opportunity to learn from someone

# Who would dentists prefer to sell their practice to:



Source: Tony Stefanou, DMD, "What Dentists Really Think of DSOs (A Survey)," posted 8/26/2016 on Groupdentistrynow.com

who had been in the field for a long time. I got to sit down with him over dinner and really pick his brain and have a candid conversation with him."

As an employee, Lu said he has the long-term option to stay or move into private practice. Either way, he said Heartland has been great to work with.

"If Heartland is not my long-term goal, affiliating with them is still a great option," he said.

# Not New to the Practice or Ready to Retire?

Let's say you are among the 100,000 or so dentists who are not new graduates or imminent retirees. What, then, does the DSO trend mean to you? For several dentists AAID spoke to about this article, it often means little, in the way of added competitive pressure. Still others relate cautionary tales of negotiating with DSOs.

Dr. Matt Young of Young Dental SF in San Francisco sums up what many dentists said.

"I don't think of DSOs in a competitive sense. I'm more focused on competing for new patients. I believe there are plenty of patients to go around," he said. Young's practice is noteworthy because it's in a building with approximately 150 other practices, so he is accustomed to seeing his competitor down the hall and may not fret about a new office opening down the street. Young said that DSOs merely reinforce that private practice dentists need to up their game when it comes to matching a competitor's strength.

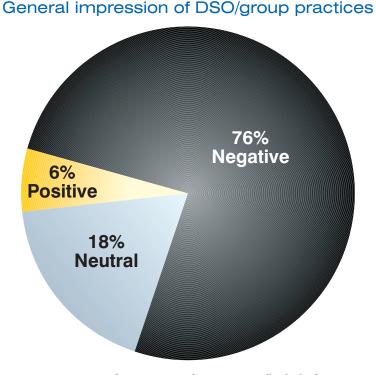
"For instance, we adjusted our hours to improve patient convenience to offer more appointments for working patients who cannot come in during the day," he said. Young said DSOs market well, have expanded hours, and provide flexible financing for patients. He advised other dentists to examine their practice in light of those strengths to make sure they can match their strengths where possible.

Dr. Ira Goldberg echoes Dr. Young's comments about DSOs as competitors.

"We do have a few in the area (Morris County, New Jersey), but I don't really consider them competitors. It's nice having them so we don't get pressure from people who are looking for emergency-based services or limited-care services when they really are more concerned about insurance coverage. We like to attract patients for comprehensive care and build long-term relationships," he said.

Goldberg also pointed out one compelling irony that all implant dentists may take heart in hearing.

"Some of the DSOs actually help my practice because their ads raise so much awareness about implants," he said. "However, there is some overselling of one-day implants and we do treat patients who have unrealistic expectations."



SOURCE: Source: Tony Stefanou, DMD, "What Dentists Really Think of DSOs (A Survey)," posted 8/26/2016 on Groupdentistrynow.com

### In the belly of the beast

Still other dentists with an inside view of DSOs have had different experiences. Consider the case of Dr. Randall Rose from Clarksville Dental Spa in Clarksville, Tennessee. After 33 years in private practice, Dr. Rose was tired of being the boss. He made inquiries with a local DSO and from there the recruitment was on.

"At the time I sold to the DSO, I was actually without an associate and was a sole practitioner. In retrospect, I did not appreciate how good things were in those years. Sometimes, as the song says, 'You don't know what you've got until it's gone'," he said. Rose could not provide details of his encounter and negotiations with his first DSO but characterized life as "emotional trauma with life- and career-changing events. Fortunately, I have a strong faith, a fantastic wife, family, and colleagues who were supportive during a very difficult and uncertain time. I was out of work for only 10 weeks."

Rose urges dentists, especially young dentists, to read and understand any contract presented by a DSO.

"For a younger doctor who is anxious to go to work and gain experience, a DSO can be a good place to get a few years' experience," he said. "But you should consider negotiating from the side of it being the best thing in the world for you while realizing the possibility that the contract can be canceled."

Rose sums up the dichotomy that DSOs present.

"DSOs, when run properly with the right motivation and goals, can provide a channel for new dentists to find employment and retiring dentists with fair market compensation for their practice. Unfortunately, like most of the corporate world, the business end of an operation can be swayed from original goals by greed and pressure on the providers to hit the numbers."

# What's said online about the corporate dentistry experience?

According to a survey posted on groupden tistrynow.com, 76% of dentists responded that their "general impression" of DSO/group practices are negative. Although this is down from 84% reported in the survey conducted two years previously, only 6% stated they had a positive "general impression." Eighteen percent said they were neutral.

Not all dentists are pleased with their experience working in corporate dentistry. Glassdoor and Indeed, two major online job services, includes reviews of companies by current and former employees. Although the reviews are anonymous, they do point out concerns about how the practice was disappointing and the structure did not allow for the dentists to give quality patient care.

Some of the concerns raised included:

- · Over treatment of patients
- · Dentist not the leader of the practice
- Lack of training of front staff and assistants
- Staff turnover
- Incentives to provide excessive or unnecessary treatment
- · Lack of long-term rapport with patients

### How to compete with a DSO practice

As some of the online comments suggest, many dentists may be worried about a DSO practice opening up in their market. If the conversation of DSOs comes up and you are honest, you are probably living in fear, too, according to Alex Nottingham of All Star Dental Academy, a firm that specializes in providing customer service training for dental practices.

"About 10 percent of dentists live in fear that a DSO practice will open near them," Nottingham said. And if you are one of those dentists, it's likely you may be calling Nottingham soon, primarily because solo, private practice dentists will have a difficult time competing with a DSO practice.

DSOs have economies of scale. They can buy in bulk and extract savings from suppliers and service providers that individual dentists may not be able to match. According to Dr. Charles Blair, in an article in *Dental Economics*, DSOs negotiate with insurance companies and are able to arrange a higher fee for PPO reimbursement. Most individual practice owners don't realize they can do this as well. "On average, dentists are successful with their fee negotiations about one-third of the time," Blair wrote. "In some cases, you're permitted to raise the fees of ten procedures of your choosing several percent above the norm," he noted.

According to Nottingham, DSOs train. And train. And train some more. This commitment to training and support, especially in the front-office area, is one the biggest competitive advantages some DSOs offer compared to their private practice competitors.

"The truth is, most dentists do not train well," Nottingham said. "They start, but don't sustain the effort." The typical dentist must be the practice manager, CEO, human resources manager and, of course, dentist. The added burden of providing regular training may be too much to add to their plate, Nottingham said. A national survey from the American Academy of Cosmetic Dentistry found that A national survey from the American Academy of Cosmetic Dentistry found that 97 percent of dentists train their staff only once a year.

97 percent of dentists train their staff only once a year.

Nottingham looks at how customer service training can help a dentist's bottom line. He has shown that his methods can help double the number of new patients into a practice.

"Customer service in health care is not good now. So, if you improve your customer service, you can really stand out because patients are surprised," Nottingham pointed out.

Levin agrees with Nottingham's push on customer service but goes further.

"Dentists need to have management systems in place that emphasize case management," he said. "If a DSO dental practice opens down the street, it should serve as a reminder that your practice needs to be lean, with low overhead, and a regular and disciplined staff training program in place."

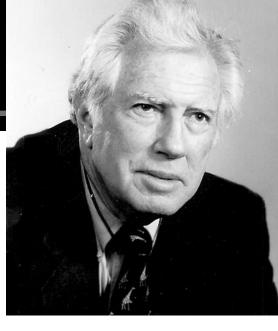
### Where is this heading?

Will the solo-practitioner, private practice model disappear and be replaced by DSOs? Probably not, but DSOs will continue to grow, especially given the number of new graduates who are becoming employed by them.

However the business model for successfully delivering dental services will change. According to Rick and Chuck Cohen, owners of Benco Dental, "we may see more group practices as dentists see the benefits of banding together in small groups." They also see a new segment that will grow quickly, perhaps faster than corporate dentistry: Community Health Centers — nonprofit organizations designed to provide dentistry to lower-income families and individuals.

While there were many valid points of concern, it was generally agreed that every provider in dentistry should be oriented to deliver a proper diagnosis and quality services. That remains preeminent whether the professionals are self-employed or employees of a large corporate structure or anything in between.

Chris Martin, MPH, has more than 20 years' experience in communications and public relations, including more than 15 in various health care positions. He worked for the American Osteopathic Association, American Dental Association, the Blue Cross and Blue Shield Association, and Rush University Medical Center. He is currently with the David James Group — www.davidjamesgroup.com.



# Dr. Leonard Linkow: "Father of Dental Implants"

**Editor's Note: Dr. Leonard Linkow,** a past president and Honored Fellow of the AAID and Diplomate of the American Board of Oral Implantology/Implant Dentistry, passed away on January 26, 2017 at the age of 90. He is considered by many to have been the "father of dental implants." Although recruited by the New York Giants to play professional baseball, Dr. Linkow instead entered the U.S. Army. Upon his discharge, he attended the N.Y.U. Dental School. Dr. Linkow was the only dentist to date nominated for the Nobel Prize in Medicine. His alma mater named a chair in Implantology in his name in 1992.

We asked several colleagues from his early days in implant dentistry to share some of their personal memories of their time with Dr. Linkow. Here are a few that we received.

### From: Dr. Shankar Iyer, President, American Academy of Implant Dentistry

The year was 1991 — a cold blustery Halloween day in Chicago. The icon I had admired during my graduate studies was introduced to me by Phyllis St. John during the annual meeting. I came face to face with someone who I considered as the



DeBakey of implant dentistry. My feelings are still fresh in my mind. Dr. Leonard Linkow is not just a pioneer or an outstanding clinician. To me, he is the embodiment of substance, character, genuineness, tough, resistant, resilience, passion, and consistence. He is an adrenalized trailblazer who can only be matched by his own talents. His 90th birthday was marked by his wit, charm, astounding memories, and dedication to his friends. He is an example to live by and everyone who knows him well can only attest to his unflinching determination to make implant dentistry better every day. It was my honor to present with him as he recounted his 60-year journey in implant dentistry at our 2012 Annual Conference in Washington, D.C. I am still in shock over his meticulous documentation of every case that he had treated. I considered it my utmost privilege to have received his treasure trove of microfiches, slides, and 8mm films that took two trips using two U-haul trucks to transport to my office. It will take me two decades to sift through his work and accomplishments. One day, I hope to turn it into a complete archive.

He is the reason why we as restorative dentists are placing implants today in our practices. The Academy is indeed saddened to see the mentor Dr. Linkow and his beloved mentee **Dr. Carl Misch** snatched away successively by the ravages of destiny in the past months. We deeply mourn these giants and will always remember them each moment we pick up a radiograph to treatmentplan implant cases.

# From: Dr. Jack Lemons, UAB University Professor Emeritus, School of Dentistry, Medicine and Engineering

I met, came to know, and came to appreciate the vigor of Dr. Leonard Linkow (Len) in the late 1960s while I was a junior faculty member and participant in educational/research meetings during the evolving biomaterials engineering



program at Clemson University. This was a very dynamic period, in that some questioned the need for dental implants; however, no one questioned the need for research.

Sometimes, as a moderator, the speakers (strong type-A-plus personalities) had to be kept apart so that post-lecture discussions did not escalate. After 1970, at the University of Alabama at Birmingham, participation evolved to regular exchanges between the south and northeastern groups of AAID, plus the evolving Alabama Dental Implant Study Group. All of these collaborations, plus faculty responsibilities, resulted in many mutual travels, professional meetings, and lectures throughout the world, and later, co-authored publications. Often, we expressed and debated different opinions (mine related to biomaterials and biomechanics). We could actively disagree without hostility.

Len was also very interested in the technology of designing, manufacturing, and evaluating dental implants. My materials engineering and experience related to devices and biocompatibility helped to keep the discussions mutually beneficial. Activities while traveling and at meetings extended to functions starting in the evening, continuing with follow-up discussions and lectures the next morning. No matter what time had been set for the lecture, Len was always ready to lecture with more than 100 slides.

Local alumni and faculty recommendations resulted in Len providing a keynote lecture at the UAB School of Dentistry 25th-Year Alumni Reunion. Len showed so many slides and so rapidly, I was concerned about motion sickness. I was present when several "classic" events happened and the basics of the stories were true. However, as the stories were enhanced when repeated by others, exaggerations ever increased. We often laughed about the changes after a year or two, of others retelling about the events. The "classic" words: "What! I brought all of these slides!", "Stop bleeding!" and "I invented that many years ago!" were said, sometimes more than once.

Often others said (now in past tense), "He walked and ran to a different drummer." I agree with that thought. Interaction over five decades provided insight into the many unique aspects of Len; especially respect for his knowledge, energy, and innovation. Some years past, I received a request to submit a curriculum vitae to be considered for the L. Linkow Academic Professor position at New York University. Although I declined, feeling that many others were more qualified, I felt greatly honored to have been considered.

Within the past few years, meetings and discussions have been limited. At each, the discussions were very calm and very different, with a focus on "information transfer." This related to "what, when and where, plus in what form (venue)" should the "attempt to transfer" take place (lectures, laboratory models, surgery, articles, books, etc.). This also extended to "what will be retained by the discipline?"

It has been a very sad year so far as three close friends who have been very important to implant dentistry and me personally have been lost: Martha Bidez, Carl Misch and Leonard Linkow. It has been a pleasure and honor to interact with special people with special abilities. Dr. Linkow was special amongst many and he will be greatly missed. Related to information transfer, I believe Len's legacy, as with the others, will continue.

### From: Dr. Jack Hahn

Dr. Leonard Linkow was my idol in my early days of venturing into the world of implant dentistry. He definitely opened the door for me when I took his two-day course in New York in December of 1969. It was a course on placing



endosseous blades and of course you had to purchase the kit and implants in order to take the course. From what Lenny showed us, I was able to place my first implant in March of 1970. After that experience, I didn't want to do anything but implants.

I called Lenny telling him how excited I was and thanked him for changing my professional life. He said "in this business kid, you got to be tough." He always called me kid. I soon learned what he meant. The profession in those days didn't accept implant dentistry. Lenny took a lot of arrows in his back and fought vigorously for what he believed. After many years of hard work, Lenny showed the non-believers that he was right, helping thousands of patients to a better quality of life. I also had to deal with a lot of criticism from local colleagues.

Lenny was tough. He use to brag to me that he could still hit an 80-mile-per-hour fastball. I would call Lenny and complain that colleagues were saying terrible things about me. Lenny's answer to me was "you ain't tough enough kid; if you can't stand the heat, get out of the kitchen." He was like my high school football coach, making me persevere and continue to fight for what I believed.

Lenny was like family. He came to Cincinnati for our daughter's wedding. He sat front and center in 2004 when I received the Aaron Gershkoff Award. In my speech, I asked Lenny to stand and I said that I didn't know Dr. Gershkoff, who was known for his compassion and a giving educator, but I was fortunate to have Dr. Linkow in my life, as he was my **Aaron Gershkoff.** 



(L-R) Drs. Leonard Linkow, Ken Judy, and Carl Misch.



(L-R) Drs. David Hochberg, Bernee Dunson, Leonard Linkow, Shankar Iyer, and Frank LaMar.

### From: Dr. Arthur Ashman, Professor and Founder, Ashman Department of Periodontics and Implant Dentistry; New York University School of Dentistry

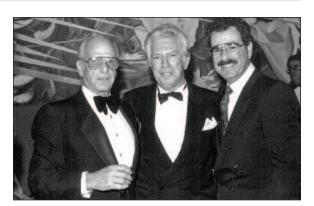
When I think of Leonard Linkow today, our association for almost 50 years of my professional and personal life comes to mind. I think about the opportunity he gave to me, as a 27-year-old novice, to begin my professional dental career



after returning from a surgical residency in the Army. Lenny was just opening his office in Manhattan and needed a new hire to help him. When it came to the practice of implant dentistry, we were a team: We worked together, we shared, we talked, we argued, and we always came to a treatment plan that was beneficial for the patient.

I think about our shared professional life and the person who would come to mean so much to me in so many ways: as a mentor, colleague, and as friends. I think about a fellow avid and talented baseball player and our trips together to Dodger Fantasy Camp before spring training. I think about double dating. I personally think about learning so much from him that I was able to go out on my own and develop a very successful rehabilitative implant practice just down the street from his. I think about the research we performed together.

I think about forming the first implant department in the world at New York University College of Dentistry. I think of the many dentists who joined together to raise money to name the first implant



(L-R) Drs. Herb Gross, Leonard Linkow, and Arthur Ashman.

professorship after him at NYU. They had been lectured to at meetings, taught and mentored in our office on the techniques and approaches to implant dentistry, and all had deep gratitude and respect for Lenny. Lastly, I think about him recommending me for membership to the AAID, the first implant dentistry organization, as the youngest member accepted since its inception in 1955. At the time, we barely had 100 members.

Leonard Linkow was uniquely driven to expand the various modalities of implant dentistry. Modern implant practice as we know it today would never have been possible without his initial hard push, his inventiveness, and his oversight. He was indeed one of a kind. He pushed the boundaries of established practice beyond what we thought was possible. Knowing him, being taught by him, and being encouraged by him was one of the really special experiences of my life. I practiced just up the block on Central Park South in Manhattan from him for 40 years...We were never out of touch. I shall miss him greatly, and implant dentistry has lost an icon.



Dr. Leonard Linkow with Arthur Ashman at a Dodger Fantasy Camp.

# BUSINESSBITE



Shawn M. Johnson, ChFC, CLU, CLTC

# Starting a Practice? Pointers on Risk Management

Duying or starting a practice can seem like a daunting task fraught with countless details. In our work with dentists, we frequently come across doctors who particularly need help navigating the insurance landscape. Here are some of the most common issues we run across.

### If you're borrowing money, the bank will want protection

In order to secure a practice loan, many banks require various insurance policies to protect their exposure should

Business loan protection disability insurance is designed to pay your monthly practice loan payment in the event of a total disability.

> something happen to you or the physical practice itself. Traditionally, one of those requirements is disability insurance to cover the monthly payment. While it's tempting to want to use your personal disability income insurance for this purpose, resist the urge.

Instead, you should consider one or both of the disability policies designed to protect this risk: business overhead expense insurance and/or business loan protection (also referred to as reducing term disability insurance). Business overhead expense insurance is a policy that helps pay the fixed costs of running the business in the event you are unable to work due to an injury or illness and typically pays for 12 to 24 months. Business loan protection disability insurance is designed to pay your monthly practice loan payment in the event of a total disability.

Not only are both policies more costeffective solutions when compared to using your personal coverage, but they're also more suitable. Consider a hypothetical scenario where you borrow \$400,000 to start a practice, but a few months after opening the doors, you're injured and can't work.

While you were wise to buy personal disability coverage at the conclusion of your training, that benefit amount is barely enough to cover your practice loan and rent payments. You're still left worrying about how to pay the other costs of the office, as well as your own personal expenses.

In this situation, a business overhead disability policy would alleviate the pressure of the fixed office expenses such as rent and staff salaries while you're assessing whether or not you can return. If you can return, you'll come back to a more intact operation. If not, the business loan disability policy will pick up the monthly loan payments. This is especially critical with new practices as their initial value may not exceed the amount of outstanding debt. All the while, though, your personal disability coverage is helping you meet your expenses outside of the practice.

# Why the bank should not be the beneficiary of your life insurance policy

Banks typically ask that you obtain and pay for life insurance to cover the amount of the loan. Every situation is different, but usually the type of insurance you will purchase to cover a bank loan will be inexpensive term insurance named "term" because it simply provides protection for a fixed period of time. It makes good sense not to make the bank the beneficiary of your policy. Instead, you will want to use what's called a "collateral assignment." This ensures that in the event of your death, only the outstanding loan amount is repaid to the bank, and any balance of the death benefit goes to your loved ones.

### Obtain the right kind of property insurance

Another area of great importance when you open a practice is obtaining the right kinds and amounts of property insurance. Property insurance actually encompasses several different types of insurance, which are packaged into what's known as a Business Owner's Policy (BOP). The key components of this policy are:

- Contents coverage, which provides money to replace all of your "stuff" inside the practice such as computers, chairs, supplies, etc.
- Build-out coverage, which provides funding to rebuild the interior of the practice in the event of damage.
- Business Income Interruption, which reimburses the practice for loss of revenue in the event the space is totally or partially unusable and you're unable to see patients.
- General liability to protect the practice's liability (e.g., slip & fall)

Both the bank and landlord will typically require evidence of sufficient coverage prior to closing and/or occupying the space.

### Other liability concerns

In addition to property coverage, there are a few other liability concerns a practice owner should address. Employment Practices Liability Insurance (EPLI) protects your liability in the event an employee sues you for wrongful termination, harassment or discrimination. Although a traditional property policy has a very small amount of coverage allotted for this risk, an enhanced limit or separate policy needs to be considered.

Another addition to the property policy is coverage for "Data Breach." It, too, goes by different monikers (e.g., Cyber Liability), but protects the practice in the event confidential patient data is compromised. Not only will it help offset expenses associated with notifying patients of a breach and providing the appropriate identity monitoring, it also offers liability protection in the event of a patient lawsuit.

Last, but not least, many states require employers to carry workers' compensation insurance for their employees. This is a form of insurance that provides wage replacement and medical benefits to employees injured in the course of employment. It is a separate policy from your BOP.

### If you're starting a practice with a partner

All multi-professional practices should have a buy-sell agreement that addresses both death and disability.

Buy-sell agreements are contracts between business owners for the purchase and sale of a practice in the event of death, disability, or retirement. The buy-sell agreement will establish a pricing formula for the practice, serve to have a ready buyer for the practice, and may be used to value the business interest for federal estate tax purposes. It's strongly recommended that both partners insure their agreement with life and disability insurance.

In the event of a death, the practice should have life insurance on each partner in order to provide an immediate funding source for the deceased partner's share of the practice. Ensuring the policies have the correct owner and beneficiaries is critical to avoiding potential tax and legal hurdles.

The situation can be more complicated in the event of a disability as most partnership agreements don't require a disabled partner to sell their portion of the practice unless they've been disabled for 12 months. During that time, however, determining how the disabled partner's share of the expenses gets paid can be a concern. This is why each owner should carry business overhead disability coverage.

At the end of 12 months, the non-disabled partner has a

### see Business Bite p. 32

# LEGALBITE



How to Apologize to a Patient

By Frank Recker, DDS, JD

**Editor's Note:** The following article was originally published in January 2013, in AAID's Business Bite. We thought this was valuable advice in case you missed seeing the original or simply wanted a refresher on a legal issue. Practitioners, unfortunately, may face more and more in today's litigious society.

**QUESTION:** An extensive treatment plan was completed on one of my more difficult patients. Along the way, we encountered just about everything that could go wrong. I was confident that the treatment was all performed properly, but I apologized to the patient several times for each difficulty we encountered.

# Studies have shown that patients are far more reluctant to institute litigation if they believe empathy or compassion is felt by the health care provider.

The patient is now hinting that I should pay her for what she "went through," because she obviously interpreted my apologies as admitting some kind of wrongdoing. Should I never be courteous and extend an apology of any kind to a patient for some discomfort or any treatment difficulty they encounter? **ANSWER:** Dentists and other health care practitioners are often confronted with a situation where the treatment was rendered appropriately, but the patient is unhappy with the results. Another scenario is when an unforeseen event occurs, such as a temporary paresthesia or difficult postoperative healing period, and every caring health care provider feels "empathy" for the patient. Oftentimes, I am asked whether an apology should be noted in the records, or just not made at all.

It is clear that when patients feel that the practitioner relates to what they are going through, the patient is happier. Studies have shown that patients are far more reluctant to institute litigation if they believe empathy or compassion is felt by the health care provider. And public policy, as expressed in many state statutes, encourages expressions of honest compassion and open communication with patients and families following unanticipated outcomes. To that end, about 36 state legislatures, plus the District of Columbia, have enacted "apology statutes," which allow physicians and dentists to speak openly with patients without fear of retribution in the legal system.

The Ohio apology statute is one example of the wording and objectives of such a law:

"In any civil action brought by an alleged victim of an unanticipated outcome of medical care...any and all statements, affirmations, gestures, or conduct expressing an apology, sympathy, commiseration, condolence, compassion or a general sense of benevolence that are made by a health care provider or an employee of a health care provider to the alleged victim, a relative of the alleged victim, and that relate to the discomfort, pain, suffering, injury or death of the alleged victim as a result of the unanticipated outcome...are inadmissible as evidence of an admission of liability or as evidence of an admission against interest."

Clearly the purpose of such "apology" statutes is to encourage expressions of compassion without exposing the practitioner to legal jeopardy. However, such laws do not shield statements or expressions that admit liability or fault. For example, one case held that the physician saying "I take full responsibility for the outcome and it was my fault" was admissible. Another example was when a practitioner said he was the "captain of the ship" and assumed responsibility was deemed to be an admission of guilt and was admissible in court in a subsequent malpractice suit.

The bottom line is that you can be compassionate, and express an apology for what the patient is encountering or what difficulties were experienced, but without making statements that constitute "admissions" or guilt of malpractice. When I first entered the practice of dentistry many years ago, a very old local dental practitioner had just died. Upon seeing many of his former patients, I was amazed at the substandard dentistry he had rendered. But in virtually every instance, the patients praised his skills and his likeability. In short, if they love you, they are very reluctant to take any adverse action against you! That is the objective of "apology" laws.

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# CLINICALBITE





Ryder Moses-Kessler, MD, MS

# Torsades de Pointes Risk in Dental Implant Surgery

As an implant dentist, particularly one providing the surgical phase of implant dentistry, you sometimes encounter unexpected adverse reactions from patients to the procedure. Torsades de Pointes ("twisting of the points")<sup>1</sup> can be particularly dangerous in the implant surgery setting.

Torsades de pointes is associated with a baseline prolonged QT interval on an electrocardiogram—EKG or ECG. It is often initiated by bradycardia or can be pause dependent (i.e., a premature ventricular contraction or PVC) with a compensatory pause followed by a second PVC). A prolonged QT interval can be congenital or due to medications, metabolic derangements, and structural heart disease.

Drugs Causing QT Prolongation							
Antipsychotics	Type 1A antiarrhythmics	Type 1C antiarrhythmics	Class III antiarrhythmics				
<ul> <li>Chlorpromazine</li> <li>Haloperidol</li> <li>Droperidol</li> <li>Quetiapine</li> <li>Olanzapine</li> <li>Amisulpride</li> <li>Thioridazine</li> </ul>	<ul> <li>Quinidine</li> <li>Procainamide</li> <li>Disopyramide</li> </ul>	• Flecainide • Encainide	• Sotalol • Amiodarone				
Tricyclic antidepressants	Other antidepressants	Antihistamines	Other				
<ul> <li>Amitriptyline</li> <li>Doxepin</li> <li>Imipramine</li> <li>Nortriptyline</li> <li>Desipramine</li> </ul>	<ul> <li>Mianserin</li> <li>Citalopram</li> <li>Escitalopram</li> <li>Venlafaxine</li> <li>Bupropion</li> <li>Moclobemide</li> </ul>	<ul> <li>Diphenhydramine</li> <li>Astemizole</li> <li>Loratidine</li> <li>Terfanadine</li> </ul>	<ul> <li>Chloroquine</li> <li>Hydroxychloroquine</li> <li>Quinine</li> <li>Macrolides <ul> <li>Erythromycin</li> <li>Clarithromycin</li> </ul> </li> </ul>				

Although it is estimated to exist in 1 of every 10,000 individuals—it is also estimated to be undiagnosed in 10 to 15% of patients.<sup>2</sup> Forty-three percent of torsades de pointes events, in those patients with congenital LQTS, have been connected with episodes of emotional stress.<sup>3</sup> Visits to the dentist, not to mention the prospect of dental surgery, can be stressful experiences for many patients.

Many dentists prescribe antibiotics prior to dental treatment as a presurgical antibiotic prophylaxis or because of a pre-existing medical condition. An article in the Journal of Periodontology suggested the use of azithromycin instead of amoxicillin for premedication due to its anti-inflammatory properties.4 Dr. James Rutkowski, in an editorial published in the Journal of Oral Implantology, suggested that implant dentists should exercise caution when prescribing azithromycin because of its proclivity to cause Long QT interval in patients who have existing torsades de pointes.5 He points out that this is less of an issue for patients not affected by cardiovascular disease or those receiving a single azithromycin dose versus prolonged treatments.

Emotional stress prior to surgery can aggravate an existing cardiac arrhythmia. General anesthesia used during implant surgery can also be a contributing factor. The management of anesthesia in a patient with LQTS

carries a very high risk of intraoperative arrhythmias, which may prove difficult to treat.<sup>6</sup> Paralytics such as succinylcholine should be avoided because of its autonomic effects and potassium release. It will prolong the QT interval in patients with LQTS unless the patient is treated with a priming dose of tubocurarine.<sup>7</sup> The general anesthetic/deep sedation adjunct ketamine should be avoided in patients with LQTS because of its propensity to stimulate the sympathetic nervous system.<sup>8</sup> However cardiac arrhythmias can be reduced by perioperative administration of oral or IV benzodiazepines.9 Implant surgery performed with conscious sedation in combination with local anesthesia (prudent doses) or local anesthesia (again prudent doses) only, is less likely to increase the level of risk. Nitrous oxide has been used without reported adverse effects and may also help to reduce stress and anxiety.11

Outward clinical manifestations of congenital LQTS can be highly variable or entirely absent. Symptoms typically result from an arrhythmia and can include palpitations, presyncope, syncope, seizures, or cardiac arrest. Due to the potential for limited symptoms, the best way to assure yourself that your patient is not susceptible to torsades de pointes is to conduct an EKG prior to the administration of anesthesia and the surgical procedure. If that is not done, at least review the heart health history, as well as family cardiac history, and ask the patient about the medications he or she is taking.

Several medications can also trigger torsades de pointes. In addition to antiarrhythmics, some antipsychotics, antidepressants, and antihistamines can induce cardiac arrhythmia. (See page 22 for a chart of drugs that can cause QT prolongation.) It has also been reported that patients being treated with methadone for drug addiction or chronic pain management are at risk for torsades de pointes, with the higher dosages causing greater risk of complications.<sup>12</sup>

Because of the connection between emotional stress and torsades de pointes, monitor the patient carefully after surgery. It is crucial to maintain a calm and quiet supervised environment as the patient recovers from the effects of the anesthesia.

It will be clear that a patient is experiencing a complete torsades de pointes event during dental surgery because he or she will suddenly lose consciousness. The episode can be short and the heart will often correct itself spontaniously seconds later. At this point, the patient will regain consciousness, will be hemodynamically stable, and immediate defibrillation is not indicated.

Short of losing consciousness, the patient may experience postoperative syncope, nausea, and vomiting. Avoid droperidol as it can prolong the QT interval and carries a "black box" warning for putting patients at risk for fatal arrhythmias.<sup>13</sup>

If a patient does not quickly regain consciousness, first assess the ABCs while charging the external defibrillator in your office. If the patient is hemodynamically unstable or has no pulse, begin Advanced Cardio Life Support immediately by applying CPR and using the external defibrillator as appropriate. And of course, call 911 to have the patient immediately rushed to the hospital for emergency treatment.

Torsades de pointes may be a complication that most dentists will not encounter. However, implant dentists performing surgery with an anesthesia should be aware of the potential of this complication, review medical history for possible causes, recognize the signs of distress, and treat the patient in distress.

Dr. Sanjay S. Gill is a cardiovascular disease (cardiology) specialist in Chicago, Illinois. He graduated with honors in 2005. Having more than 12 years of diverse experiences, especially in cardiovascular disease (cardiology), Dr. Gill affiliates with many hospitals, including Presence Saint Joseph Hospital – Chicago and Advocate Illinois Masonic Medical Center. He is in private practice at lincolnparkheartcenter.com

Dr. Ryder Moses-Kessler, a graduate of the University of Illinois at Chicago College of Medicine, earned her Master of Science in Biotechnology and Chemical Sciences from Roosevelt University. She is an intern at Lutheran General in Park Ridge, Illinois and will begin her residency in physical medicine and rehabilitation at Rush University Medical Center in 2018.

- Torsades de pointes refers to an irregular, unstable polymorphic ventricular tachycardia with gradual change in amplitude and twisting of the QRS complex as seen on an EKG can be particularly dangerous in the implant surgery setting.
- Sovari A, Kocheril A, Assadi R, Baas A, Zareba W, Rosero S. Long QT syndrome. Available at: http://emedicine.medscape.com. Accessed March 23, 2017
- Modell S, Lehmann M. The long QT syndrome family or cardiac ion channelopathies: a HuGE review Genet Med 20068(3) 143– see Clinical Bite p. 66

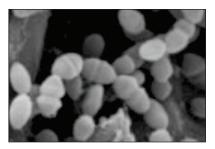
# **JOI**SAMPLER



*Editor's Note:* Because of busy schedules, you may not have time to read the dozen or so articles in each issue of the Journal of Oral Implantology. In this section of AAID News, we selected a few articles that have broad applicability to the daily practice, and provide a brief summary of key points so you can decide if you wish to read the complete article. The following articles are from Volume 43, Issue 1 (February 2017).

### RESEARCH

**Enterococcus Faecalis and Dental Implants** *Enterococcus faecalis (E faecalis)* is so pervasive in dental infections that it is used to test composite fillings, endodontic sealers, and implant abutment seals of implant designs. It is very often found in and around the roots of root canal treated teeth. *E faecalis* has been found to colonize dental implants to cause periimplantitis. *E faecalis* resists bile salts, detergents, heavy metals, ethanol, azide, and



A scanning electron microphotograph of Enterococcus faecalis.

desiccation. It can survive and grow in a temperature range of 10-45°C and survive for 30 minutes at temperatures of 60°C. Ozone is an effective antimicrobial and has been found to be effective in removal of *E faecalis* biofilm. Lasers have been shown to eliminate 100% of *E faecalis* on rough surface implants *in vitro*. After an extraction, thorough debridement of the socket is crucial, even if an implant will not be immediately placed because of the vegetative talents of *E faecalis*.

Dennis Flanagan, Enterococcus Faecalis and Dental Implants, *Journal of Oral Implantology.* 2017;43(1):8-11.

### CASE LETTER

# Covering the Implant Prosthesis Screw Access Hole: A Biological Approach to Material Selection and Technique

The contents of the implant/abutment negatively affect the peri-implant bone and the contents will leak from the implant-abutment junction. According to a 2008 survey, 59% of prosthodontic residency directors and 77% of restorative department chairpersons in the United States use cotton pellets to cover the screw access opening under the definitive restoration. This practice continues today because it is familiar, easy, and inexpensive. Covering the screw with cotton appears to be problematic because it is an open, organic, scaffold-like structure. Cotton has been shown to allow the most leakage into the implant when compared to alternatives. The authors of the Case Letter provide a stepby-step technique for the use of polytetrafluoroethylene (PTFE) tape and polyvinyl siloxane (IPVS) as alternatives that are easily retrievable, pliable, and microbiologically inert, thus minimizing the colonization and proliferation of oral flora inside the implant system.

Todd R. Schoenbaum, Chandur Wadhwani, Richard G. Stevenson, Covering the Implant Prosthesis Screw Access Hole: A Biological Approach to Material Selection and Technique, *Journal of Oral Implantology.* 2017;43(1):39-44.

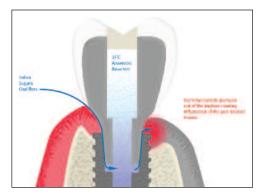


Figure 1. The implant abutment junction leaks with repeated use, which pumps oral flora and nutrients into the internal aspects of the implant and the abutment. Traditionally, cotton has been used to cover the abutment screw and has provided an environment where anaerobic bacteria propagate and are ultimately pumped into the fragile peri-implant tissues.

### **CLINICAL**

### Frequency of Prosthetic Complications Related to Implant-Borne Prosthesis in a Sleep Disorder Unit

Sleep bruxism and higher clench index have been associated with obstructive sleep apnea (OSA). Although studies have shown a significant correlation between bruxism and technical prosthetic complications, there have been no studies on the prosthetic complications in patients with OSA. The authors conducted a retrospective clinical study at a private center involving patients who had a sleep study performed and had an implant-borne prosthesis. Of the 172 patients seen in the sleep disorder units, 67 had an implant-supported prosthesis and were included in the analysis. A total of 30 complications in 22 prostheses occurred in 16 patients. The complications were:

- · Porcelain fracture (14 events)
- · Screw/implant fracture (8 events)
- Screw loosening (3 events)
- Decementation (5 events)

Most occurred in the posterior sectors.

Prosthetic complications were more frequent in cementretained prostheses with porcelain fracture the most frequent prosthetic complication in the study.

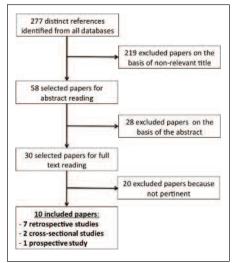
Eduardo Anitua, Juan Saracho, Gabriela Zamora Almeida, Joaquin Duran-Cantolla, Mohammad Hamdan Alkhraisat, Frequency of Prosthetic Complications Related to Implant-Borne Prosthesis in a Sleep Disorder Unit, *Journal of Oral Implantology.* 2017;43(1):19-23.

	Prosthetic Complications		
	No	Yes	P-value
Number of implants	2 (range: 1-10)	3 (range: 1-6)	.188*
Number of units	2 (range: 1-13)	4 (range: 1-8)	.009*
Type of fixation	200		
Screwed	17	7	.878
Cemented	35	15	
Type of prosthesis			
Crown	24	3	.001‡
Complete prosthesis	1	1	
Partial prosthesis	27	18	

Table 1: Description of the prostheses inserted in patients with/without prosthetic complications

### LITERATURE REVIEW

### Medication-Related Osteonecrosis of the Jaw and Dental Implant Failures: A Systematic Review



Flow chart during search of studies. According to the inclusion criteria for the selection, a total of 10 papers were included and reviewed. The final selected studies were 7 retrospective, 2 cross-sectional, and 1 prospective. There is no strong evidence supporting safe use of bisphosphonates (BP) or other antiresorptive agents prior, during, or after dentoalveolar surgery. The authors conducted a systematic review to assess the scientific literature concerning the implants placement in antiresorptive agent users and the related risk of implant failure and osteonecrosis of the jaw (ONJ) development.

The authors found that cancer patients undergoing intravenous antiresorptive therapy and also dentoalveolar procedures had a 5- to 21-fold increased risk of ONJ development than the same population who did not undergo dentoalveolar surgery, whereas oral use of antiresorptive use of antiresorptive agents seems to have a lower grade risk of ONJ.

The authors concluded antiresorptive agent therapy should be considered a risk factor until further evidence is prospectively obtained.

Riccardo Guazzo, Luca Sbricoli, Sara Ricci, Eriberto Bressan, Adriano Piattelli, Flavia Iaculli, Medication-Related Osteonecrosis of the Jaw and Dental Implant Failures: A Systematic Review, *Journal of Oral Implantology*. 2017;43(1):51-57.

# The new AAID Podcast series is

an easy and free way to find out what is happening in the world of implant dentistry. You can hear from world-renown experts and from dentists who are in the trenches, just like you. We asked members to tell us what they like about AAID Podcasts. Interested in subscribing? Visit aaid.com/podcasts



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Why do you listen to AAID Podcasts?						
Great to hear other	It is great information	To keep current on the				

dentists who are "in the trenches" discuss their day-to-day challenges in implant practice and to hear their comments about contemporary implant practice. It is great information from experts in the field of implantology. I always learn something new from each podcast. To keep current on the world of implant dentistry. I like to hear from the "titans" of implant dentistry, as well as the common implant dentist in private practice. I enjoy hearing how people became interested in implant dentistry and learning about the process of their journey.

### Of the podcasts broadcast so far, which have been your favorites?

I thoroughly enjoyed hearing one of my mentors from years ago, Dr. David Vassos, "Science from Science Fiction," (published 12/27/2016). His dry sense of humor made his journey from the early days of implant dentistry even more entertaining. I also enjoyed Cory Glenn, **DDS** in "Nuggets of Knowledge." (Published 2/7/2017)

**Dr. Cory Glenn** in "Nuggets of Knowledge." (Published 2/7/2017) He has been in incredible contributor in the field of dentistry. My favorite has been **Dr. Monty Buck** and Dr. Frank Recker "A Hot Seat in Texas" (published 11/8/2017). I find it fascinating to see AAID progress in the fight for implant dentistry to become a recognized specialty.





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# **PRESIDENT'SMESSAGE**



Ask What AAID Can Do For You

Shankar Iyer, DDS, MDS, FAAID, DBAOI/ID n my presidential inaugural address, I mentioned an antithesis to JFK's famed quote by imploring everyone to explore what AAID has done, is doing, and can do for all of its members. The AAID is the only nonprofit Academy solely dedicated to not only advancing science and research, but also to benefiting its members in the practice of dentistry.

Taking the bull by its horns, we have shaken up the very framework of how organized dentistry ... was controlling the practice of dentistry.

> Look what we have accomplished in a short period of time. Taking the bull by its horns, we have shaken up the very framework of how organized dentistry, by precluding implant dentistry as a specialty, was controlling the practice of dentistry. Our legal counsel, Frank Recker, has work feverishly every week reminding state boards of their obligation to fall in line with what constitutes the First Amendment rights to commercial free speech.

Our Admissions and Credentials Board under the chairmanship of **Dr. Mario Cabianca** has worked rigorously to maintain our credentialing standards. This has resulted in an unprecedented number of applicants taking the Associate Fellowship exam. A record 121 candidates have registered for the exams. If you are considering taking these exams in the future, we have mentors who are there to guide you through the process.

While most organizations are struggling to maintain their membership, our Membership Committee Chair, **Dr. Danny Domingue**, encourages his creative team to attract new members and enhance your member benefits. If you have an idea or thought to see how we can make our Academy even better please reach out to our Membership Committee.

The hallmark of our Academy is quality education and we are proud to announce four more MaxiCourses® were approved this year. We will have one in New York City to complement the one in Rutgers, New Jersey. The New York MaxiCourse® will be directed by **Dr. John Minichetti** who is also the director of the Las Vegas MaxiCourse®. The newly recognized Chicago Midwest MaxiCourse® will commence early next year under the leadership of Co-Directors **Dr. Natalie Wong** and **Dr. Adam Foleck.** The longsee President's Message p. 32



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### President's Message

continued from p.30

dormant Howard MaxiCourse<sup>®</sup> is being revived by our Treasurer, **Dr. Bernee Dunson. Dr. Jaime Lozada** worked with Dr. Joey Chen to organize the new China MaxiCourse<sup>®</sup> that will have most of its modules in Shanghai. Thanks to the quick review process put in place by **Dr. Dominique Rousson**, Chair of the Education Oversight Committee, the Academy is able to add new opportunities around the world much faster than in the past.

Visibility is everything. The Public Relations committee has done a phenomenal job in placing AAID's website consistently on page one of Google. To satiate your curiosity, please search your browser for keyword implant dentistry and you will see us on page one in the organic search results. Thanks to **Dr. Larry Nalitt** and his knowledgeable team for working with the industry's finest. Please reach out to Max Moses and see how your website can benefit from all of this exposure by adding a link to AAID's consumer-facing website on your own website.

We are thankful to Vincent Shuck, our Executive Director, who had stepped in to help us with the process of hiring a new executive director for our Academy. The search committee was comprised of the executive committee and Mr. Shuck. We had a great pool of applicants and the committee narrowed down the candidates who were then called to our headquarters for a face-to-face interview. The credentials of the applicants were quite admirable and the committee, guided by a matrix, objectively and unanimously selected one. The candidate, Cheryl Parker, who has served a long tenure with American Academy of Periodontology, most recently as Director, Academics, Regulatory Affairs and Advocacy, stood out from the crowd. She was presented to the Board of Trustees during a special meeting with a single-agenda item to vote on her selection as the Executive Director.

I am so fortunate to be working with a group of the finest professionals who make up both the Board and the Executive Committee. They are making my responsibilities and workload a pleasure to carry out.

So what are you waiting for? Contact your colleagues who volunteer as committee chairs or members of the Board of Trustees and of course our dedicated and helpful staff at our headquarters in Chicago. You cannot have a better ally in your practice than the AAID. We take pride in your success and want you to know that you have 6,000 others like you all over the world who are taking advantage of the benefits of being members of the leading organiza-

tion in implant dentistry — AAID.

black in

### **Business Bite**

continued from p.19

contractual right to purchase the other half of the practice. In this instance, disability buy-out insurance provides two essential functions. First, the insurance company's determination that a partner is disabled relieves the non-disabled partner from having to prove it themselves. And second, the policy can help fund the buy-out.

# Now's the time to do other "insurance housekeeping"

While you are launching your practice, it's not a bad idea to also do some risk management housekeeping. By this we mean taking another look at your professional liability insurance. Make sure to update your location with your carrier. If there is another doctor working in your practice as an employee, independent contractor, or partner, make sure that your professional entity (i.e., corporation or partnership) is also covered in the event of a malpractice suit.

There are indeed many details to consider when you are starting out. You are no longer "just" the doctor; you are also the human resources department, marketing department, and everything in between. Although the insurance concerns can seem overwhelming, soliciting the guidance of an experienced and competent advisor is a critical step in protecting one of your biggest investments. Shawn M. Johnson, ChFC, CLU, CLTC is Vice President, Sales for Treloar & Heisel. (treloaronline.com)

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# New MaxiCourses® Approved

The Academy's Education Oversight Committee has approved four new MaxiCourses<sup>®</sup>, bringing the total around the world to 19. The 300-plus hour continuum courses offer unbiased, comprehensive training that forms the foundation for a career in implant dentistry. The four new courses and contact information are:

### Chicago Midwest AAID MaxiCourse®

Co-Directors: Natalie Wong, DDS and Adam Foleck, DMD Contact: Linda Shouldice Phone: 416-566-9855 Fax: 647-748-3551 E-mail: info@ti2inc.com Website: www.torontoimplantinstitute.com

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Room 609, Building 2, Tower D, Yinghua International Place Lane 2899, Guangfu Road W Putuo District Shanghai, China Director: Jaime Lozada, DMD Contact: Jolie Meng Phone: +86 21-61364635 or 909-558-4685

# New York MaxiCourse<sup>®</sup> in Implant Dentistry

St. Barnabas Hospital 4422 Third Avenue Bronx, NY 10457 Co-Directors: John Minichetti, DMD and Joseph C. D'Amore Contact: Esther Yang Phone: 201-871-3555 E-mail: info@englewooddental.com Website: www.dentalimplantlearningcenter.com

Washington, DC (Mid-Atlantic) MaxiCourse® Howard University Washington, DC Monthly March through November beginning in 2018 Director: Bernee Dunson, DDS Contact: Keonka Williams, Course Administrator Phone: 404-897-1699 Email: docdunson@gmail.com



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# 25<sup>TH</sup> ANNIVERSARY Dr. Arthur Ashman Department of Implant Dentistry at NYU College of Dentistry

Editor's Note: On the occasion of the founding of Department of Implant Dentistry at NYU College of Dentistry that bears his name, AAID News had a conversation with Dr. Arthur Ashman.

**AAID:** Dr. Ashman, when did you first begin thinking about an implant department?

DR. ASHMAN: Back in 1968, when I placed my first dental implant, I had little understanding of what I was doing. We had mentors who tried to pass their experiences to others by way of visiting their office, observing a procedure, or taking an implant course from a colleague who often had less of an understanding and experience than you did. In truth, the field of implant dentistry had absolutely no credibility whatsoever. Early "implant dentists" were true dental pioneers: names like Linkow, Goldberg, Gershkoff, and Lew in the U.S.; Strock in Germany; Tremonte in Italy; and Bränemark in Sweden come to mind.

People were skeptical whether this new modality would be successful. If you recall, in the late 60s and early 70s, the professionals attempting implant dentistry were primarily general dentists with some experience in surgery and prosthodontics. Surgical specialists, such as periodontists and oral surgeons, by and large, stayed clear of the field.

The generalists with their pioneering spirit I felt, had no credibility; but it was they who really started this new field. I was also a generalist, who did, however, go through specialty training in oral surgery and prosthetics, but chose to spend my time in practice doing rehabilitation with implants and mostly teaching and research.



Drs. Bonnie and Arthur Ashman.

I felt it was absolutely necessary in order to establish credibility with the entire profession to have an implant department in a dental school. The goals were to: establish consistent protocols; do research; answer the many questions that come up with documented facts; and, of course, to teach practicing dentists first, and then undergrad students, this new modality. An implant department could standardize how implant dentistry was taught, could conduct suitable research in animals, and could eventually get aligned with the specialties of dentistry like oral surgery and prosthodontics with common recognition and respect.

The future establishment of our own specialty of "implant dentistry" was my dream.

Coincidently, I was involved in research at that time, mostly at Columbia University, with my old professor and the future dean of the College of Dental and Oral Surgery (as it was then known), Dr. Melvin Moss, and at Mount Sinai Hospital. I was utilizing animals to develop the first synthetic bone substitute. As luck would have it, many years later I was able to sell my technology company to United States Surgical, Inc. of Norwalk, Connecticut. This enabled me to acquire the resources that enabled my dream to come true: the formation of the first implant department at a dental school anywhere in the world.

**AAID:** Founded in 1990, the Dr. Arthur Ashman Department of Implant Dentistry was the world's first official department of implant dentistry. Specifically, how did that come about to be located at NYU?

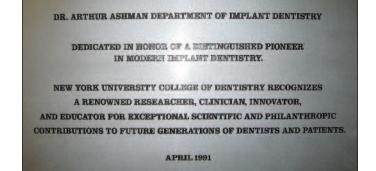
**DR. ASHMAN:** In January 1990, I strongly felt that dentistry needed and was ready for an implant department at a dental school to introduce the concept of utilizing implants in restorations of the dentition. Since I was teaching at Columbia and knew most of the people, including the then Dean, I felt Columbia should be the place to do this.

One day in 1989, I approached the Dean and the Associate Dean with an idea. In essence, if I provided the funds necessary, would they be open to establishing an implant department at Columbia? The only request I had was suitable small space to kick off the studies necessary for establishing needed credibility. I literally handed the Dean a blank check. He looked at me, smiled, and gave me a big hug in front of two other professors who had come into his office. The Dean thanked me and said: "Your heart is in the right place, but *we cannot possibly do an implant department here* at Columbia." I asked him why, and he looked me straight in the eye and said, "We all know implants are experimental and don't work."

Much to my surprise, two days later I got a call from Dean Ed Kaufman of New York University Dental School saying to me that he heard I was interested in establishing an implant department with the teaching and research that would go with it. Dr. Kaufman would not divulge to me how he heard about my conversation with the Columbia Dean. But he did say he had conversations with the late Dr. Bill Greenfield, the Associate Dean of NYU, who said he knew me well even though I had never set foot in the NYU school.

Bill Greenfield and I have a long history, which began when I first met him back in 1962. When I interned at Einstein Medical School Hospital, he was my teacher and mentor who instructed me in oral surgery. Many years later, a number of companies were conducting due diligence prior to making an investment in the development of the world's first synthetic bone substitute that I had just invented, which received FDA approval.

Coincidentally, and purely accidentally, Bill was hired by these investors (called venture capitalists today) to spend over six months, two to three days a week, watching me work in my office placing implants and using my bone replacement material, HTR (Hard Tissue Replacement),



The official plaque announcing the Dr. Arthur Ashman Department of Implant Dentistry.

owned by U.S. Surgical, in human patients. Years later, HTR was purchased by Sybron-Kerr Dental, which changed the name to Bioplant. It is still sold today by Henry Schein. Bill took meticulous notes, and followed all patients post-operatively for months, evaluating results. I later saw some of the reports he wrote. He was truly thorough and amazing in his reporting. I owe so much to Bill, especially for being open-minded and for his honest reporting in an area with which he was not initially familiar. We developed a longtime friendship, becoming personal and professional friends. All this occurred at least ten years prior to meeting again in Dean Kaufman's office in 1990 at the NYU Dental School.

Bill, a respected oral surgeon, was also essential in persuading the dental profession non-believers of the importance of this new modality: first, mainly at NYU, and then worldwide. Bill Greenfield played an important role in the ultimate success of this very successful implant department at NYU, the Dr. Arthur Ashman Department of Implant Dentistry. In 1991, I sold my private practice and devoted four days a week to teaching and conducting human research projects as a hands-on clinical dentist.

**AAID:** In the early 2000s, wasn't there a request to combine periodontology and implant dentistry in one department? What was your response?

**DR. ASHMAN:** By the early 2000s, the Ashman Department of Implant Dentistry had defined most standards and techniques of implant treatment, including placement, bone regeneration, rehabilitation, and maintenance. It had led the field in research of new ideas and materials. It educated over 125 foreign dentists per year, representing all specialties in a two-year, in-house program, and gave many courses throughout the world to dentists who wanted to learn implant dentistry.

At this point, the newly appointed Dean Michael Alfano and I met and discussed the possibility of combining the implant and the periodontal departments into one department. I thought this was a great and important idea since see Interview p. 38

#### Interview

continued from page 37

the periodontists had the recognized specialty umbrella that would add more credibility to the next phase of implant development and expansion. In addition, besides placing implants themselves, the periodontists were maintaining the majority of the implants placed either by themselves or by other dentists. My personal approval of the Dean's plan was necessary, and I enthusiastically gave the go-ahead. The transition proved to be very smooth and successful.

Implant dentistry today has not only the credibility of organized dentistry, but also acceptance as a world specialty. It was our Department that set the standards that most other dental schools initially duplicated. Our protocols of research were done by others; our techniques and approaches expanded upon; and the credibility of both the Departments together resulted in synergistic success. The profession confirmed this. We set the standard of not only teaching dentists "hands-on" the how and the why of implants, but this success has been transferred to the undergrad student of dentistry as well.

**AAID:** Twenty-five years ago, did you ever expect that implant dentistry would become as mainstream as it is today?

**DR. ASHMAN:** Twenty-five years ago, I not only expected implant dentistry would become as mainstream as it is today, but anticipated the fact that it would drive dentistry into greater success and acceptance from the community at large. With ongoing, new technology enabling the changing techniques, methods and materials, implant dentistry has risen to the forefront of how modern dentistry is practiced not only by every specialty today, but the generalist as well.

Today, have you ever met a dentist of any specialty from any country that "doesn't do implants" or who denies its success, or says implants "do not work?"



Dr. Ashman at Dodger Fantasy Camp held in conjunction with spring training.

I haven't. I am very proud that in a small way we have contributed to the beginnings of where we are today. Take a look at our credibility today!

**AAID:** From your current vantage point, what do you see as the future of implant dentistry at NYU, nationally, and abroad?

**DR. ASHMAN:** I see the future of implant dentistry as an incredible impetus to the success of not only dentists entering the field, but of patients not having to resort to the traditional partial, full dentures, and many bridges. As technology advances, I anticipate the cost of implant restorations to come down considerably. More people will have access to our services everywhere in the world.

For example, the implant procedure of the future may sound like this: The patient breaks a tooth and is in pain. The dentist will provide not only a new same-visit ceramic custom crown tooth, but also enable immediate function. This will be done in a little over one hour.

A proposed technique might be:

- 1. New painless ways to provide immediate pain control by "jetting" (pressure injection) with an immediate acting anesthetic.
- 2. Extracting a tooth and placing a suitable implant directly into the tooth socket, which can be coated with appropriate antibiotics on the implant or on synthetic bone delivering antibiotics by surface-coating slow release.
- 3. Injecting and hardening a strong, resorbable synthetic bone around the neck of the implant for 30 seconds with a normal dental white light. The implant is now strong enough to chew on (resisting chewing forces of 75 to 100 PMa). Do any necessary bone augmentation of defects in the adjacent area. (Bone shall be regenerated around the area that is potentially two to three times stronger than host bone.)
- 4. Scan the entire implant area with a computer; send the scan to a 3D machine that shall carve out an exactly desired hard porcelain crown in 10 minutes.
- 5. This crown is cemented permanently (there is no bleeding as the bleeding is terminated with the bone graft), and the patient, within one hour, leaves the dental office with a new tooth that he/she can chew on IMME-DIATELY. Total cost for one hour plus materials: \$400 to \$600 (estimate). Instead of the three to five visits, over six to 12 months at a cost of \$2,000 to \$3,500 today. The patient's savings is amazing.
- 6. The saving of dentist hours over per patient enables the practice to treat six to ten additional patients per dentist. Not bad!

End of my crystal ball. I believe this will happen fairly soon.

### INTERVIEW

**AAID:** What was your relationship with your good friend Dr. Leonard I. Linkow when you founded the Department?

**DR. ASHMAN:** Dr. Linkow joined the Department after it was decided to dedicate the first Implant Professorship ever at a dental school to him. The Linkow Professorship still exists today, made possible by the additional monies donated at that time by dentists all over the world who loved and respected him for all that he did for furthering the knowledge of the use of implants. It was a great honor to bestow on their mentor. At the time, everyone believed him to be the father of implant dentistry. He invented, taught, and selflessly shared his knowledge with anyone who desired his help.

Dr. Len Linkow will always have a special place in my life and my heart. It is because of Len that I was introduced to the field of implant dentistry. He was my first mentor, and gave me my first and only job in 1967.

When I returned from my Army tour of duty in Germany, where I was an oral surgeon (I did my residency in the Army after an internship at Einstein Jacobi Hospital), I had the good fortune to be introduced to Dr. Linkow by a mutual friend. He was just opening a new office at 30 Central Park South, and his old office in Queens needed someone to work there when he was in Manhattan. He rented me space in New York for two days a week and I worked for him two days a week in his Queens office. We got to know each other quite well over a few years, and he was the person who introduced me to this new field of dental implants. I would observe him operating in my spare time while I was trying to build my own practice and teaching at Columbia School of Dental and Oral Surgery (as it was then called).

We had many conversations over dinner and in between seeing patients about this new fascinating field, it's future, and the need for a way to formalize teaching based on our (and others') experience and know-how. I knew we needed an Implant Department in a dental school and that it was the only way to obtain acceptance and credibility from the public and our co-professions, but it was a dream unfulfilled until 1991.

There came a time when I started doing implants myself. It is worth noting that Len is the person who introduced me to the American Academy of Implant Dentistry (AAID) and proposed me for membership. At the time, I was the youngest member in this new organization of 100 plus. The AAID was made up mainly of general dentists who were so instrumental in starting and contributing to this field. The exchange of ideas, approaches, materials, and methods of working was invaluable to this young dentist in his mid-20s. This knowledge was so useful later when I founded the Department.

Then an opportunity presented to open my own office at 200 Central Park South by taking over the office and (I hoped) practice of a recently deceased dentist. I also started building my full-time practice.

I was at this location for over 40 years. Since 1970, I always taught (Columbia) and did research (Head of Dental Research at Mt. Sinai Medical Center), inventing what turned out to be the first synthetic bone substitute used in dentistry or medicine.

Len and I remained close both professionally and socially. It is amazing when I think back I owe so much to the special Dr. Leonard Linkow. Thanks, Len, for the love and the experience.

AAID: Any thoughts you would like to add?

**DR. ASHMAN:** It is noteworthy that implant dentistry really got its real push from the Ashman Department at NYU. Since 1991, over almost 26 years, the Department has trained thousands of dentists worldwide: practitioners, future teachers and lecturers, researchers, and writers. The Department has an exceptional clinic that treats many people. We are not only nationally known and recognized, but also internationally respected and emulated.

I am personally very proud of what we have accomplished in 25 years. I am very aware and appreciative of what individual members of our Implant Department have accomplished, and of our current leadership in the field. Today there is a combination of different technical modalities like CT scans, 3-dimensional technology computers that shall make the future implant and restorations faster and considerably less expensive.

I would like to thank the late Dean Ed Kaufman, Associate Dean Bill Greenfield, and Dean Alfano for their vision and support when we (and dentistry) really needed them. And to all the dentists over the years who contributed their expertise and valuable time, I offer my sincere thanks. We couldn't have done it without you.

I personally would like to thank the many dentists who taught, lectured, and advised in the Implant Department at the school. They gave of their time, input and energy graciously. Without so many people giving of themselves, this enormous professional success would not have happened.

#### AAID HIRES NEW EXECUTIVE DIRECTOR

The Board of Trustees of the American Academy of Implant Dentistry unanimously selected Cheryl Parker, CAE, to be the new Executive Director of the Academy effective May 1, 2017.

Ms. Parker has a very strong background in the dental world having most recently served for over ten years as Director, Academics, Regulatory Affairs and Advocacy for the American Academy of Periodontology. She previously worked for nearly eight years for the American Dental Association. She was Manager, Tripartite Grassroots Membership Initiative and Manager, Allied Dental Program Reviews/Dental Laboratory Technology Education (CODA).



"I'm excited to become Executive Director of an organization that I have admired for years," Ms. Parker said. "We will continue to offer a variety of benefits and services that assist members in providing high-quality patient care and tools to enhance practice management."

**Dr. Shankar lyer,** president of the AAID, speaking on behalf the leadership of the Academy, said, "By almost every measure, the AAID is the most successful organization in implant dentistry. We are very lucky that Cheryl was available at the time we decided to seek new leadership to help guide the Academy to even greater heights."

A graduate of the University of Illinois at Chicago, Ms. Parker is currently pursuing a Master of Science in Public Services at DePaul University. When weather permits, she enjoys biking along the beautiful lakefront bike path. In her spare time, she is researching her family tree. She has discovered that one great-grandmother was a Civil War nurse and her great-grandfather, a member of the Union Army, was wounded in the Battle of Antietam. "I'm trying to confirm my suspicion that they met while my grandfather was recuperating from his wound," Ms. Parker said.

#### NOMINATIONS SOUGHT FOR HONORED FELLOWS

The Honored Fellows Committee is seeking nominations of members to be denoted as AAID Honored Fellows in 2017. Members may self-nominate, nominate another member, or be nominated by their peers.

To be eligible, members must have been voting members (Associate Fellow, Academic Associate Fellow, or Fellow) in good standing for at least eight years. Nominees should have distinguished themselves through support of AAID, including committee, district leadership, and other activities. In addition, they should have distinguished themselves and colleagues through professional, clinical, research or academic endeavors. They should have achieved noteworthy accomplishments within the field of implant dentistry.

A list of eligible members and a nomination form is available at aaid.com. Nominations are due July 1, 2017.

## ECTATIONS H**EXPAREL**® **SET NEW** (bupivacaine liposome injectable suspension)

#### Offer your patients long-lasting, non-opioid postsurgical analgesia

- EXPAREL provides significant pain control during the first few days after surgery<sup>1</sup>
- EXPAREL significantly decreases opioid consumption<sup>1,2,\*</sup>
- Only EXPAREL uses DepoFoam<sup>®</sup> technology to deliver bupivacaine over time
- EXPAREL has a proven safety and tolerability profile<sup>2</sup>



\*The clinical benefit of the difference in opioid consumption was not demonstrated in the clinical trials.

#### EXPAREL is available for purchase at EXPAREL.com/OMFS

#### Please see brief summary of Prescribing Information on reverse side.

For more information, please visit EXPAREL.com or call 1-855-RX-EXPAREL (793-9727).

EXPAREL is indicated for administration into the surgical site to produce postsurgical analgesia.

#### Important Safety Information

- EXPAREL is contraindicated in obstetrical paracervical block anesthesia
- In clinical trials, the most common adverse reactions (incidence  $\geq 10\%$ ) following EXPAREL administration were nausea, constipation, and vomiting
- EXPAREL is not recommended to be used in the following patient population: patients <18 years old and/or pregnant patients
- Because amide-type local anesthetics, such as bupivacaine, are metabolized by the liver, EXPAREL should be used cautiously in patients with hepatic disease. Patients with severe hepatic disease, because of their inability to metabolize local anesthetics normally, are at a greater risk of developing toxic plasma concentrations

#### Warnings and Precautions Specific to EXPAREL

PACIRA

• EXPAREL is not recommended for the following types or routes of administration: epidural, intrathecal, regional nerve blocks, or intravascular or intra-articular use

 Non-bupivacaine-based local anesthetics, including lidocaine, may cause an immediate release of bupivacaine from EXPAREL if administered together locally. The administration of EXPAREL may follow the administration of lidocaine after a delay of 20 minutes or more. Formulations of bupivacaine other than EXPAREL should not be administered within 96 hours following administration of EXPAREL

#### Warnings and Precautions for Bupivacaine-Containing Products

- Central Nervous System (CNS) Reactions: There have been reports of adverse neurologic reactions with the use of local anesthetics. These include persistent anesthesia and paresthesias. CNS reactions are characterized by excitation and/or depression
- Cardiovascular System Reactions: Toxic blood concentrations depress cardiac conductivity and excitability which may lead to dysrhythmias sometimes leading to death
- Allergic Reactions: Allergic-type reactions (eg, anaphylaxis and angioedema) are rare and may occur as a result of hypersensitivity to the local anesthetic or to other formulation ingredients
- Chondrolysis: There have been reports of chondrolysis (mostly in the shoulder joint) following intra-articular infusion of local anesthetics, which is an unapproved use

References: 1. Gorfine SR, Onel E, Patou G, Krivokapic ZV. Bupivacaine extended-release liposome injection for prolonged postsurgical analgesia in patients undergoing hemorrhoidectomy: a multicenter, randomized, double-blind, placebo-controlled trial. Dis Colon Rectum. 2011;54(12):1552-1559. 2. Data on file. Parsippany, NJ: Pacira Pharmaceuticals, Inc.



EXPAREL

(bupivacaine liposome injectable suspension)

#### Brief Summary (For full prescribing information refer to package insert) INDICATIONS AND USAGE

EXPAREL is indicated for administration into the surgical site to produce postsurgical analgesia.

EXPAREL has not been studied for use in patients younger than 18 years of age

#### CONTRAINDICATIONS

EXPAREL is contraindicated in obstetrical paracervical block anesthesia. While EXPAREL has not been tested with this technique, the use of bupivacaine HCI with this technique has resulted in fetal bradycardia anḋ death

#### WARNINGS AND PRECAUTIONS

#### Warnings and Precautions Specific for EXPAREL

As there is a potential risk of severe life-threatening adverse effects associated with the administration of bupivacaine, EXPAREL should be administered in a setting where trained personnel and equipment are available to promptly treat patients who show evidence of neurological according training. or cardiac toxicity.

Caution should be taken to avoid accidental intravascular injection of EXPAREL. Convulsions and cardiac arrest have occurred following accidental intravascular injection of bupivacaine and other amidecontaining products.

Using EXPAREL followed by other bupivacaine formulations has not been studied in clinical trials. Formulations of bupivacaine other than EXPAREL should not be administered within 96 hours following administration of EXPAREL.

EXPAREL has not been evaluated for the following uses and, therefore, is not recommended for these types of analgesia or routes of administration.

- epidural
- intrathecal
- regional nerve blocks
- intravascular or intra-articular use

EXPAREL has not been evaluated for use in the following patient population and, therefore, it is not recommended for administration to these groups.

- · patients younger than 18 years old
- pregnant patients

The ability of EXPAREL to achieve effective anesthesia has not been studied. Therefore, EXPAREL is not indicated for pre-incisional or pre-procedural loco-regional anesthetic techniques that require deep and complete sensory block in the area of administration

#### ADVERSE REACTIONS

#### **Clinical Trial Experience**

The safety of EXPAREL was evaluated in 10 randomized, double-blind, Ine sately of EXPAREL was evaluated in to failonitized, usuality of EXPAREL was evaluated in to failonitized, usuality of the surgical site clinical studies involving 823 patients undergoing various surgical procedures. Patients were administered a dose ranging from 66 to 532 mg of EXPAREL. In these studies, the most common adverse reactions (incidence greater than or equal to 10%) following EXPAREL administration were nausea, northeatic adduced to durate the studies involved to th constipation, and vomiting.

The common adverse reactions (incidence greater than or equal to 2% to less than 10%) following EXPAREL administration were pyrexia, dizziness, edema peripheral, anemia, hypotension, pruritus, tachycardia, headache, insomnia, anemia postoperative, muscle spasms, hemorrhagic anemia, back pain, somnolence, and procedural pain.

#### DRUG INTERACTIONS

EXPAREL can be administered in the ready to use suspension or diluted to a concentration of up to 0.89 mg/mL (i.e., 1:14 dilution by volume) with normal (0.9%) saline or lactated Ringer's solution. EXPAREL must not be diluted with water or other hypotonic agents as it will result in dimensioned the lineacement particles. disruption of the liposomal particles.

EXPAREL should not be admixed with local anesthetics other than bupivacaine. Non-bupivacaine based local anesthetics, including lidocaine, may cause an immediate release of bupivacaine from EXPAREL if administered together locally. The administration of EXPAREL may follow the administration of lidocaine after a delay of 20 minutes or more. 20 minutes or more.

Bupivacaine HCl administered together with EXPAREL may impact the pharmacokine to administered objecties with LATARLE has pharmacokine and the sector of EXPAREL and this effect is concentration dependent. Therefore, bupivacaine HCI and EXPAREL may be administered simultaneously in the same syringe, and bupives and bupives and the second and the seco

The toxic effects of these drugs are additive and their administration should be used with caution including monitoring for neurologic and cardiovascular effects related to toxicity.

Other than bupivacaine as noted above, EXPAREL should not be admixed with other drugs prior to administration.

#### USE IN SPECIFIC POPULATIONS

#### Pregnancy

<u>Risk Summary</u> There are no studies conducted with EXPAREL in pregnant women. In animal reproduction studies, embryo-field leaths were observed with subcutaneous administration of bupivacaine to rabbits during organogenesis at a dose equivalent to 1.6 times the maximum recommended human dose (MRHD) of 266 mg. Subcutaneous administration of bupivacaine to rats from implantation through weaning readined doceseed new any environ it at the times the produced decreased pup survival at a dose equivalent to 1.5 times the MRHD [see Data]. Based on animal data, advise pregnant women of the potential risks to a fetus.

. The background risk of major birth defects and miscarriage for the indicated population is unknown. However, the background risk in the

U.S. general population of major birth defects is 2-4% and of miscarriage is 15-20% of clinically recognized pregnancies.

Clinical Considerations

#### Labor or Delivery

Bupivacaine is contraindicated for obstetrical paracervical block anesthesia. While EXPAREL has not been studied with this technique, the use of bupivacaine for obstetrical paracervical block anesthesia has resulted in fetal bradycardia and death

Bupivacaine can rapidly cross the placenta, and when used for epidural, caudal, or pudendal block anesthesia, can cause varying degrees of maternal, fetal, and neonatal toxicity. The incidence and degree of toxicity depend upon the procedure performed, the type, and amount of drug used, and the technique of drug administration. Adverse reactions in the parturient, fetus, and neonate involve alterations of the central nervous system, peripheral vascular tone, and cardiac function.

#### <u>Data</u> Animal Data

Bupivacaine hydrochloride was administered subcutaneously to rats and rabbits during the period of organogenesis (implantation to closure of the hard plate). Rat doses were 4.4, 13.3, and 40 mg/kg/day (equivalent the hard plate). Hat doses were 4.4, 13.5, and 40 mg/kg/day (equivalent to 0.2, 0.5 and 1.5 times the MRHD, respectively, based on the BSA comparisons and a 60 kg human weight) and rabbit doses were 1.3, 5.8, and 22.2 mg/kg/day (equivalent to 0.1, 0.4 and 1.6 times the MRHD, respectively, based on the BSA comparisons and a 60 kg human weight). No embryo-fetal effects were observed in rats at the doses tested with the high dose causing increased maternal lethality. An increase in embryo-fetal deaths was observed in rabbits at the high dose in the absence of maternal toxicity.

Decreased pup survival was noted at 1.5 times the MRHD in a rat pre- and post-natal development study when pregnant animals were administered subcutaneous doses of 4.4, 13.3, and 40 mg/kg/day buprenorphine hydrochloride (equivalent to 0.2, 0.5 and 1.5 times the MRHD, respectively, based on the BSA comparisons and a 60 kg human weight) from implemention through working development and a for kg human weight) from implantation through weaning (during pregnancy and lactation).

#### Lactation

Risk Summary Limited published literature reports that bupivacaine and its' metabolite Einited published netatule reports that objevatame and its interaborite, pipecolykylidide, are present in human milk at low levels. There is no available information on effects of the drug in the breastfed infant or effects of the drug on milk production. The developmental and health benefits of breastfeeding should be considered along with the mother's clinical need for EXPAREL and any potential adverse effects on the breastfed infant from EXPAREL or from the underlying maternal condition.

#### Pediatric Use

Safety and effectiveness in pediatric patients have not been established. Geriatric Use

Of the total number of patients in the EXPAREL surgical site infiltration clinical studies (N=823), 171 patients were greater than or equal to 65 years of age and 47 patients were greater than or equal to 75 years of age. No overall differences in safety or effectiveness were observed between these patients and younger patients. Clinical experience with EXPAREL has not identified differences in efficacy or safety between elderly and younger patients, but greater sensitivity of some older individuals cannot be ruled out.

#### Henatic Imnairment

Because amide-type local anesthetics, such as bupivacaine, are metabolized by the liver, these drugs should be used cautiously in patients with hepatic disease. Patients with severe hepatic disease, because of their inability to metabolize local anesthetics normally, are at a greater risk of developing toxic plasma concentrations.

#### **Renal Impairment**

Bupixacaine is known to be substantially excreted by the kidney, and the risk of toxic reactions to this drug may be greater in patients with impaired renal function. Care should be taken in dose selection of EXPAREL.

#### OVERDOSAGE

In the clinical study program, maximum plasma concentration (C<sub>max</sub>) values of approximately 34,000 ng/mL were reported and likely reflected inadvertent intravascular administration of EXPAREL or systemic absorption of EXPAREL at the surgical site. The plasma bupivacaine measurements did not discern between free and liposomal-bound bupivacaine making the clinical relevance of the reported values uncertain; however, no discernible adverse events or clinical sequelae were obsenued is these existence. were observed in these patients.

#### DOSAGE AND ADMINISTRATION

EXPAREL is intended for single-dose administration only.

- The recommended dose of EXPAREL is based on the following factors:
  - Size of the surgical site
  - Volume required to cover the area
  - Individual patient factors that may impact the safety of an amide local anesthetic
  - Maximum dose of 266 mg (20 mL)

As general guidance in selecting the proper dosing for the planned surgical site, two examples of dosing are provided. One example of the recommended dose comes from a study in patients undergoing bunionectomy. A total of 8 mL (106 mg) was administered as 7 mL of EXPAREL infiltrated into the tissues surrounding the osteotomy, and 1 mL infiltrated into the subcutaneous tissue.

Another example comes from a study of patients undergoing hemorrhoidectomy. A total of 20 mL (266 mg) of EXPAREL was diluted with 10 mL of saline, for a total of 30 mL, divided into six 5 mL aliquots, injected by visualizing the anal sphincter as a clock face and slowly infiltrating one aliquot to each of the even numbers to produce a field block.

#### **Compatibility Considerations**

Admixing EXPAREL with drugs other than bupivacaine HCl prior to administration is not recommended.

Non-bupivacaine based local anesthetics, including lidocaine, may cause an immediate release of bupivacaine from EXPAREL if administered together locally. The administration of EXPAREL may follow the administration of lidocaine after a delay of 20 minutes or more.

Bupivacaine HCl administered together with EXPAREL may impact the pharmacokinetic and/or physicochemical properties of EXPAREL and this effect is concentration dependent. Therefore, bupivacaine HCI and EXPAREL may be administered simultaneously in the same

syringe, and bupivacaine ICI may be injected immediately before EXPAREL as long as the ratio of the milligram dose of bupivacaine HCI solution to EXPAREL does not exceed 1:2. The toxic effects of these drugs are additive and their administration should be used with caution including monitoring for neurologic and cardiovascular effects related to toxicity.

When a topical antiseptic such as povidone iodine (e.g., Betadine®) is applied, the site should be allowed to dry before EXPAREL is administered into the surgical site. EXPAREL should not be allowed to come into contact with antiseptics such as povidone iodine in solution.

Studies conducted with EXPAREL demonstrated that the most common implantable materials (polypropylene, PTFE, silicone, stainless steel, and titanium) are not affected by the presence of EXPAREL any more than they are by saline. None of the materials studied had an adverse effect on EXPAREL

#### Non-Interchangeability with Other Formulations of Bupivacaine

Different formulations of bupivacaine are not bioequivalent even if the milligram dosage is the same. Therefore, it is not possible to convert dosing from any other formulations of bupivacaine to EXPAREL and vice versa.

#### CLINICAL PHARMACOLOGY

#### **Pharmacokinetics**

local infiltration of EXPAREL results in significant systemic plasma levels of bupivacaine which can persist for 96 hours. Systemic plasma levels of bupivacaine following administration of EXPAREL are not correlated with local efficacy.

#### **CLINICAL STUDIES**

The efficacy of EXPAREL was compared to placebo in two multicenter, randomized, double-blinded clinical trials. One trial evaluated the treatments in patients undergoing bunionectomy; the other trial evaluated the treatments in patients undergoing hemorrhoidectomy.

#### Study 1

A multicenter, randomized, double-blind, placebo-controlled, parallel-group clinical trial evaluated the safety and efficacy of 106 mg (8 mL) EXPAREL in 193 patients undergoing bunionectomy. The mean age was 43 years (range 18 to 72).

Study medication was administered directly into the site at the conclusion of the surgery, prior to closure. There was an infiltration of 7 mL of EXPAREL into the tissues surrounding the osteotomy and 1 mL into the subcutaneous tissue.

Pain intensity was rated by the patients on a 0 to 10 numeric rating scale (NRS) out to 72 hours. Postoperatively, patients were allowed rescue medication (5 mg oxycodone/325 mg acetaminophen orally every 4 to 6 hours as needed) or, if that was insufficient within the first 24 hours, ketorolac (15 to 30 mg IV). The primary outcome measure was the area under the curve (AUC) of the NRS pain intensity scores (cumulative pain scores) collected over the first 24 hour period. There was a significant treatment effect for EXPAREL compared to placebo. EXPAREL demonstrated a significant reduction in pain intensity compared to placebo for up to 24 hours (p<0.001).

#### Study 2

A multicenter, randomized, double-blind, placebo-controlled, parallel-group clinical trial evaluated the safety and efficacy of 266 mg (20 mL) EXPAREL in 189 patients undergoing hemorrhoidectomy. The mean age was 48 years (range 18 to 86).

Study medication was administered directly into the site (greater than or equal to 3 cm) at the conclusion of the surgery. Dilution of 20 mL of EXPAREL with 10 mL of saline, for a total of 30 mL, was divided into six 5 mL aliquots. A field block was performed by visualizing the anal sphincter as a clock face and slowly infiltrating one aliquot to each of the even numbers.

Pain intensity was rated by the patients on a 0 to 10 NRS at multiple time points up to 72 hours. Postoperatively, patients were allowed rescue medication (morphine sulfate 10 mg intramuscular every 4 hours as needed).

The primary outcome measure was the AUC of the NRS pain intensity scores (cumulative pain scores) collected over the first 72 hour period. There was a significant treatment effect for EXPAREL compared to placebo.

This resulted in a decrease in opioid consumption, the clinical benefit of which was not demonstrated.

Twenty-eight percent of patients treated with EXPAREL required no rescue medication at 72 hours compared to 10% treated with placebo. For those patients who did require rescue medication, the mean amount of morphine sulfate intramuscular injections used over 72 hours was 22 mg for patients treated with EXPAREL and 29 mg for patients treated with placebo

The median time to rescue analgesic use was for 15 hours for patients treated with EXPAREL and one hour for patients treated with placebo.

Pacira Pharmaceuticals. Inc. San Diego, CA 92121 USA

## San Diege, Patent Numbers: 6,132,766 5,891,467 766,627 8,182,835

Trademark of Pacira Pharmaceuticals, Inc.



For additional information call 1-855-RX-EXPAREL (1-855-793-9727) August 2016 Rx only

#### AAID MEMBERSHIP AMBASSADORS

AAID Membership Ambassadors know first-hand how membership in the Academy helps dentists establish or expand their expertise in implant dentistry and encourage their colleagues to join the AAID.

We would like to thank the Membership Ambassadors who have referred colleagues as new members between January 7, 2017 and April 11, 2017.

Thank you Robert Bagoff, DMD, from West Orange, NJ, for referring 17 students to the Academy.

Thank you **Danny Domingue, DDS,** of Lafayette, LA, and **Justin Moody, DDS,** of Rapid City, SD, for referring four colleagues to the Academy.

### Thank you for referring a colleague to the Academy:

Roger A. Bronstein, DMD, from New York, NY
Mike Calderon, DDS, from Bay Shore, NY
Gordon J. Christensen, DDS, MSD, PhD, from Provo, UT
Jason Crescenzo, DDS, from

Shorewood, IL Kenny Gomolplitinant, DMD, from Chicago, IL Michael Fioritto, DDS, from Mentor, OH Brian Jackson, DDS, from Utica, NY Jaime Lozada, DMD, from Loma

Linda, CA Joe Mehranfar, DMD, MS, from Phoenix, AZ Aeklavya Panjali, DDS, from

Watertown, NY Donald Provenzale, DDS, from

Downers Grove, IL

James Rutkowski, DMD, PhD, from Clarion, PA

William Schlesinger, DDS, from New York, NY

Joshua Winneberger, DMD, from Wilmington, NC Thomas Wright Jr., DDS, from

Richmond VA

Encourage your colleagues to join the AAID and offer them a \$50 discount on their first year's membership dues by letting us know you referred them. Do so by November 1, 2017 and be entered into a drawing for 2018 AAID membership dues — up to a \$600 value.

#### ISAIH LEW MEMORIAL RESEARCH AWARD

The Isaih Lew Memorial Research Award is presented by the AAID Foundation to an individual who has contributed significantly to research in implant dentistry. This award is given every year to perpetuate Dr. Isaih Lew's spirit and enthusiasm for implant dentistry.

Send your nominations and the CV for the nominee to Afshin Alavi at afshin@aaid.com by July 31, 2017.

#### OBITUARIES



**Leonard Linkow, DDS, DMSc,** Fort Lee, NJ – Past President and Honored Fellow, Life Member



**Carl Misch, DDS, MDS, PhD,** Miami Beach, FL – Past President and Honored Fellow, Life Member

Kirikumar Salvi, DDS, Corona, CA – General Member

#### GERSHKOFF/GOLDBERG MEMORIAL

If you know a member of the Academy who exemplifies qualities of co-founders and past presidents Aaron Gershkoff and Norman Goldberg, please contact an AAID past president by May 31, 2017, to suggest his or her consideration as a nominee for the award.

Winners of the award have demonstrated one or more of the following attributes:

- Documented, outstanding service to AAID
- An outstanding and recognized contribution to the field of implant dentistry
- National and/or international recognition as an outstanding implantologist
- Distinction in the field or allied sciences
- High degree of professionalism

#### UPCOMING KEY AAID DATES

#### JUNE 2017

9-10 SOLVING DENTAL IMPLANT DILEMMAS Chicago Marriott Downtown Magnificent Mile, Chicago, IL

#### OCTOBER 2017

11–14 66<sup>™</sup> ANNUAL IMPLANT DENTISTRY EDUCATION CONFERENCE Hilton San Diego Bayfront, San Diego, CA

#### **APRIL 2018**

20-21 FOCUS ON THE SINUS 2.0 Newport Beach, CA

#### JUNE 2018

8-9 DECODING DIGITAL DESTISTRY San Juan, PR

Check the AAID online calendar using this QR Code for a complete listing of all key AAID dates.



#### AAID ATTENDS AMERICAN STUDENT DENTAL ASSOCIATION ANNUAL SESSION

The Academy hosted a booth at the ASDA annual session in Orlando, Florida on February 23, 2017

Keelin Billue-Gubbels, AAID's Manager of Member Communications, and Carolina Hernandez, AAID's Director of Membership and Credentialing, welcomed an enthusiastic crowd of dental students to the Academy. The pair talked to more than 100 dental students about the prospect of practicing implant dentistry and the important role AAID plays in any implant practice. As a result, AAID gained over 120 new electronic student members. In addition, AAID donated a subscription to Dental Campus as a prize in ASDA's "Passport Game," which was awarded to a student attendee.



Maria Bender, a student from Rutgers University Dental School, was one of the hundred-plus students who stopped by AAID's booth. She is flanked by AAID staff members Keelin Billue-Gubbels (Left) and Carolina Hernandez.

#### AAID MEMBERS IN THE NEWS



Dr. Justin Moody had articles published in the December/January 2017 and February/March 2017 issues of Implant Practice

magazine. The former was entitled "What happens when your real teeth give up?" and the latter, "Scan and you shall receive!"

#### Dr. Joseph D. Bedich

was installed as Corydon Palmer (Ohio) Dental Society president.





Implant Practice featured Dr. John Minichetti in their section "Educator Insight" with his views on creating and running an implant study club.



Dr. Jack Piermatti was featured on the cover of the March 2017 issue of Dentistry Today for his article entitled "Implant

**Fixtures and Abutment** Considerations."

#### SUMMARY OF ACTIONS TAKEN BY BOARD OF TRUSTEES February 25, 2017, San Antonio, Texas

APPROVED Life Membership application for Dr. Blake Nicolucci AGREED to a retainer arrangement with Dr. Frank Recker for non-litigation

related activities for the American Board of Dental Specialties

**REFERRED** a number of issues to appropriate AAID committees for further discussion

#### SUMMARY OF ACTIONS TAKEN BY BOARD OF TRUSTEES April 8, 2017, Pittsburgh, Pennsylvania

APPROVED SELECTION of Cheryl Parker, CAE, as new Executive Director of the AAID, effective May 1, 2017

#### ACADEMY HAS LARGE PRESENCE AT AMERICAN ACADEMY OF COSMETIC DENTISTRY CONFERENCE

Dr. Shankar lyer's presentations were very popular at the American Academy of Cosmetic Dentistry's Annual Conference in Las Vegas. In addition to presenting two well attended programs, including a hands-on workshop, the AAID also hosted a booth on the conference exhibit floor.

AAID's booth was a family affair as AAID member Dr. Jerry Stahl, his wife Tess, and daughter, Chelsea, who is a 4th year dental student at Rutgers University School of Dentistry, helped Keelin meet and greet members of the AACD on behalf of the AAID.



A family affair – (I – r) Tess Stahl, Dr. Jerry Stahl, and Chelsea Stahl

# Poster Presentations and Table Clinics — 2017 Annual Conference

#### **Overview**

The American Academy of Implant Dentistry (AAID) Annual Educational Conference will be held at the Hilton San Diego Bayfront, October 11-14, 2017. This dynamic conference will feature more than 50 noted authorities in implant dentistry. Posters and Table Clinics are an important part of this event and an excellent opportunity for dental professionals and graduate students to participate.

AAID will accept applications for Posters and Table Clinics until **September 15, 2017, or until capacity has been reached.** Applicants will receive an email within one month of submission to verify acceptance, provided the application is complete. **Please note: Only accepted applications received by August 10, 2017 will be published in the Annual Conference Onsite Program Book.** 

To view more detailed information and/or submit your Poster/Table Clinic application visit www.surveymonkey.com/r/2017\_ poster\_and\_table\_clinics.

#### **POSTER DISPLAYS**

Dental students and practitioners are eligible to submit an electronic poster. Posters will be on display from Thursday, October 12 through Saturday, October 14. A panel of judges will evaluate each Poster; no verbal presentation is required. The prizes are as follow:

First place — \$500 Second place — \$300 Third place — \$100

Selected applicants must send in a maximum of three Powerpoint slides or PDFs to Jenna Przybysz at jenna@aaid.com no later than September 22, 2017.

#### **TABLE CLINICS**

Table Clinic Presentations will be given on Friday, October 13 during the afternoon break from 3:30pm-4:30pm. The prizes are as follow:

First place — \$500 Second place — \$300 Third place — \$100

A Table Clinic typically consists of a ten-minute presentation supported

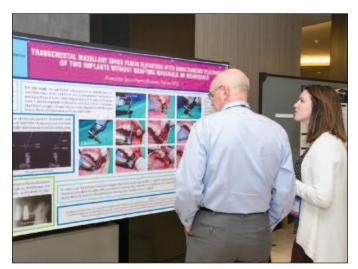
by information on the presenter's laptop computer. The audience stands around the table to hear the presenter. It is important that the presentation is limited to ten minutes so that the audience members can hear as many presentations as possible.

AAID will provide a small, high table on which the presenter may place a laptop. Table Clinic presenters must bring their own laptops. Because of the danger of audience members tripping on unsecured power cords, an electrical hookup will not be provided. Presenters should plan to use laptop battery power. Presenters MUST limit materials to those that will fit (along with a computer) on the 30-inch table top.

If you have any questions about the application process, the status of your application, the time of your presentation or other logistics, please contact Jenna at 312.335.1550 or jenna@aaid.com.



Table Clinics provide an excellent way to interact with colleagues.



Poster Clinics will be electronic at the 2017 Annual Conference.

## What's Your Dilemma?

What dilemmas do you face in your implant dentistry practice? Perhaps you are concerned about complications. What about the various alternatives for enhancing bone? Are you unsure about the use of current technology?

Attend AAID's "Solving Dental Implant Dilemmas" in Chicago, June 9 – 10, 2017. This two-day conference is presented by the Academy's Central and Western Districts.

You will be able to earn at least 19 hours of implant-specific CE.

#### The 2-day Conference includes the following programs and presenters:

**FRIDAY, JUNE 9, 2017** 

Vascularized Ridge Split: Treating the Deficient Posterior Mandible Rajiv R. Patel, BDS, MDS, FAAID, DABOI/ID

Vertical Bone Augmentation in the Posterior Mandible Bernee Dunson, DDS, FAAID, DABOI/ID

Augmenting the Deficient Site with Allogenic Blocks David Resnick, DDS, FAAID, DABOI/ID

A Novel Way to Teeth-in-a-Day<sup>sM</sup> George Arvanitis, DDS, FAAID, DABOI/ID

Guided Surgery and Guided Prosthetics: An Alternative to Advanced Grafting Natalie Wong, DDS, FAAID, DABOI/ID

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## Record number of candidates seek AAID credentials

The Admissions and Credentials (A&C) Board will hold its 2017 annual meeting and oral/case examination in Chicago on May 4 – 7. At this year's examinations, 92 Associate Fellow candidates and 29 Fellow candidates will be considered for credentialed membership. As per AAID policy, the A&C Board publishes the list of candidates and invites comments from the voting members concerning the candidates that would bear upon their certification by the Board.

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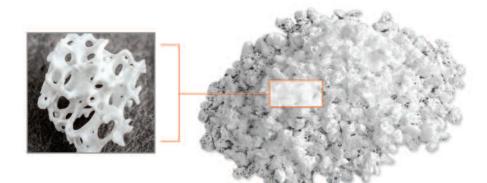
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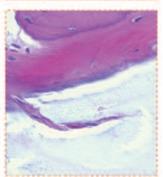
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Vital bone ingrowth into the inter-particle space of Zcore<sup>m</sup>

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Case and histology courtesy of Gustavo Avila-Ortīz, DDS, MS, PhD University of Iowa College of Dentistry, Department of Periodontics



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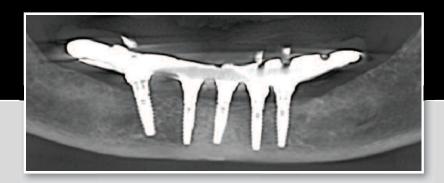
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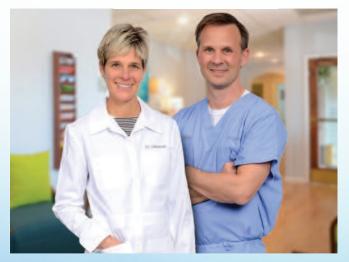
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As well as running a private practice in Northfield, Ohio, Dr. Davidson trains other doctors on the use of Sirona's Galileos<sup>®</sup> 3D imaging.

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continued from p. 56

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**JAPAN** Hiroshi Toda, DDS Kawachinagano, Osaka Daisuke Suzuki, DDS Matsumoto City, Nagano Kentaro Doi, DDS Nagoya, Aichi Masakazu Hasegawa, DDS Nagoya, Aichi Yuki Kurita, DDS Nagoya, Aichi Takeshi Fujii, DDS Okayama, Okayama Tadao Fujita, DDS Sakai, Osaka En-Tse Yen Shiojiri Naoya Ueda, DDS Tsushima, Aichi

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Rokaya Salim Hamad Al Rikabi BChD, BDS Madha

#### SINGAPORE

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#### SOUTH KOREA

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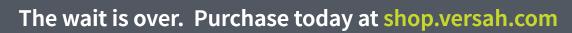
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## AAID welcomes new student members

It's never too early for dental students to become familiar with the practice of implant dentistry. And there is no better place for them to learn than from the leading organization of dental implant experts in the world. AAID's electronic membership, open only to dental students, has been in place for several years. We currently have over 1,000 dental student members entitled to online access to Academy information and resources. The following is the list of new dental student members who joined between January 4, 2017 and April 11, 2017.

#### Baylor College of

**Dentistry** Jeremiah Alybedion Ben Donnelli Caitlyn Lee

#### Case Western Reserve

University Suzana Ahmed Ida Ettehadieh Richard McGuire Lizzeth Rodriguez Allan Siu

Columbia University Chad Curtis Adam Ellenthal

Creighton University Lauren Booth Tessa McDermott

Loma Linda University Doug Ganuarthaler Jasmine Healy Annie Kim Allison Lee Mitch Seltman Eric Stratton Brett Wiu

Louisiana State University Stefania Balasa Hannah Knott Nancy Ly

Medical University of

South Carolina Montana Housand Katie LeBlanc Emily Martin Jennifer Stokes

Meharry Medical College Amber Spurlock

Midwestern University, Arizona Brandon Le

#### Midwestern University, Illinois DeAndra Cates

#### **New York University** Deepika Ankreddy

Jason Chen Shun Chen Paul Chung Joseph Geiger III Kathleen Hoffman Jonathan Hsiao Brian Jun Hwangpo Henry Jackson **Dimitriy Klass** Karan Mirchandani Arsen Murdokhisen Katherine Passaro Michael Samandosev Tuan Thai Virajitha Velichala Jason Wiener Naila Williams

Nova Southeastern University Shaileen Ejtemai Bryan Kim

Oregon Health Sciences University Sarah Edmondson Daniel Mabaet Kaitlyn Traynor

Roseman University of Health Sciences Hana Lim Heather Rowlands

Rutgers University Anudeep Grewal Ben Kahan Rupali Patel Renata Villarreal

State University of New York at Buffalo Jesse Adamson

damson

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**Temple University** John Brun Anthony Greiss Selena Nguyen

Tufts University Airy Choi

University of Alabama Amanda Morris

Ashlee Turner University of California Los Angeles Arth Patel Shallene Cam

University of California, San Francisco Vida Bao Michael Nguyen Geetan Virdi

University of Chicago at Illinois Milica Mina Golubarch John Tran

University of Colorado Ali Lindauer

University of Colorado, Denver Connie Lan

University of Connecticut Breanne Dufault Leila Fussell Steven Halepas Marc Novak

University of Detroit Mercy Adit Patel Aida Rosenthal

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University of Louisville James Devine Carissa Smardo

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University of Nevada at Las Vegas Maddie DiPaolo Ryan Ellis

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**University of Oklahoma** Ramina Golshani Carmen Martinez

University of Pennsylvania David Liberman see New Student Members p. 66



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#### Chicago Midwest AAID MaxiCourse®

Co-Directors: Natalie Wong, DDS and Adam Foleck, DMD Contact: Linda Shouldice Phone: 416-566-9855 Fax: 647-748-3551 Email: info@ti2inc.com Website: www.torontoimplantinstitute.com

#### Las Vegas MaxiCourse®

370 Grand Ave, Englewood, NJ 07631 Director: John Minichetti, DMD Contact: Esther Yang Phone: 201-871-3555 Email: info@englewooddental.com Website: aaid-vegasmaxicourse.org

#### Loma Linda University/AAID MaxiCourse<sup>®</sup>

Loma Linda, California Monthly March through December Continuing Dental Education 11245 Anderson St.; Suite 120 Loma Linda, CA 92354 www.llu.edu/assets/dentistry/documents/c de/

maxicourse2010.pdf

### New York MaxiCourse<sup>®</sup> in Implant Dentistry

St. Barnabas Hospital 4422 Third Avenue Bronx, NY 10457 Co-Directors: John Minichetti, DMD and Joseph C. D'Amore Contact: Esther Yang Phone: 201-871-3555 Email: info@englewooddental.com Website: www.dentalimplantlearningcenter.com

### Nova Southeastern University College of Medicine MaxiCourse®

Fort Lauderdale, FL Director: Jack Piermatti, DMD Contact: Jack Piermatti, DMD Phone: 609-314-1649 Email: jpiermatti@yahoo.com Website: www.dental.nova.edu

#### Oregon/AAID MaxiCourse®

Medoline, Inc. September – June 1 weekend per month Contact: Dr. Shane Samy Phone: 800-603-7617 Email: oralaidmaxicourse@gmail.com Website: www.oraaaidmaxicourse.com

#### Puerto Rico MaxiCourse®

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#### Rutgers University of Dental Medicine MaxiCourse<sup>®</sup>

September - June 110 Bergen Street, Room B701 PO. Box 1709 Newark, NJ 07101-1709 Director: Jack Piermatti, DMD Coordinator: Janice Gibbs-Reed, MA, CMP Phone: 973-972-6561 Email: gibbs@sdm.rutgers.edu Website: sdm.rutgers.edu/CDE/MaxiCourse

#### TexMAX<sup>®</sup> Dental Implant Education MaxiCourse<sup>®</sup>

Director: Jay Elliott, DDS Registrar: Jackie Martinez Telephone: 281-703-9468 Email: Jackie@texasimplanteducation.com Website: www.texasimplanteducation.com

#### Ti-MAXImplant Maxicourse®

September – June Ten 3-day weekends Oakville, Ontario, Canada and Waterloo, Ontario, Canada Phone: 905-235-1006 Contact: Chantel Furlong Email: info@ti-maxicourse.ca Website: www.ti-maxicourse.ca

#### Vancouver, British Columbia MaxiCourse®

September – June Contact: Andrew Gillies Phone: 604-330-9933 Email: andrew@implantconnection.ca Website: www.vancouvermaxicourse.com

#### Washington, D.C. (Mid-Atlantic) MaxiCourse®

Howard University Washington, DC Monthly March through November beginning in 2018 Director: Bernee Dunson, DDS Contact: Keonka Williams, Course Administrator Phone: 404-897-1699 Email: docdunson@gmail.com

#### Outside U.S. and Canada MaxiCourses®

Japan MaxiCourse® 13, Morimaki-cho, Moriyama-ku Nagoya, Japen 463-0073 Director: Yasunori Hotta, DDS, PhD Phone: +81-52-794-8188 Email: hotta-dc@ff.iij4u.or.jp Website: www.hotta-dc.com

#### MaxiCourse® Asia

October – August One week bi-monthly Abu Dhabi, United Arab Emirates; New Dehli, India; Bangalore India; Jeddah, Saudi Arabia Contact: Dr. Shankar Iyer Email: drsiyer@aol.com Website: www.aaid-asia.org

#### Korea MaxiCourse®

Monthly March through December Contact: Dr. Jaehyun Shim Email: dental-care@hanmail.net Website: www.kdi-aaid.com

#### Egypt MaxiCourse®

15 ezz eldeen Mohamed Hozha Heliopolis, Cairo, Egypt Co- Directors: Kim Gowey, DDS; Shankar Iyer, DDS, MDS Administrative Contact: Dr. Mahmoud Kohail Email: mahmoudkohail@ascde.com Telephone: (002)01141403350

#### China MaxiCourse®

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#### MaxiCourse® Malta

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#### Courses presented by AAID credentialed members\*

#### **U.S. LOCATIONS**

24 Hour Teeth Spring Hill, FL September 21 - 22, 2017 January 25 - 26, 2018 March 29 - 30, 2018 Contact: James W. Gibney, DMD, JD Phone: 352-686-4223 Email: jwgibney@atlantic.net Website: jameswgibneydmd.com

#### AAID Study Club/Mini Residency in Implant Dentistry

September - June, Bi-weekly 100 hours CE credit Approved by NJ State Board of Dentistry Contact: Dr. Shankar Iver Email: drsiyer@aol.com Website: www.maxicourseasia.com

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#### **California Implant Institute**

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#### **Connecticut Dental Implant Institute**

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#### **Fixed Removable Implant Treatment** Carol Phillips, DDS

Contact: Melissa Martin Phone: 800-549-5000

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Dr. Ken Hebel Hands On Implant Training -Prosthetics, Surgery and Bone Grafting Contact: Kerri Jackson Phone: 888-806-4442 or 519-439-5999 Email: info@handsontraining.com Website: www.handsontraining.com Programs held throughout the year in Canada, New Jersey, California and Texas

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#### Midwest Implant Institute Externship – "The One-on-One Training You Are

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#### Sendax Mini-Implant Seminars & MDI

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Phone: 727-459-4910

Email: tatuminfo@aol.com Website: tatuminstituteusa.com

#### University of Nevada, Las Vegas (UNLV) Division of Continuing Education Courses in Implant Dentistry

Live Implant Surgery Course (3 months) Surgical Bone Grafting Human Cadaver Course (3 days) Hands-on Maxillary Sinus Augmentation

Course (2 days) Pig Jaw Surgical Bone Grafting Course

(2 days)

Francis Jones, DDS, PhD (Ca) Contact: Roxane Santiago Phone: 702-774-2822

#### CANADA

The D.M. Vassos Dental Implant **Centre Introductory & Advanced Surgical & Prosthetic Programs** Dr. D.M. Vassos Mentor Program - Hands-on Program over six Saturdays Location: Edmonton, Alberta, Canada Contact: Rosanna Frey Phone: 780-488-1240 Email: rosanna@dmvassos.com Website: www.dmvassos.com

#### see Continuing Education p. 64

## **CONTINUINGEDUCATION**BITE

#### Continuing Education

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#### The BITE Club

- For those not ready for the AAID Vancouver MaxiCourse<sup>®</sup>. Didactic study club to introduce you to the world of oral implantology.
- Contact: Andrew Gillies, Education Coordinator

Phone: 604-330-9933 Email: andrew@implantconnection.ca

#### "Hands-on" Introductory to Advanced Surgical and Prosthetic Implant Courses with Live Surgery. Dr. Robert E. Leigh, Director

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Contact: Corie Zeise

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- center.com www.leighsmilecenter.com

#### Implant Connect: Prosthetic Course

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Website: www.cditc.ca

#### **Pacific Implant Institute**

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Website: www.piidentistry.com

#### Toronto Implant Institute

Toronto Implant Institute Natalie Y. Wong, DDS, FAAID, DABOI/ID Implant Prosthetic Session: Traditonal to Digital Digital Implant Dentistry Internship Guided Surgery and Guided Prosthetics™ for Immediate Full-Arch Implant Restorations Contact: Linda Shouldice Phone: 416.566.9855 Email: linda@ti2inc.com Website: www.ti2inc.com

#### Vancouver Implant Continuum

Continuing your MaxiCourse<sup>®</sup> journey One-year program that incorporates live patient surgery on your own patients with a review of everything within the AAID Vancouver MaxiCourse<sup>®</sup>

Contact: Andrew Gillies, Education Coordinator

Phone: 604-330-9933

Email: andrew@implantconnection.ca Website: www.cditc.ca

### OUTSIDE NORTH AMERICA LOCATIONS

#### **Beirut Implant Dentistry Center**

CE Courses Survey of Surgical and Prosthetic Implant Care Drs. Jihad Abdallah & Andre Assaf Contact: Mahia Cheblac Phone: +961 1 747650 or +961 1 747651 Fax: +961 1 747652 Email: beirutidc@hotmail.com

#### AAID Affiliated Study Clubs\* ALABAMA

Alabama Implant Study Group Timothy Hacker, DDS, FAAID, DABOI/ID Phone: 901-377-3988 Email: timtamhacker@aol.com

#### CALIFORNIA

Bay Area Implant Synergy Study Group San Francisco Matthew Young, DDS, FAAID, DABOI/ID Contact: Kimberly Phone: 415-392-8611 Email: info@dentalimplantssc.com Website: www.drmatthewyoung.com/ BayArealmplantSynergyPage.htm

#### Northern California Dental Implant Continuum

Craig A. Schlie, DDS, AFAAID Phone: 530-244-6054 Email: Dr.Schlie@gmail.com

#### **FLORIDA**

#### Central Florida Dental Implant Study Group Altamonte Springs, FL

Don Preble, DMD Contact: Sharon Bruneau Phone: 407-831-4008 Fax: 407-831-8604

#### Mid-Florida Implant Study Group

Palm Harbor, FL Rajiv Patel, BDS, MDS Phone: 386-738-2006 Email: info@delandimplants.com

#### **NEW JERSEY**

Bergen County Implant Study Club John C. Minichetti, DMD Contact: Esther Yang Phone: 201-871-3555 Email: info@englewooddental.com Website: www.dentalimplantlearning center.com

#### Lincroft Village Dental Implant Study Group

Treatment planning, bonegrafting, prosthetics Richard J. Mercurio, DDS Contact: Martha Gatton Phone: 732-842-5005 Email: lincroftimplant@aol.com

#### **NEW YORK**

**CNY Implant Study Group** Brian Jackson, DDS Contact: Melanie – Course Coordinator Phone: 315-724-5141 Email: bjjddsimplant@aol.com

#### **New York Study Club**

Edgard El Chaar, DDS John Minichetti, DMD Phone: 212-685-5133 Email: info@edgardelchaar.com

#### NORTH CAROLINA

Clemmons North Carolina Study Club Andrew Kelly, DDS Clemmons, NC Phone: 336-766-7966 Email: dctr2th@msn.com

\* This calendar section is available to any credentialed member of the AAID to post information about implant education courses offered by the member. The member must agree to provide the list of attendees to AAID in exchange for publication of the course in the calendar. Study Club listings are available only to Affiliated AAID Study Clubs. For information about becoming an Affiliated AAID Study Club, email education@eaid.com.

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#### **New Student Members**

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Priyanka Patel Ben Truong **University of Southern California** Stephanie Nguyen Karen Siena

#### University of Tennessee Anna Hill-Moses University of

**Texas - Houston** Kaylea Olsak Gabriella Balli Thai Cuang Ho Nadia Ismail Matthew Le Alicia Morris Angie Nguyen Jade Nix Sean Pawelek Adrienne Rhodes Katherine Richardson Natalie Vos Hong Wang Katie Womack

Virginia Commonwealth University Claire Krueger

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