December 2019/January 2020

HYATTREGENCY

The publication exclusively for the general practitioner

Florida AGD One Thousand Dollars & 10/100

> The BaleDoneen Method (BDM): A solution for America's number one healthcare issue

\$1,000.00

CHASE O

Intraoral Scanners in Dental **Practice Today** By: Robert Mongrain, DMD

In-Office 3D Printing is Here -Are You Ready? Rick Ferguson DMD, DABOI/ID

FLORIDA GENERAL DENTISTRY



- **3** President's Message Dr. Andrew Martin
- 4 Editor's Note Dr. Randall Weisel

5 Digital Denture Technology By Damon Liesse

6 Upcoming CE Courses Laser Dentistry & Perio Surgery -Register Now!

8 Legislative Update Dr. Melvin Kessler

9 The BaleDoneen Method (BDM): A solution for America's number one healthcare issue

11 Intraoral Scanners in Dental Practice Today By: Robert Mongrain, DMD

12 In-Office 3D Printing is Here - Are you Ready? Rick Ferguson DMD, DABOI/ID

FLORIDA FOCUS Copyright: 2019©FLAGD - Florida Academy of General Dentistry: 5200 NW 43rd St., #102-308, Gainesville, FL 32606 - Randall Weisel, DDS, FAGD, Editor, Patricia Jenkins, Managing Editor. Send announcements and correspondence to: Florida Academy of General Dentistry: 5200 NW 43rd St., #102-308, Gainesville, FL 32606 Phone: 866-620-0773, FAX: 352-354-9064. Email: Flagd@flagd.org. Send letters to the editor to: Randall L. Weisel, DDS, FAGD, 11851 Driver Ln., Spring Hill, FL 34610 - docweisel@gmail.com Disclaimer: The Florida Academy of General Dentistry, its Officers and Board of Directors does not necessarily endorse opinions or statements contained in essays or editorials published in the Florida Focus. The publication in advertisements does not indicate endorsements for use of products or services. The Florida Focus is published for its members by the Florida Academy of General Dentistry. Comments and suggestions about the Florida Focus should be sent to the Executive Office:

Patricia Jenkins, Executive Director: 5200 NW 43rd St., #102-308, Gainesville, FL 32606

2019/2021 OFFICERS AND DIRECTORS AT-LARGE

OFFICERS

PRESIDENT Andrew P. Martin, DMD, MAGD

VICE PRESIDENT Naresh Kalra, DDS

SECRETARY Ray Morse, DMD, MAGD

EDITOR Randall L. Weisel, DDS, FAGD

TREASURER Harvey P. Gordon, DDS, MAGD

IMMEDIATE PAST-PRESIDENT Merlin P. Ohmer, DDS, MAGD

DIRECTORS AT-LARGE

Dr. Olivier Broutin, DMD, MAGD John V. Gammichia, DMD, FAGD, Public Information Officer Toni-Anne Gordon, DMD, Membership Mel Kessler, DDS, MAGD, Legislative Douglas Massingill, DDS, MAGD Mohammed Mujeeb, DDS, MAGD Bipin Sheth, DDS, MAGD Marissa Whitehead, DMD

REGION 20 OFFICERS CONGRATULATIONS TO OUR NEW REGIONAL DIRECTOR!!

Merlin P. Ohmer, DDS, MAGD

REGION 20 TRUSTEE Robert Gehrig, DMD, FAGD

REGION 20 SECRETARY/TREASURER Harvey P. Gordon, DDS, MAGD

How to Reach Us

Florida Academy of General Dentistry 5200 NW 43rd St. #102-308 Gainesville, Florida, 32606 Phone: 866-620-0773 Email: Flagd@flagd.org

EXECUTIVE DIRECTOR

Patricia Jenkins

A Letter from your President Andrew P. Martin, DMD, MAGD

On the National Front, I would like to congratulate Dr. Connie White who stepped into the office of AGD President, Dr. Gerald Botko our new Vice President, Dr. Abe Dyzenhaus the new Secretary, and Dr. Bryan Edgar who was elected to another term as Speaker of the House. Following the 2019 House of Delegate meeting in Chicago, I am pleased to welcome Dr. Merlin Ohmer as our new Region Director. Dr. Robert Gehrig will remain our Trustee for Region 20.

I was fortunate enough to attend the AGD Advocacy Summit and while I considered myself well-informed I was shocked to learn of the myriad fronts on which our profession is being challenged. I am truly glad to know that I have the AGD Headquarters in my corner. Dr. Spencer Bloom is an excellent resource for any member seeking information on the Mid-Level Provider issue that has been raised again by a recent Senate Bill.

Within Florida, we are seeking volunteers to help us reconstitute the Gold Coast Component, help the NW Component gain traction, and begin a Component in South West Florida. Any AGD dentists interested in getting involved at the component level should reach out to our Executive Director.

The FLAGD CE program is going strong and after a successful course on analog and digital implantology, we are excited about our laser course that will held in Tampa on January 24, 2020. Dr. Matt Scarpitti now chairs the CE program so keep checking your email and our website for future courses. I would also ask that you let out-of-state friends and colleagues know about our courses so that can take advantage of the opportunity to come visit our beautiful state.

The AGD has rolled out a new Career Center for members to find and recruit individuals who fit your team needs. Headquarters has also partnered with Dental Health Products, Inc. so that our members can enjoy aggressive discounts on the brand name supplies. Other features that may be of interest are the All-Star Dental Academy, Dentist's Advantage Professional Liability Insurance, Dental Card Services Alliance to help save money on merchant processing.

Personally, my mission remains to deliver value to you, our members, so contact me if you have suggestions as to how the FLAGD can serve you better. Help us grow as an organization by sharing the value and importance of membership with your associates, study clubs, and classmates.

In the words of Thich Nhat Hanh, "The path is the goal," and I am humbled and honored to share this journey with you.



With gratitude, Andrew Martin DMD, MAGD



AGD2020 THE PREMIER MEETING FOR GENERAL DENTISTRY

LAS VEGAS JULY 15-18 AGD2020.ORG



Editor's Note

Happy New Year to all! 2020! Wow, this past year has flown by; Tis the Season to be happy, grateful and hopefully healthy, wealthy and wise.

I want to welcome you to the window of the Academy of General Dentistry; the Florida Focus Magazine (winter edition.)

Here you will have an introduction by articles on cutting edge digital technology and the shift of being "teeth doctors" to integrative healthcare physicians of the stomatognathic system.

I am so excited to be part of the Academy of General Dentistry. Our great organization is so devoted to helping elevate our profession to being leaders in healthcare by communication, education, and participation.

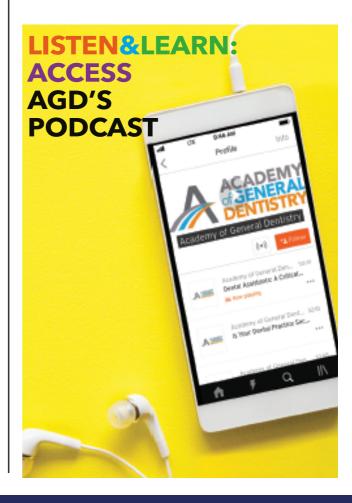
The Florida Focus Magazine is an integral part of our initiatives. So, enjoy your magazine. It is your source to be exposed to evolving ideas, technology and advocacy issues that affect us and our patients. I would not be an effective team player within organized dentistry without urging you to stay active in the AGD.

Invite other colleagues to join our ranks. As you continue to grow as a dentist, share what know. Share the value with others. Our abilities to help our patients strengthen by the unity within our profession.



The Academy of General Dentistry is you! It is us! It is new members and seasoned members. Let's be thankful, count our blessings and enjoy this holiday season.

Randall Weisel, DDS, MPS, FAGD



DIGITAL DENTURE TECHNOLOGY

By Damon Liesse -Area Vice President of Digital Technology

CLEARWATER, FL - An exciting change is happening in the world of Removables, and every Industry Professional knows it has been a long time coming. The advancement of digital denture technology delivers excellent results while maintaining ongoing improvements. Anyone who has been involved with dentures knows the drawbacks with the analog process: prolonged work flow with multiple appointments, numerous adjustments, let alone the profitability small margins for the clinician. As the new age dawns in digital denture technology, the future success in denture cases, for the clinician and patient, is possible through the elimination of excessive chair time and vast reduction in adjustments on both printed and milled dentures.

Patient acceptance on digital dentures with excellence on fit, form and function is achievable on every case. A reality that starts virtual and ends up both practical and effective.

"The future looks bright with digital denture technology. General dentists now have the opportunity to increase profits and raise their removable comfort level, providing peace of mind on the denture final outcome and achieving the ultimate goal: patient acceptance and patient satisfaction."

-Dennis Urban, DSG, CDT

A necessity, on any successful denture case, includes the partnership and communication between the laboratory and the clinician beginning with case planning and material choice. The materials available with digital denture technology improved tremendously over the past few years, and now we can utilize the best in both milled and printed denture base materials. All of which utilize tooth choices, which are unsurpassed in wear resistance and aesthetics. both in a milled and individual tooth form. Clinical work flow reduces to merely three office visits shrinking operatory chair time, minimizing patient discomfort, and providing a dramatic reduction on denture adjustments - especially when it comes to occlusion and sore spots.







Continued on page 10

RIDA

Δ

Introduction to Advanced Laser Applications That Revolutionize Today's Modern Dental Treatments

Friday, January 24, 2020

Location: Embassy Suites by Hilton-- 555 N. Westshore Blvd. Tampa, FL 33609 Time: 8:30 a.m. to 4:30 p.m. (Lunch 12-1:00) Includes light breakfast, full lunch and coffee bar throughout the day 7 CE HOURS- PARTICIPATION /HANDS-ON Submitted to CE Broker and AGD Subject code: 135

Course Description:

We will be discussing the progression laser technology has undergone to the advanced applications available today. Learn how to enhance traditional restorative dentistry with lasers and see how these benefits can reduce your stress and improve your care; providing a superior value for your patients will gladly pay for. We will discuss how lasers can revolutionize your treatment of Periimplantitis and traditional Periodontal care Improve the cleansability of the entire endodontic system including lateral and accessory canals previously untreatable. Expand into Vital Pulp Therapy. Plus learn how to shed years off the look of your patients through exciting advanced aesthetic procedures as well.

Learning Objectives:

- 1) Learn why laser physics works to improve your dentistry.
- 2) Learn why laser physics can be applied to achieve painless dentistry
- 3) Learn how Twin Wavelengths significantly improve the results of periodontal therapy with bone regeneration
- 4) Learn why photoacoustic streaming is guickly becoming the standard of care in Endodontic therapy
- 5) Learn how to improve your TMD and Facial Pain treatment results with laser photobiomodulation.
- 6) Learn how Twin Wavelength technology can set back the clock on skin aging.

LIMITED SEATING AGD Members: \$399 Non Members: \$499 Staff: \$109



1. Take out your smart phone, open your camera and hover your camera over the QR code.

2. Don't take a photo. A link will pop up on the top of your screen. 3. CLICK THE LINK and it will take you right to the website to register.



PAC GENERAL DENTSITRY PROGRAM APPROVAL FOR CONTINUING EDUCATION Florida Academy of General Dentistry National Approved PACE Program Provider for FAGD/MAGD credit. Approval does not imply acceptance by any regulatory authority or AGD endorsement. 1/1/2019 to 12/31/2020. Provider ID #219295



Dr. Alford received his undergraduate degree with majors in Mathematics, Physics, Aerodynamics, Biology & Chemistry. He completed his dental training at the University of Alabama & received the AGD Award for Excellence. He practices is in Bradenton, FL with special emphasis in Cosmetic Reconstruction, Implants & Cosmetic enhancements entered the United States Dental Institute for continued education and completed a full course (5 years) in functional orthopedics with additional training in orthodontics. He realized he needed to be more knowledgeable in functional occlusion and began taking courses in TMJ, full mouth reconstruction, pathology (function) of the jaws, and prosthodontic reconstruction with implants. He continues to attend courses from leading clinicians throughout the world and recently attended the World Conference on Implant Therapy in Las Vegas bringing back to Bradenton the most current treatments being offered utilizing computer imaging technology and Laser Application to current dental procedures. Dr Alford receive his Masters Certification in Laser Dentistry in 2012 and continues his laser education today with focus in the applications of multiwavelength therapies and cutting edge techniques. His office hosts the Largest Laser Study Club in the United States. In 2019 was co-founder of the Advanced Laser Training Institute with the objective to educate all dentist in the use of modern dental lasers & advanced aesthetic treatments.

CANCELLATION POLICY: No refunds are provided after this date. Failure to attend the meeting without written notification will not qualify for a refund. Cancellations received less than 30 days, but more than 15 days prior to the course date will receive a 50% refund. In the event that a registrant needs to cancel, please email flagd@flagd.org at least 30 days prior to the course date to receive a full refund.

GENERAL DENTISTRY

Perio Surgery for the Modern Dental Practice

A Complete Look at Diagnosing and Treating Periodontal Disease; From Surgical to Non-Surgical Solutions

March 13 & 14, 2020

Location: TBD - Orlando, FL Time: 8:30 a.m. to 4:30 p.m. (Lunch 12-1:00) Includes light breakfast, full lunch and coffee bar throughout the day 7 CE HOURS- PARTICIPATION /HANDS-ON Submitted to CE Broker and AGD Subject code: 490

Course Description:

Join us for an innovative, hands-on course for those interested in learning surgical and non-surgical solutions to periodontal disease, including improving patient compliance for at-home care. Participants will take part in hands-on exercises that include flap and suturing, bone contouring, and bone grafting. Exercises will be done on both pig jaws and anatomically correct models. Day One is ideal for clinical staff, especially Hygienists. We will also show an evidenced-based method for the minimally invasive management of moderate to advanced periodontal infection targeting the bacteria and not the pocket. We will explore ongoing maintenance, a key factor for long term success, and emphasize methods that patients can manage at home without being too complicated. With this approach, compliance might be improved over traditional efforts to get people to floss. In this course, we will clarify diagnosis and treatment planning to help practitioners feel comfortable with different kinds of treatments, and the potential for success of these approaches, whether you treat infective periodontal disease cases yourself or make informed referrals.

Topics to be covered include: Diagnosis, Prognosis, Minimally invasive anti-microbial methods, Instrumentation, Basic flaps and palatal flaps, Osseous concepts for both osseous reduction procedures and basic bone grafting for three wall defects, The role of traum from the occlusion Predictable methods for patient motivation that will include a key cornerstone for long term successful maintenance care.

Learning Objectives

- 1.) Better understand multi-faceted causes for periodontal disease and how to diagnose them
- 2.) Learn how occlusal forces contribute to progression of periodontal disease
- 3.) Explore a wide range of treatment options from minimally invasive non-surgical to surgical
- 4.) Better understand a simplified approach to patient care at home that might actually lead to more compliance
- 5.) Learn when to maintain some 5 mm pockets and treat others
- 6.) Learn goals for flap design and osseous recontouring
- 7.) See what types of bone defects are candidates for bone grafting

Dr. Kohner was sold-out 3 months in advance last year! Register early!

Friday Lecture + Saturday Workshop AGD Members: ONLY \$999 Non-Member: \$1299

Staff: \$119 (Hygienists encouraged on Friday) *Dentist seat Includes \$400 workshop fee (pig jaws + equipment)*



 Take out your smart phone, open your camera and hover your camera over the QR code.
 Don't take a photo. A link will pop up on the top of your screen.
 CLICK THE LINK and it will take you right to the website to register.

> PACE ACADEMY of GENERAL DENTSITRY PROGRAM APPROVAL FOR

CONTINUING EDUCATION

Florida Academy of General Dentistry National Approved PACE Program Provider for FAGD/MAGD credit. Approval does not imply acceptance by any regulatory authority or AGD endorsement. 1/1/2019 to 12/31/2020. Provider ID #219295



Dr. Kohner is a leading specialist in the periodontal world of dental health. He is an expert in the management of periodontal infection using non-surgical methods, as well as being current on the latest procedures relating to surgical therapy. He has presented at the American Academy of Periodontology meetings for many years, and presented lectures at the Harvard School of Dental Medicine. He now teaches for the Perio Institute (since 2003), and is a current member of both the American Dental Association and the American Academy of Periodontology, About Dr. Kohner plus is a professional member of the National Speakers Association. With over 35 years in the private practice of Periodontics and more than 20 years teaching, Dr. Kohner has the experience to make his courses meaningful. If your goal is to learn about what it takes to deliver new procedures to your patients and improve your restorative results at the same time, then his programs will give you the information you need.

CANCELLATION POLICY: No refunds are provided after this date. Failure to attend the meeting without written notification will not qualify for a refund. Cancellations received less than 30 days, but more than 15 days prior to the course date will receive a 50% refund. In the event that a registrant needs to cancel, please email flagd@flagd.org at least 30 days prior to the course date to receive a full refund.

Legislative Report - Melvin "Mel" Kessler, DDS, MAGD

Stop DT Legislation; Fund Dental Student Loan Repayment Bill

Advocacy. At. Work.

Last session we defeated Dental Therapy (DT) legislation while it was still in committee; the best possible outcome. Now they are back with SB 152 (Brandes) and they are planning a similar house bill. Why? Minnesota passed the first actual DT bill in 2009, and a decade later they only have 100 therapists, as of most recent count by the AGD, October 16, 2019. Their program required only 2 years of training. CODA, Commission on Dental Accreditation, later set guidelines and now requires a 3 year program.

DT's were to solve the shortage of care in census-designated rural areas. To date, only 18 DT's are in these areas while the rest are in non-shortage urban areas. Eleven do not show a current work address. Even with this "program", Minnesota risked losing federal funding for its Medicaid program because not enough children were receiving preventative dental care. Still, notwithstanding these shortcomings, a total of 12 states have some form of program (4 passed in 2019). In addition, Minnesota is the ONLY state that currently has any DT's working on patients (4 of those states have a different type of program limited to tribal areas). This does not sound that successful, so after over 10 years of trying, why don't the multibillion PEW and Kellogg Foundations consider another option?

We feel the Dental Student Loan Repayment Bill is a better option. It normally takes from 5 - 6 years to get a DT program to get off the ground and graduate students. Then you only have a mid-level that cannot diagnose and do all the procedures that a fully trained dentist can do. We can have 10 doctors going to census-designated rural areas within a few months, if that long. That can be followed by another 10 the following year, and if some choose to stay in area, we have a more final solution. We PASSED THIS BILL last session, so what happened? Even though it passed, the appropriations committee did not find any money to fund it.

Donated Dental Services was included with the student loan bill. This was also part of the unfunded bill. The program asked for funding for two coordinators so that the 400 volunteer dentists could treat people unable to afford treatment who are disabled, elderly and medically compromised for FREE! Another budget item, passed but not funded, though it had been funded for the previous four years, was fluoridation. For every \$0.50 - \$3.00 spent, there is an average \$32.19 per capita savings in treatment costs.

On 11/13/19, I attended a Capitol Visit, with Dr. Rick Huot and the FDA lobbyists, Dir. Joe Anne Hart, Alexandra Abboud and Jamie Sheehan. These key visits target legislators serving on health and appropriation committees, while bills are still in the formative stages. We met with two legislators and four staff members. Capitol Visits, the Legislative Contact Dentist Program (LCD) and Dentist Day on the HILL (DDOH), 2/4/20, are major parts of the FDA Advocacy program. The other major part of the program is YOU, the FLAGD and FDA members. If you do not want a whole new group of dental providers, mainly coming to the already crowded urban areas, you need to help.

How? You can become an LCD or attend DDOH, and/or participate with FLAGD & FDA Action Alerts. Mike Toner, Manager, Government Relations, AGD, will send the Action Alerts to FLAGD members. He can be reached at: michael. toner@agd.org, or call him at the AGD, 312-440-4307.

The Action Alerts are sent out to notify the membership to contact their individual legislator or contact the entire health committee, if a very important bill needs a full response. Take out your smart phone, open your camera and hover your camera over the QR code(s) below - Don't take a photo. A link will pop up on the top of your screen - CLICK THE LINK and it will take you right to the website.

> Information on DT's and Midlevels



Find your Legislator



Register for DDOH 2020



The BaleDoneen Method (BDM): A Solution for America's Number One Healthcare Issue

Despite incredible advances in medical technology, cardiovascular disease (CVD), namely heart attacks and ischemic strokes, have remained the leading cause of death and disability in the United States since the year 1900. According to the Center for Disease Control (CDC), 415, 000 Americans are killed annually by this preventable disease. After a heart attack, immediate mortality is 14% and 35% of victims will be dead within a year. Heart disease is the largest cause of premature death and robs people on average of 16 years of life. Strokes cause more disability than any other disease. An American suffers a stroke every 40 seconds. It strikes approximately 55,000 more women annually than men. Financially CVD is the number one healthcare expenditure. It is projected to cost 1.1 trillion dollars by 2035.ii

The current healthcare system has been unable to stop this disease, allowing it to penetrate into almost every household in America. It is time to change this. We believe that a collaborative approach to arterial health is the answer, bringing together all specialties, specifically medicine and dentistry with the aim of identifying and eradicating the root causes of vascular inflammation. The BaleDoneen Method has been proven to halt the progression of arterial disease using a precisionbased model of care that demands different specialties in healthcare work together with the unified goal of identifying and eradicating the root causes of vascular inflammation. The BaleDoneen Method recognizes high risk periodontal pathogens, endodontic infections and airway to be three of the many root causes of vascular inflammation. The exciting news is there is a solution for arterial disease which can remove heart attack and stroke off the top of the mortality and morbidity billboard. A person must have arterial disease to have risk for one of these CVD events.iii Imaging technologies are available to find arterial disease before someone has a heart attack or stroke. These tools are safe, reliable, validated and inexpensive to identify who has arterial disease before it is symptomatic and can be used to monitor the arterial disease over time.iv The cause of arterial disease is known to be inflammation.v

There are numerous health issues that can generate arterial inflammation. Optimal management of these issues extinguishes any 'fire' in the arteries. The disease stabilizes averting potential CV events.vi

.

Additionally, genetic testing allows for each patient to be treated uniquely with precision-based lifestyle and therapeutic advice. Precision healthcare avoids treating the patient as simply an average of a study population. With this information dietary advice can be personalized. Pharmacogenetics enhances the safety and efficacy of supplement and drug choices. Genetics can also establish better therapeutic goals such as glycemic control in diabetics.vii The most recent institute established by the American Heart Association is anchored in genetics.viii Customized management helps assure arterial wellness. The BaleDoneen Method incorporates imaging of arterial disease, assessing the degree of arterial inflammation, evaluating all the root causes of 'fire' in the arteries and managing the issues causing inflammation with precision guided by genetics.

This method has been shown to stabilize, halt and regress arterial disease.ixx It reaches beyond the standard of care by recognizing and managing non-traditional causes of inflammation such as the gut microbiome, psychosocial and oral health issues. This method demands an multidisciplinary approach with healthcare providers involved in diet, exercise, psychology, medicine and dentistry. Periodontal disease caused by high risk pathogens is recognized as a contributory cause of arterial disease and endodontic disease as a potential trigger for CV events. xixii This method is a solution for the most costly and deadliest healthcare problem. It requires collaboration between medicine and dentistry. Oral healthcare providers are a critical member of the healthcare team to help identify several of the root causes of vascular inflammation and to elucidate effective treatment strategies specific to periodontal pathogens, oral infections and airway maintenance. When medicine and dentistry work together, we are one step closer to taking heart attacks off the top of the list as the leading cause of death in America.

Dentistry makes a difference.

Learn how to prevent the #1 cause of death & disability.

The BaleDoneen Method[®] offers a unique comprehensive and science-based approach to detecting, preventing and treating cardiovascular disease.

ATTEND A 2-DAY EVENT TO LEARN ABOUT THE METHOD AND ABOUT GROWTH OPPORTUNITIES FOR PROVIDERS.

BaleDoneen

Arterial Health...for Life.



2020 PRECEPTORSHIPS April 17-18 | Scottsdale, AZ September 18-19 | Houston, TX

Continued from page 5

DIGITAL DENTURE TECHNOLOGY

By Damon Liesse -Area Vice President of Digital Technology

At the forefront of Digital Denture Technology, Dental Services Group (DSG) expands their digital laboratory named The Digital Experience Center (DXC). The DXC is the result of combining DSG's decades of industry-leading innovation and technologically advanced workflows to deliver another valued service option within its wide and growing group of comprehensive digital dental solutions for the modern dental practitioner. The DXC continues to disrupt the fast-paced digital environment though ongoing investments into advanced equipment, development of proprietary processes, and talent enhancement. All strategies ensure DSG strengthens collaboration with IOS Strategic Partners while remaining current with IO scanning software, devices, and workflows.

"Customers will benefit from enhanced product esthetics, consistent quality, exemplary service, and expedited turnaround times, all through the DXC's fast and user-friendly interface.", Ashley Teague, The Digital Experience Center Manager.

DSG knows success lays in the right combination of process, product, and people. The rigorous workflow processes at DSG bring together industry veterans and offer consistency in quality, care, customer service, and guaranteed results. DSG's Quality Promise ensures our customers complete satisfaction with all digital cases, enhancing relationship value. In addition, the DXC offers a wide array of products, including and not limited to: Full Contour mono-lithics, Smile Design diagnostics, splints, digital dentures and additional modeless restorations; and offer yet another distinctive service: DSG's wholly supplied IOS Certified Training Specialist Team.

"The DXC brings together DSG's digital all-stars, along with all the latest technologies, allowing for quicker receipt, processing, and production of all digital cases. The DXC presents easy case submission, concierge customer service, and consistently low re-makes on digital and modeless cases." Chris Bolam, The Digital Experience Center Director of Operations.

DSG® is the nation's largest network of dental labs and lab services. Our growing family of lab locations handles everything from simple restorations up to the most complex dental cases. Each case receives personal care and attention so you can focus on what's important: your patients.







Intraoral Scanners in Dental Practice Today

By: Robert Mongrain, DMD | General Dentist and Director of Clinical Advocacy Heartland Dental

Intraoral Scanning is for today. The time has passed when one could sit on the sidelines of this technology. Today we have multiple systems at multiple price points for all types of practices. You can spend as much as \$60,000 or as little as \$18,000 before discounts on a scanner. They don't all provide the same features, but they will all provide you with accurate results. I can attest to this as in my support role at Heartland Dental I am able to have personal experience with each system.

If you think you are not "doing" digital dentistry today, you should know that nearly all crown and bridge restorations are fabricated digitally no matter which lab you use. The process begins with a scan, whether in your office or of the die in the laboratory.

How does one go about selecting a scanner? First by defining what clinical applications you want to see digitized. Is it just crowns, or do you include clear aligner therapy or even traditional orthodontics? If using clear aligners for tooth movement is it Invisalign or another brand? Chairside milling or laboratory? Implant placement with surgical guides or just restoration? Are you more of a do it your selfer or do you want lots of in person and online support? How about your team? Will they be more self starting or will getting started be an effort?

There are many questions beyond these you should ask but don't let that stop you. A team meeting before you start will help you complete your list. When selecting a scanner you should know that despite marketing claims about superiority of one over another all scanners on the market today have enough accuracy for almost all applications. The order of accuracy in digital technology is scanner, then milling unit, for milled restorations and then the least accurate part is the printer. So this reverses our mental process as we are so used to using the model as our final check for accuracy, but we know from the technical aspects of the digital workflow that this is the least.

Once you decide your priorities it is time to act. The primary scanners today are the Itero Element II, Trios from 3Shape, Primescan from Dentsply, CS3700 from Carestream, Emerald from Planmeca and the Medit I-500. I have only included the main players here in the US market. There are many ways to use the Intraoral Scan once completed. Of course, crown and bridge and implant restorations are the most obvious. There is also, outcome simulation for both orthodontic and Esthetic cases, visualization of various oral conditions using the scan for patient communication, surgical planning and guide fabrication for implants. There are more and more functions becoming available every year.

There are so many ways that digital scans can improve patient care and your practice today and the applications continue to grow. I urge you to take a good look at this technology for your practice and make sure you are not the last in your neighborhood to get one.

WILL YOU HOPE OR WILL YOU HELP?

Hoping can't end oral cancer. But, together, we can. AGD members make a powerful team for fighting oral cancer.

Together, we can:

- Find innovative ways to detect and treat oral cancer.
- Create new approaches to prevent oral cancer.
- Alert the public about oral cancer risk factors and prevention.
- Screen our patients and the public.
- Help eradicate this disease.

As we approach this season characterized by goodwill and generosity, please support the mission of the AGD Foundation. Make a tax-deductible donation with your AGD membership dues renewal or online at agd.org/agd-foundation.

We can't let early detection and diagnosis of oral cancer be delayed or at worst, remain unknown. Your gift today can help save lives.



HELP MAKE PROGRESS HAPPEN agd.org/agd-foundation

The AGD Foundation is a 501(c)(3) charity; gifts to the AGD Foundation are fully deductible for United States federal income tax purposes, subject to the limitations placed on charitable gifts by the Internal Revenue Service. Be sure to check with your tax professional or attorney for specific, allowable deductions in your state.

IN OFFICE 3D PRINTING IS HERE - ARE YOU READY?

As dental practices move into the digital era with digital intra-oral scanners and CBCT xrays there is a need to take these images from a virtual world into the real world for creating dental devices with 3D printing. Luckily high-quality 3D printing is finally within the reach of every dentist with 3D printers as low as \$500 available for dental use. The types of 3D printers used in dentistry typically use a UV light to incrementally cure and harden a light sensitive liquid resin. 3D printers can currently be differentiated most readily by resolution and speed.

What are the uses for 3D printing in the typical dental office and which type of printer and quality do we need? The best way to answer this question to look at a conventional dental product such as a staple in any dental office - dental stone. Dental stone is available in different qualities depending on the need. Most dental models are produced with standard (low resolution) buff stone. Crown and bridge models are made with stronger epoxy blended stone which allow for more detail (higher resolution). 3D printers similarly can produce models with different resin formulations and resolutions. Low cost 3D printers typically will produce models for everyday use but more mission critical accurate models typically require more expensive and carefully calibrated resins and printers.

Examples of everyday use include study models, digital waxups, clear orthodontic aligner models, temporary crowns, surgical guides, custom trays, dentures and bite splints/nightguards which can be printed accurately at 100 microns resolution. Crown and bridge models require better accuracy and resolutions lower than 50 microns. Just like dental stone however, most dental practices don't need the highest resolution more expensive printers.

Many practices are already producing surgical guides in office by merging CBCT and intra-oral scan data to efficiently place dental implants and doing so with a quicker turnaround. Software to produce in office clear aligners have revolutionized progressive practices by significantly lowering the cost of these procedures compared to services like Invisalign[™]. Dental assistants can produce custom trays in as little as 40 minutes for same day use. More complex appliances such as temps, dentures, digital waxups and bite splints can have the design outsourced and printable files can be sent back to the dental office for printing on the inhouse 3D printer.

As 3D printers become more automated, reliable and easy to use the printing process can be more easily delegated. There are 5 steps to producing a dental device or model with a 3D printer.

- (1) Data acquisition (Digital impression or scanning of impressions/models)
- (2) Design (easily outsourced for more complex devices)
- (3) Printing on the 3D printer
- (4) Washing after printing
- (5) Post curing for full strength

Steps 4 and 5 are known as post processing.

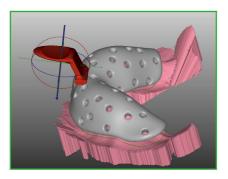
With 3D printing the size and resolution of the model affects the speed of printing with larger, higher resolution models taking longer to print. As an example, a model printed at 100 microns will print in about half the time as the same model printed at 50 microns resolution. 3D printing is actually 2D printing in layers and a 50-micron print will have twice as many layers as a 100 micron print of the same size. Print times range from as lows as 15 minutes to over 2 hours for a single model depending on the printer. Still it is now possible to print dentures for example with a low-cost printer for same day or next day delivery.

Dental Dealers now carry a range of 3D printers with some designed specifically for and others modified for dental use. Even low cost non dental printers can be used with FDA cleared dental resins to fabricate appliances. Models not being used in the body can be printed with non-FDA cleared resins which are typically lower cost. Generic resins are typically not formulated, calibrated or have as good quality control as branded resins. Resin costs can vary from \$60 to almost \$500 per liter. The number of models from each liter will vary with a liter of FDA cleared surgical guide resin (\$300) capable of producing 40 or more surgical guides as an example. Study models can be produced for around \$1. Techniques such as hollowing of models can save on resin costs and print speed.

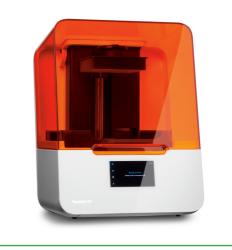
In conclusion 3D printers are available for every dental practice budget but there is a learning curve and there will be disruptions in the current workflow. It is important to buy a printer that fits your required need. It is doubtful that dentists will need to print at a higher resolution than 100 to 50 microns in the near future and the higher resolution printers are more suited for dentals labs where their higher costs and maintenance needs can be offset by higher volume use. There are some processes which are still best suited for conventional technology such as bleaching trays. It is still faster and less costly to produce bleaching trays from stone models. Some processes devices such as surgical guides and aligner just simply cannot be produced without 3D printers.

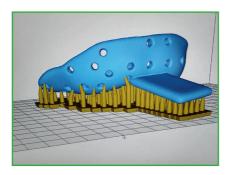
Where current processes work more efficiently, they should still be employed. That will change over time with technology and we will eventually be able to ditch dental stone (pun intended).

About the author: Rick Ferguson DMD, DABOI/ID has been involved in teaching implant dentistry for the last 22 years and has lectured in every major city in the United States as well as internationally. These lecture topics have included treatment planning, case selection, simple and complex surgical placement and restoration, advanced bone grafting and bone graft materials, use of Computed Tomography and surgical guides, hygienic maintenance, management of complications and failures. Dr. Ferguson has been instrumental in bringing low cost 3D printing technology to dentistry and developing digital workflows for implant placement. Dr. Ferguson and his wife Dr. Katherine Ferguson DMD, FAGD runs implant training programs and hands on bone grafting courses including Implant Educators - a 7 month Implant Live Surgery Continuum at the University of FL and also at LSU which have been attended by thousands of dentists. They maintain a private practice in Davie, FL emphasizing dental implants and implant repair.





















Dentistry has changed over the years. Our commitment hasn't.



Transitions are hard.

Even though dentistry has changed dramatically over the years, easing dentists into retirement has always remained our focus. The transition ahead seems as new and uncertain as when you began your practice, and your experienced Transition Consultant at Henry Schein Professional Practice Transitions will guide you along the way.

Contact us at: 1-888-738-3433 or email: PPTflorida@henryschein.com



www.henryscheinppt.com

 PRACTICE SALES = VALUATIONS
 TRANSITION CONSULTING/ PLANNING = ASSOCIATESHIPS

© 2019 Henry Schein, Inc. No copying without permission. Not responsible for typographical errors. "World's Most Ethical Companies" and "Ethisphere" names and marks are registered trademarks of Ethisphere LLC.



PROMOTIONAL CODE:

Member's name

REFERRAL INFORMATION If you were referred to the AGD by a current member, please note his or her information below:

City, state/province, or U.S. Federal Services branch

MEMBER INFORMATION

											1	
First name MI Last na							lv sectio	ons of the	AGD website			
Do you currently hold a valid	I U.S./C									-		
Type of membership: (Check	(one.)	Active general dent	ist □ As		alist) 🗆 R			Denta				
If you are not in general prac		-			,							
	•		•	-t			- D-	. :	- 6-			
Current dental practice envir □ Other			ate your speciality::									
If you are a member of the C □ U.S. military counterpart			, please indic		onstituent:				F	lease in	dicate bra	inch
CONTACT INFORMAT Your AGD constituent is determined by you	-	s address, unless one is not available	9.									
Business address			City		State/provinc	ce			ZIP/postal o	:ode		
Name of business (If applicable)				Phone				Fax				
Home address			City		State/provinc	ce			ZIP/postal o	ode		
Phone			Primary email		Website add	ress						
			ata af an aca	raditad* U.S. (Canadia					Ne			lu oprollo
EDUCATIONAL INFO		Are you a gradu	ate of an acc	realled 0.5./Canadia	an dentai sci	1001 :						
Dental school			State/province		Country			Date o				
	sident	in) an accredited** U.S.		n postdoctoral progra				Date 0	graduation		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
□ Yes □ No □ Currently e					*Official a provinces	s. **Accredi	ted dental	residenci	s qualify for	the resid		
Postdoctoral institution			State/province		Country			Start d	ate (mm/dd	/уууу)	End date	e (mm/dd/yyy
	τιων					AGD Priv	vacy Inf	ormati	on			
Postdoctoral institution State/proving OPTIONAL INFORMATION Gender: Male Female Ethnicity: American Indian Asian African-American Hispa					T to	he AGD ha: o the handl	s systems a ing of your	nd proce personal	lures in place information.	The AGD	does not a	collect persona
		an □African-America	n 🗆 Hispani	ic 🗆 Caucasian 🗆 (Other a	ctivities. Or	n occasion,	the AGD	nay collect p	ersonal i	nformation	n, but only with
				y								
2019 AGD												
Headquarters Dues Please check membership type applying for: Active General Dentist Associate (Specialist) Affiliate Resident. 2018 Graduate	. \$400 . \$200 \$80	2019 Florida AGD Consti Active General Dentist/At 2018 Graduate/Current R 2017 Graduate 2016 Graduate 2015 Graduate 2019 Florida AGD Compo	tuent Dues ssociate\$95 Resident\$20 \$95 \$95 \$95 onent Dues**	this application, I a hours of continuing	this application, I agree to all terms of membership including completion of 75 hours of continuing education every three years for active general dentist and							
 2017 Graduate 2016 Graduate 2015 Graduate Dental Student 	\$240 \$320	 Gold Coast Northeast FL Southeast FL Sun Coast 	\$60 \$15 \$10 \$0	Signature								
AGD Headquarters Dues: (See abo				 Date								
Florida AGD Constituent Dues: (See												
Florida AGD Component Dues				Please sign thi		ion a	n <mark>d su</mark> l	bmit	payme	ent t	0:	
Individuals joining July 1 to Sept. 30, 2019, pay hal resident, first-year graduate, or affiliate members). end of 2019. Paid dues will be applied to the upcor	f the annua Individuals	headquarters membership dues (does no	t apply to student,	Academy of Gener 560 W. Lake St., Siz Chicago, IL 60661-	xth Floor							

Per the U.S. Revenue Reconciliation Act of 1993, 1.2 percent of membership dues payment is allocable to the AGD's lobbying activities and is not deductible as a business expense. Please consult with your financial adviser for detailed information Dues rates effective through Sept. 30, 2019. Contact the AGD or visit agd.org for updated rates.

Note: Check payment is required with hard copy applications. To pay with credit card, please apply online at agd.org/join-agd. If you have any questions, please contact our Membership Services Center at 888.243.3368.





JOIN AGD TODAY



DO YOU KNOW A GENERAL DENTIST WHO IS NOT A MEMBER OF THE AGD?

ASK. ONE. SIMPLE. QUESTION.

HOW ARE YOU ADVOCATING TO PROTECT OUR AMAZING PROFESSION?

YOUR DUES WILL ALWAYS GO TOWARDS ADVOCACY AND QUALITY CE







