

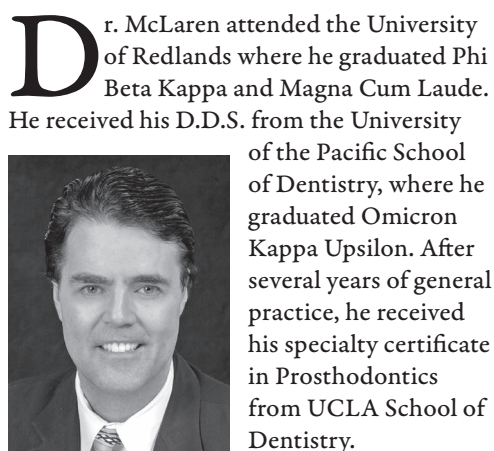
# DENTISTRY

...in general

Spring 2011

**HANDS-ON WORKSHOP • APRIL 15, 2011**  
9 Hours CE—2 hrs. Lecture and 7 hrs. Participation

## Photography, Shade Taking (visual and computerized) Photoshop and PowerPoint for communication and dental esthetics



**D**r. McLaren attended the University of Redlands where he graduated Phi Beta Kappa and Magna Cum Laude. He received his D.D.S. from the University of the Pacific School of Dentistry, where he graduated Omicron Kappa Upsilon. After several years of general practice, he received his specialty certificate in Prosthodontics from UCLA School of Dentistry.

Dr. McLaren is a Professor in the Biomaterials and Advanced Prosthodontic department. He is also an Adjunct Assistant Professor for the University of Oregon Dental School. Dr. McLaren maintains a private practice limited to prosthodontics and esthetic dentistry in which he does all of his own ceramics. He is the director of the UCLA Center for Esthetic Dentistry, a full time didactic and clinical program for graduate dentists. He is also the founder and director of the UCLA Master Dental Ceramist program. The residency program is a full time master ceramist program for dental technicians featuring extensive experience with the newest esthetic restorative systems.

Dr. McLaren is a member of the American College of Prosthodontists, Pacific Coast Society of Prosthodontists, International College of Prosthodontists, Fellow of the American Academy of Esthetic Dentistry, International Association of Dental Research, American Association of Dental Research, American Dental Association, and the California Dental Association.

Dr. McLaren is a board member and project director for Clinicians Report (formally Clinical Research Associates); he is the lab section editor for Inside Dentistry Magazine, the Techno-Clinical editor for spectrum magazine, on the editorial review board of Practical Procedures and Aesthetic Dentistry magazine and on the editorial review board for Contemporary Esthetics magazine.

Dr. McLaren is actively involved in many areas of prosthodontic and materials research and has authored over 50 articles. He is performing ongoing clinical research on various restorative systems. He has presented numerous lectures, hands-on clinics and postgraduate courses on ceramics and esthetics across the nation and internationally.

*Continued on page 5.*

### COURSE OBJECTIVES

1. To learn the fundamental principals of general photography and how to operate a digital SLR camera.
2. To learn macro-photography (close-up photography) used in documenting a case involving esthetic dental restorations.
3. Learn the basics of "Portrait" photography
4. How to use dental photography to diagnose and treatment plan esthetic dental restorations.
5. To learn the use of the "EASYSHADE" digital shade taking computer
6. Learn how to visualize natural teeth and take shades visually
7. To learn how to use Photoshop to enhance exposure, composition, and color balance of the dental images.
8. To learn how to use PowerPoint or Keynote to organize and edit the dental images into a format for presentations.
9. Digital smile design techniques using Photoshop

### INSIDE

#### HANDS-ON WORKSHOP:

	Page
Photography, Shade Taking .....	1
The IAGD Official Website! .....	2
Silver Amalgam Restorations Update .....	2 & 3
New Executive Secretary .....	4
Course Registration Form .....	5
Publications Review Council .....	6 & 7
Message from the Immediate Past President .....	7



Julie Berger, Executive Director  
7041 S. 38th Street, #128  
Lincoln, Nebraska 68516  
(O/F) 402/438-2321  
jberger5@neb.rr.com

### SPONSORS

Iowa Academy of General Dentistry • Henry Schein  
Dental Prosthetic Services • PhotoMed • Vident

# The IAGD Official Website!

Features you won't want to miss on the IAGD Website!

- Register your continuing education courses online.
- Keep track of your Iowa Board of Dentistry's continuing education requirements.
- Calendar of continuing education courses.
- Contact information for your IAGD officers.
- Membership Directory.
- Read past issues of the newsletter under reports of "Dentistry in General."
- AGD Foundation information.
- AGD membership benefits.
- Register online for the AGD National Meeting.
- Consumer information.
- News Releases.
- Advocacy with National Legislative Issues.
- AGD Library with archives of "AGD Impact" and "General Dentistry."
- Constituent Quick Facts.
- Feedback: "Give us your opinion."
- See the Tanaka article and video demonstration of Ethyl Chloride.

Editor, Jon L. Hardinger DDS MAGD

# Silver Amalgam Restorations Update

I felt the need to update myself on silver amalgam restorations and wanted to tell my fellow Iowa Academy of General Dentistry members what I got out of reading a chapter by James B. Summitt DDS, MS and John W. Osborne DDS from Fundamentals of Operative Dentistry a Contemporary Approach, 2001, "Amalgam Restorations." On this publication date it stated that silver amalgam is the most used restorative material and that it has been used in dentistry for more than 175 years. The book stated that there is considerable evidence for the safety of dental amalgam, and that its use is not related to any disease or toxicity.

- Concerning whether silver amalgam use promotes the fracture of teeth; the book addresses this by saying the predominate factor in potential fracture is not the material used but first the preparation width and secondly the depth.

- Concerning the occlusal cavosurface margin, the book says to leave your preparation parallel to the enamel rods to prevent marginal fracture that leaves an open margin. The distance the preparation goes up the inclined plane — as the preparation gets wider — of enamel determines this. Being enamel rods go 90 degrees to the cavosurface margin, your preparation is best left 90 degrees to the enamel, not the tooth's horizontal axis. (See Figure 1.)
- Concerning the horizontal excavation of decay, do not leave decay under the cusps as this promotes further decay and loss of the unsupported enamel. (See Figure 2.)
- Occlusal preparation of decay should not run the non carious grooves, but use sealants used over the remaining pits and fissures.

Continued on page 3.

## 2010-2011 IAGD Officers and Board of Directors

### President

Laila Bollinger, DDS  
132 East J Street  
Forest City, Iowa 50436  
(O) 641/585-4636  
U12th@hotmail.com

### President-Elect—Open

### Vice President—Open

### Secretary

Carol Moreno, DDS, MAGD  
1205 N Columbus St.  
West Liberty, IA 52776-9601  
(O) 319/627-2612  
dental1@lcom.net

### Treasurer

### Editor

Jon L. Hardinger, DDS, MAGD  
1339 6th St. SW  
Mason City, IA 50401  
(O) 641/423-6172  
jlhdds@netconx.net

### Continuing Education Chairperson

Craig Driver, DDS, MAGD  
3308 Kimball Avenue  
Waterloo, Iowa 50702-5758  
(O) 319/232-6804  
cwdriver@mchsi.com

### Dental Care Chairperson

Philip Andersen, DDS  
907 Bank Ct.  
Center Point, Iowa 52213  
(O) 319/849-1171  
aphig@fmtcs.com

### Legislative Chairperson

Stephen R. Thies, DDS  
7506 Hickman Rd.  
Des Moines, IA 50322  
(O) 515/276-0202  
srthies@qwestoffice.net

### Immediate Past President

Ted Murray, DDS, MAGD  
4200 Asbury Road  
Dubuque, Iowa 52002  
(O) 563/556-2711  
tedm102063@aol.com

### Constitution and Bylaws Chairperson

John Arend, DDS, FAGD  
206 3rd Ave. NE  
Independence, Iowa  
50644-1950  
(O) 319/334-3342  
jarend@indytel.com

### National Trustee, Region 10

Patricia Meredith, DDS, FAGD  
51371 PFP UIHC  
Iowa City, Iowa 52240  
(O) 319/384-7282  
patricia-meredith@uiowa.edu

### Regional Director, Region 10

Cassandra Pietrok, DDS  
1202 Shamrock Plaza  
Omaha, Nebraska 68154  
(O) 402/330-2243  
cass@pacificchillsdental.com

### Student Representative

### Student Representative Elect

### Executive Director

Julie Berger  
7041 S. 38th Street, #128  
Lincoln, Nebraska 68516  
(O/F) 402/438-2321  
jberger5@neb.rr.com

Figure 1.

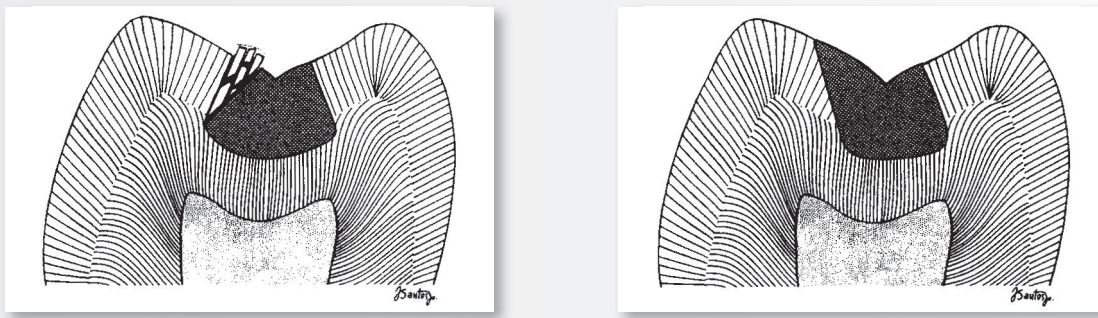
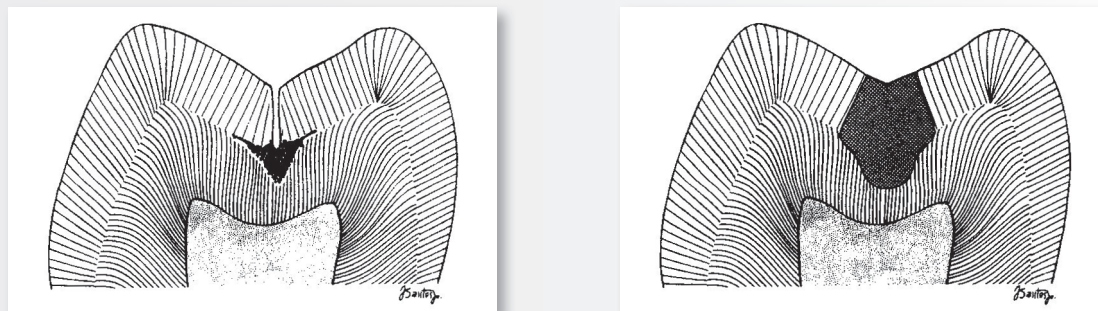


Figure 2.



*"Fundamentals of Operative Dentistry, Second Edition", Summitt J, et al. Page 312, figures 11.5, 11.6, 11.8a and 11.8b, illustrations by J. dos Santos Jr.*

*Continued on from 3.*

- Minimal slot amalgam restorations out performed tunnel preparations using glass ionomer and cermet restorations many of which failed in a three year study. None of the amalgams failed.
- Slot preparations require a small vertical retention groove running the axial walls and are to be in dentin, not the dentin enamel junction. The book shows use of a gingival margin trimmer to break out the interproximal enamel avoiding preparation damage to the adjacent tooth. Once the slot goes to the occlusal groove, the retention groove diminishes to a retention point in the dentin. The book showed a slot preparation done by Dr. Miles Markley, photographed in 1992, that had served for 58 years. (I expect it is still there.)
- Concerning adequate reduction of a cusp, a good rule for amalgam is 2.5 mm for the centric holding cusps of molars, and less so for esthetics on the non supporting cusps. This promotes an anatomic reduction, instead of a flat reduction. Many burs are 4mm long and give the doctor a quick measure of the depth of cut necessary. Slots, grooves, channels and pins were illustrated.
- Pins should be placed in the dentin and parallel to the external anatomy of the tooth. Pins have horizontal as well as vertical placement in missing cusp areas. Pins may be bent for better placement.
- Bonding amalgams have worked well, but not as the sole retentive agent.

- Restoring to ideal internal form is not necessary.
  - Placement of calcium hydroxide near the pulp is indicated.
  - Liners and bases do not insulate the pulp but may be of some benefit in sealing the dentin tubules.
  - Matrices confine the amalgam material and allow for adequate condensation pressure, preventing overhangs, forming the emergence and creating the contact. The book offers tips in removing the band without disturbing the contact. The matrix should be tipped toward the tooth so as to reduce the band from snapping off the marginal ridge. A condenser can be used to support the margin ridge to prevent it from breaking. The matrix should be removed with buccal lingual movement instead of straight up and the band should be cut to reduce the length.
  - Condensation of silver amalgam compacts, adapts, and eliminates voids and reduces residual mercury in the restoration. The book states that condensation pressure should cause a slight movement of the patient's head and that operators should maintain the same condensation pressure during later stages of amalgam placement. Silver amalgam should be slightly overfilled so that the mercury rich layer can be carved away, leaving a more durable restoration.
  - Carving is enhanced with sharpened instruments, from the tooth to the restorative surface.
  - In regard to checking the occlusion, instead of the patient being asked to close, the dentist taps the patient's teeth together by grasping the patient's chin, and hand manipulating the contact with articulating ribbon.
  - After burnishing with light pressure, the dentist can take a water dampened cotton ball that produces additional smoothing.
  - Tips on finishing include checking contours and contacts and the completing the anatomy, and polishing to a high luster several hours after placement.
  - Amalgam restorations may be attached to a previously placed and serviceable restoration; however the attachment is 30%-60% of unrepaired amalgam.
- The book is dedicated to the memory of Miles R. Markley who died January 31st, 2000 at the age of 96. The authors who wrote this chapter examined 20 of Dr Markley's patients who had been under his care in the 1930s and 1940s, among that group of patients only one tooth had been lost, and all the patients credited Dr. Markley with maintaining their healthy dentitions.
- Respectfully,*
- Jon L. Hardinger, DDS, MAGD*  
*Iowa AGD Editor*



# NEW IAGD EXECUTIVE DIRECTOR

## Julie Berger



Hi! My name is Julie Berger. First of all, I want you all to know that I am very excited to be working for the Iowa Academy of General Dentistry (IAGD). Thank you for placing your confidence in me as your new executive director. I am a native of Nebraska and grew up on a farm just north of Syracuse. I attended the University of Nebraska-Lincoln and have a degree in surgical technology from Southeast Community College. I worked for the Nebraska Dental Association for more than 16 years; first as administrative assistant and moving up to assistant executive director.

As most of you know, I have worked part-time as the executive director of the Nebraska AGD (NAGD) since 2001. For the past four-and-a-half years I have been working with Family 1st Dental as a regional coordinator/personnel manager, helping manage 32 dental practices throughout Nebraska and Iowa. I have one son who graduated from Doane College in Crete, Neb., last May, and a daughter who will be graduating from high school in a few months and is attending Doane in the fall.

I look forward to working with all of you! I have had the pleasure of working with some of you already, and I look forward to getting to know the members. I want you to

know that I am here to help you build the IAGD. I have worked with the NAGD for 10 years now and I absolutely love what I do. You have all chosen to be a part of an elite organization; one where together, we can make a difference. I am here to work with you to make the IAGD one of the best dental organizations there is. I am excited about the next few months.

Although I am in Lincoln, my door is always open. Please make sure to sign up for the April 15 course (see info in this issue). Our Board works very hard to put together high-caliber, quality continuing education courses for you, the general dentist, to help you be the best dentist you can. Get involved; your input is important and valuable! If you have an idea or suggestion, please contact me. I look forward to hearing from you!

*Best wishes,*

*Julie Berger*  
*Executive Director, IAGD*

7041 S. 38th Street, #128  
Lincoln, Nebraska 68516  
(O/F) 402/438-2321  
jberger5@neb.rr.com

HANDS-ON WORKSHOP: Photography, Shade Taking, *continued on from 1.*

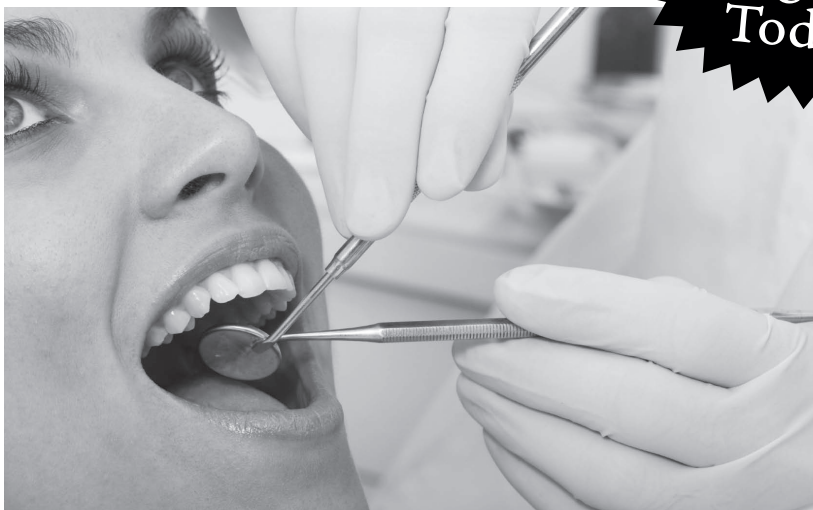
He recently published a book, on his ceramic techniques and features dental photographic art, entitled "The Art of Passion: Ceramics, Teeth, Faces, and Places."

### Course Description

The objective of the course is three-fold: (1) to learn the use of digital photography for dental esthetics, photography for shade communication and portrait photography. Secondly, to learn and use digital shade taking technology, and master the skills of visual shade taking. Third, how to import images into Photoshop and how to optimize the images and import them into a customized PowerPoint presentation. The course will also cover the use of photography as it relates to dentist-ceramist communication relative to shade analysis. Also covered will be the AACD accreditation series of images. All of the above topics will be covered in a lecture and demonstration format. The participants will then divide up into teams and will take visual and computerized shades on each other. Then the teams will take the

demonstrated dental and portrait images on each other. Lastly, the participants will import their images into Photoshop to optimize the images, which will then be exported to a PowerPoint presentation. All shade taking and photographic equipment will be supplied. The participants will need to bring a lap top computer configured with Photoshop and PowerPoint. We will have a few computers available but not enough for every participant.

**Limited  
Attendance—  
Register  
Today!**



## Course Registration Form

Photography, Shade Taking  
(visual and computerized),  
Adobe Photoshop and Microsoft  
PowerPoint for communication  
and dental esthetics with  
Dr. Edward McLaren

April 15, 2011

7:30 a.m. - 5:15 p.m. lunch will be served

CE Hours: 9 Hours

**Marriott Coralville Hotel & Conference  
Center:** 300 East 9th Street,  
Coralville, IA 52241, 319-688-4000,  
www.coralvillemarriott.com

### SEMINAR FEES:

AGD Members	\$595	_____
Member Staff	\$ 99	_____
Non-AGD Members	\$695	_____
Non-Member Staff	\$129	_____
Total Amount Paid		_____

**Please mail registration form and payment to:** IAGD, 7041 S. 38th Street, #128, Lincoln, Nebraska, 68516. A \$25 processing fee will be applied for all persons requesting a refund before April 1, 2011. There will be no refunds after April 8, 2011.

Name \_\_\_\_\_

Staff \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone \_\_\_\_\_ Fax \_\_\_\_\_

E-mail \_\_\_\_\_

AGD # \_\_\_\_\_ Non-Member: \_\_\_\_\_ Yes

### PAYMENT METHOD

Check (made payable to the Iowa AGD) \_\_\_\_\_ Credit Card \_\_\_\_\_ Credit Card Type \_\_\_\_\_

Credit Card # \_\_\_\_\_ Expiration Date \_\_\_\_\_ Code on back \_\_\_\_\_

Credit Card Address (if different from above) \_\_\_\_\_

Credit Card City, State & Zip (if different from above) \_\_\_\_\_

Phone (if different from above) \_\_\_\_\_ Fax (if different from above) \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

# PUBLICATIONS REVIEW OF THE JOINT COUNCIL Meeting of the Academy of General Dentistry

February 10 – 13, 2011

The semiannual Joint Council Meeting of the Academy of General Dentistry (AGD) met on Thursday at the ADA Building, 211 East Chicago Avenue, Suite 900, where the AGD occupies two floors. Our meeting was in the AGD board room, where we sat at a long table occupied by the committee members and AGD staff.



The first thing I heard about was the huge snow storm that hit the city the week before, and I learned a few interesting things to pass on to my readers. The staff explained the way city residents keep their parking

spaces on side streets is by placing furniture in the space while they are away so that no one will park in the spot he or she tirelessly dug out. In short, the term “dibs” describes the act of placing the personal item or piece of furniture in the spot that you dug out, letting everyone know that spot is taken! A violation is very bad neighborhood etiquette. Many staff members talked about the hours they spent digging out!

They explained that in these big storms the city and suburban plows work on clearing the main streets first and then work their way to the side streets, so often times if the car owners don’t want to wait for the plows, they are left to dig out themselves. They also told about the alleys in some neighborhoods that are not always plowed because sometimes the large plows can’t get through the narrow alleyways. Residents are

often left with no choice but to shovel the snow themselves if they want to get their cars out of their garages. Cassandra Bannon, the Self-Instruction Coordinator, chimed in with a new term describing the blizzard: “Snowmageddon!”

A sample of the meeting attendees also included the AGD Editor Roger Winland DDS, MS, MAGD, and for the first time I met Peter G. Sturm, DDS, MAGD, the outgoing associate editor, and Catherine McNamara, Director of Communications. Our Publication Review Committee’s Chair

Norm Magnuson, DDS, FAGD, is serving his last term. Each of these representatives is dedicated to his or her work on the committee and together we addressed the matters given to us. The Publications Review Council has official duties of oversight of the AGD *Impact*, *General Dentistry*, podcasts, blogs, the public site *www.KnowYourTeeth.com*, the Constituent Editors’ Program, and reviewing readership and marketing surveys.

My favorite part is to brainstorm ideas for new articles and I started with an idea about things that have become obsolete in dentistry,





including black-pointed X-ray tube heads, silver amalgam squeeze cloths, and silicates. Concerning silicates, Dr. Winland added, "Mix it quick and mix it thick!" It seems to me that we are always pushing forward to newer and better and I thought it would be good to remind ourselves that what was once thought neat is now obsolete.

I was excited to get an inside look at the production side of the publications as Production Manager Tim Henney, and Associate Designer Jason Thomas showed me their workstations. They still use a huge pegboard to pin up the pages of the upcoming issues of *AGD Impact and General Dentistry*, but a majority of the design work takes place on their computers. Jason showed me a cartoon character he created that is used to show step-by-step instructions in *AGD Impact*. The little man has black pipe arms and a round red head with various expressions. I also was amused by his cartoon drawing of a "hero" probiotic taking on the bacteria. The good guy had a huge under bite! Also, Jason sketched a caricature of me during lunch at the meeting, and it is not a bad likeness.

Lastly, circumstances of questionable roads and late planning caused me to take the intercity bus into Chicago from Mason City. Everyone told me to be careful, and even prayed for my safety! I did not realize it might be dangerous. Later when I returned safely into Mason City, everyone was delighted as I explained that when I got on the bus in Chicago I sat in the company of four Amish people and two nuns on their way to Dubuque. Dangerous? Not! I should say though, that as I was leaving Waterloo to return to Mason City, the bus driver mentioned that the bus right behind us heading for Chicago was detained while the sheriff searched for a criminal. When I was telling this to my dentist daughter in New York, she asked, "Well, Dad, would you do this again, and would you let me take the bus?" I answered, "It depends. I probably would do it again, but as far as you are concerned, it might be safer if you could dress disguised with a nun's habit!" Then she e-mailed me later that the nun outfit would look really peculiar with dangly earrings.

*Respectfully,*

*Jon L. Hardinger, DDS, MAGD  
Publications Review Council*

# Dental Photography



Digital photography is as important to how we practice as any other diagnostic method we have. Since I practice with my daughter Dr. Kristen Berning, we have 2 Cannon intra-oral dental digital camera systems that get a lot of use throughout the day. While we have a general family practice there is an emphasis on comprehensive esthetic restorative dentistry.

In keeping with a high standard of care every new patient gets a full mouth series of digital radiographs. They also get a full mouth series of digital intra oral photographs. This allows us to go over not only the radiographs, but also the photographs with them during the consultation and treatment planning appointment.

An educated patient will make the best treatment decisions based on their individual needs once they have all the facts. High-resolution photography is invaluable in allowing them to see what is really going on in their mouths. A further benefit that I encountered when I started doing this 13 years ago was how much we dentists actually miss when we only do a visual exam. When we're looking at a tooth on a monitor with our patient and it is 100 times bigger than in the mouth, you rarely have to explain anything to the patient. They can see what's wrong and often lead the dentist through the treatment plan.

It's also a fabulous way to record as you go along during treatment should you find something that wasn't obvious during the

initial exam. It's a great way to document issues that help with insurance claims and pre-authorizations. Digital images and digital radiographs can be sent instantly to most insurance companies electronically. Your office can be talking to the claims person while you're both looking at the same images. It helps clarify any confusion and streamlines the process.

Another vital place for this technology in the dental office is communicating shade and characteristics to your dental lab. Natural teeth are polychromatic. There's a lot going on; too much to write down. One shade tab doesn't cut it anymore. If today's dentist is going to do the best that they can for their patients they need to be capable of working with digital photography.

If ever a dentist is called upon to give dental presentations the dentist better be able to take professional level images to include in their PowerPoint presentations. Since we are all AGD we are all CE junkies. We have sat through hundreds and hundreds of presentations. You know what I'm talking about.

The ongoing pursuit of excellence invites some dentists to challenge themselves to become an Accredited dentist in the American Academy of Cosmetic Dentistry. For those that take up this challenge the photography has to be nearly flawless and shot to an extremely high standard. The required views of before and after are used in the examination process when submitting the five required cases. These images are shot in RAW so no image editing can be attempted. Dentists pursuing Accreditation that take digital photographs of their own work find they become their own worse critic. If they don't like what they see on the big screen it pushes them to do it better.

Who benefits from this? Patient, dentist, and dentistry in general.

*Ted Murray, DDS  
Master, Academy of General Dentistry  
Accredited Dentist, American Academy of  
Cosmetic Dentistry  
Accreditation Examiner, American Academy of  
Cosmetic Dentistry*



Iowa AGD  
7041 S. 38th Street, #128  
Lincoln, NE 68516

PRSRT STD  
US POSTAGE  
PAID  
CEDAR RAPIDS, IA  
PERMIT 291

## LEADERSHIP · EXCELLENCE · INNOVATION



An industry leader since 1972, Dental Prosthetic Services combines technology and technical skill to bring you:

- Nautilus zirconia restorations
- Lumineers®
- Implant case design and fabrication
- Complete denture services
- Oral appliances to treat sleep apnea



For more information, visit our website at  
[www.dpsdental.com](http://www.dpsdental.com)

1150 Old Marion Rd, NE  
Cedar Rapids, Iowa 52402  
Toll Free: 800-332-3341

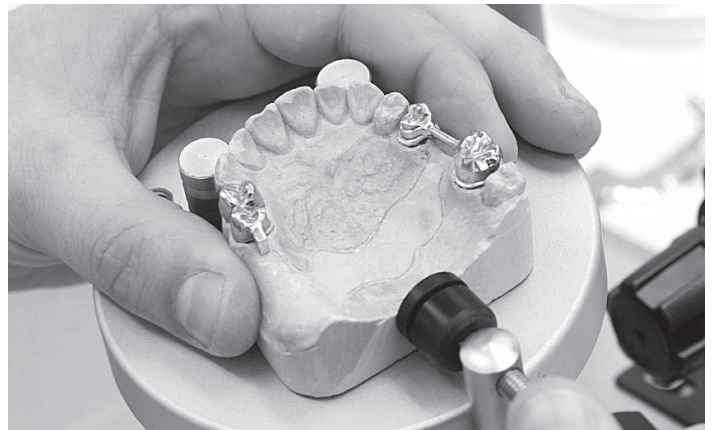
## Patrons

### DENTAL PROSTHETIC SERVICES

1150 Old Marion Road, NE  
Cedar Rapids, IA 52402  
319/393-1990 • 800/332-3341

### DENTAL REPAIR SERVICE

New & Used Equipment • Sales & Service  
2340 E. 12th, Des Moines, IA 50316  
515/263-8040 • 800/225-8040 • 515/264-8801 (Fax)



*Opinions expressed are those of the writer and not necessarily those of the IAGD Board.*