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On the cover: The humble alginate impression.
Photo credit: Miles R. Cone, DMD, MS, CDT, FACP

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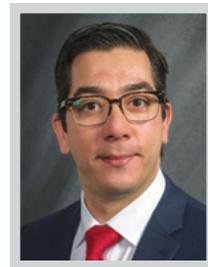
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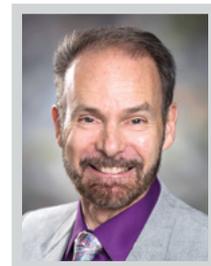
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Dr. Robert M. Taft is President of the ACP. He serves as Chair of the Department of Comprehensive Dentistry at the University of Texas Health Science Center, San Antonio.

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Correction

In the Summer issue of the *ACP Messenger*, the caption for Fig. 2 in Dr. Luiz Gonzaga’s article on page 9 should read “Various flash angles.” Under the third image, the text should read “Twin flashes with bouncers.” We regret the error.

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Archers and arrows, wizards and wands

Miles R. Cone,
DMD, MS, CDT, FACP
ACP Messenger Editor-in-Chief

Here's a short story. It's a Tuesday afternoon at the University of New England Dental College in Portland, ME. I don't carry many regrets with me, but I would eventually regret this day.

I had just finished lecturing to a 2nd year undergraduate dental class on treatment planning aesthetics when I was approached by an energetic and eager student. He was kind, courteous, and appreciative of my talk. Most of the students who hang around after a lecture want to chat me up for specifics on exam topics. But not this time. For the past hour and a half, this particular student had been champing at the bit to find out what instruments I use for my tooth preparations. The near-parallel axial wall taper and glassy finish of the post-op dentition I had shown in my presentation was remarkable, he noted. How did I do it? He had to know. I responded, without haste, that "All my preps are completed with a 330 bur." Surprisingly, he thanked me, did an about face, and left before I could share with him the jest.

Monday morning the pangs of guilt and regret set in when I discover that this same student spent a part of his Thanksgiving break hacking away at typodont teeth with a 330 bur in a vain attempt to validate my sarcastic quip the previous week. My compunction wasn't that I had misguided him on the armamentarium, but rather, that I let him believe there was a tangible shortcut to success. After all, who should think that someone would honestly attempt a full-value crown preparation with 2mm tall carbide bur?

What I needed to tell him was that when I started my journey into prosthodontics and began to cut my teeth in this specialty (all puns intended), it took me nearly 18 months of tooth preparations, every single

day, before I would truly feel comfortable showing intraoral photographs of my skills with a highspeed handpiece. The instruments didn't matter. It isn't the arrow that makes the archer nor the wand that makes the wizard. It is, in fact, the other way around.

With this in mind, I am pleased to offer the Fall edition of the *ACP Messenger* as an arrow in your quiver! In this issue we present a few spectacular archers of our own, including Mr. Fred Heppner, who fires off hot topic Q&As regarding practice transitions; an in-depth discussion with master marksman, Dr. Tony Daher, on the effect and strategic use of endosseous implants to augment the esthetics and functionality of removable dental prosthetics; and Dr. Alejandro Sánchez-Lara, who takes meticulous aim at the diagnostic protocols, preparation, design, and material considerations for porcelain laminate veneers.

As prosthodontists, our education and knowledge base are relied upon, not just by our patients, but by our professional colleagues including dental students and other specialists. As such, I believe that the onus of responsibility to educate others regarding complex treatment planning, procedural protocols, restorative material selection, and yes, armamentarium, falls squarely on our shoulders. However, as the subject matter experts, we have an obligation to espouse the virtues of our amazing specialty and raise awareness to the rest of the dental community that there are no shortcuts and no replacement for putting in the time. ■

A silhouette of an archer in profile, facing right, drawing a bow. The archer is positioned in the lower-left quadrant of the frame. The bow is held taut, with the arrow pointing towards the upper-right. The background is a smooth gradient from a deep purple at the top to a light orange at the bottom, suggesting a sunset or sunrise. The archer's hair is long and appears to be blowing in the wind. A quiver of arrows is visible on the archer's back in the lower-left corner.

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Improving the esthetics and function of RPDs with the strategic use of dental implants

Tony Daher,
DDS, MEd, FACP, FICD

When treating partially edentulous patients, several factors come into play in the choice between a fixed or removable partial denture.

Greater numbers of implants and bone grafting procedures are generally required for the fixed prosthesis as compared to the removable prosthesis treatment option. Economics, treatment time, and hygiene practices tip the scale for a removable partial denture (RPD) option. Placing implants in strategic positions increases the number of treatment options available and offers a cost-effective rehabilitation.

RPDs are classified as either tooth-borne prostheses or tooth-tissue-borne prostheses. A tooth-borne prosthesis can be considered a “removable fixed bridge” because it is the easiest to design, most accepted by patients, and has a longer survival rate than the tooth-tissue-borne prosthesis.¹

The tooth-tissue-borne RPD is not well understood by many dentists and its complexity depends on the span length of the edentulous area and the type of arch involved. Chewing and parafunctional forces act as destructive forces that may act on the RPD abutment teeth and the residual alveolar ridges.² The problem is determining how much support is required from teeth and how much support is required from the residual ridges. Patients tend to function and use the areas where the prosthesis is stable (for example, the tooth-borne side of a tooth-tissue-borne prosthesis).

A common clinical problem confronting restorative dentists is the planning and maintenance of tooth-tissue-supported RPDs.³

Multiple studies demonstrated that RPD failures are significantly higher in the mandible with bilateral distal extension base.^{4,5} Brudvick and Keltiens et al reported that dental implants can be used to resolve problems when designing tooth-tissue-supported RPDs in a cost-effective manner.^{6,7}

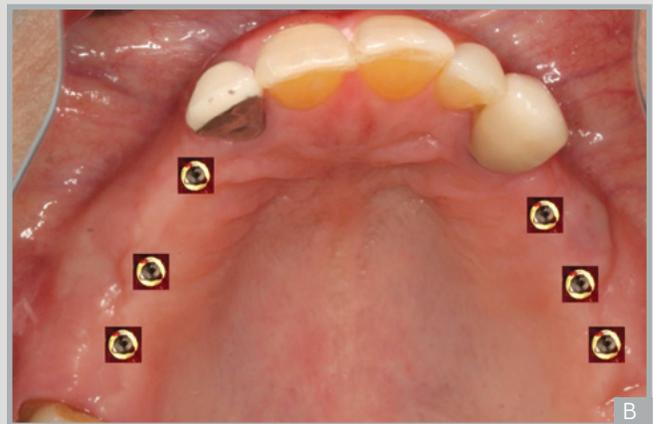
In a literature review, Mijiritsky⁸ concluded that the use of a limited number of implants improved an unfavorable RPD design and improved esthetics, producing a better treatment outcome. In an e-publication by Goodacre et al⁹, they concluded that implants will increase the number of remaining teeth and improve the biomechanics of the implant removable partial denture (IRPD); therefore increasing the abutment survival by increasing the number of occluding teeth.

Therefore, dentists can turn a tooth-tissue-borne situation into a tooth-implant-borne situation using a dental implant on the edentulous side away from the abutment tooth^{8,10} or can opt not to replace the missing teeth at the extension base with a prosthesis.

In addition to this previous mechanical advantage, placing an implant under the RPD distal extension base has a physiological advantage.^{3,10} The amount of bone loss of the distal edentulous area is reduced because of its physiological stimulation by the implant.¹¹ Even one implant per edentulous area and a simple attachment technique can yield a stable distal extension RPD.¹³

These case reports describe some clinical situations where implants could improve the biomechanical aspect of removable partial dentures and render the treatment affordable by many patients.

Treatment options for a partially edentulous patient



A partially edentulous situation to be restored is presented in Fig. 1a. In this case, a decision was needed between two treatment options: implant fixed partial restorations with 6 implants (Fig. 1b) or an implant removable partial restoration using 2 implants placed in the residual ridges (Fig. 1c), thus rendering it economical and affordable. The outcome of this IRPD treatment was improved with the use of implants by optimizing the support and retention of the prosthesis and by turning it from a tooth-tissue-borne to a tooth-implant-borne prosthesis (Fig. 1d).

Mandibular IRPD opposing maxillary natural teeth



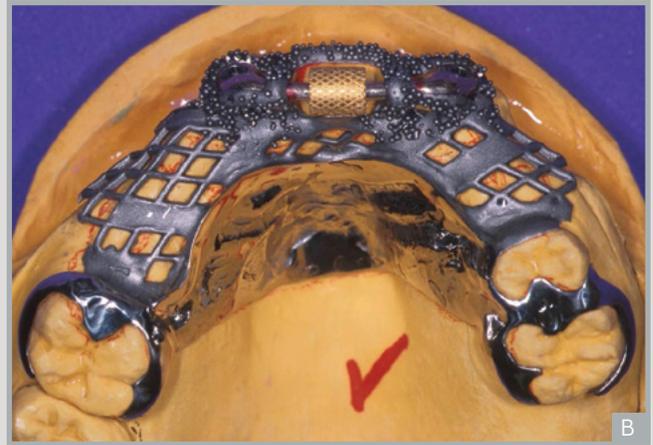
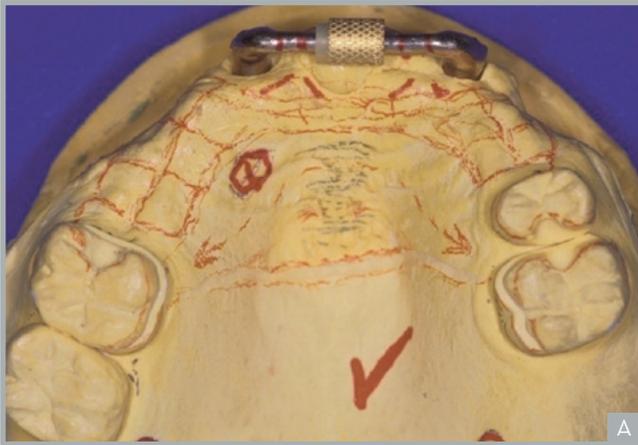
The mandibular occlusal view shows 4 implants connected with Hader bars (Fig. 2a). The patient wanted to keep all 4 remaining mandibular anterior teeth. Cingulum rests were placed on the anterior crowns to participate with the implants supporting the prosthesis. The retention of the prosthesis is provided by the ball attachments placed on the lingual surface of the bars and by the mechanical friction of the metal frame of the intaglio surface of the framework with the vertical surfaces of the bars. The intaglio surface view of the IRPD shows the metal frame detail where it is in contact with the implant bars (Fig. 2b). The occlusal view shows the prosthesis in the mouth (Fig. 2c). The frontal view of the completed mouth restoration in centric occlusion is shown in Fig 2d. The patient's before and after smile is shown (Figs. 2e-f).

Mandibular RPD opposing a maxillary implant overdenture



Mandibular occlusal view shows 2 implant-connected Hader bars (Fig. 3a). Remaining mandibular teeth are periodontally sound. The crowns on the left molar and the right canine have ball attachments. These attachments help in the support and the retention of the prosthesis. Also, the prosthesis is retained at the implant level with 2 horizontal snap-pin attachments. The plunger of these attachments goes into a hole drilled in the bars between the two implants. The intaglio surface view of the prosthesis shows the metal frame and the short flanges that are adequately designed to prevent any food impaction (Fig. 3b). The prosthesis is placed in the patient's mouth (Fig. 3c). The frontal view of the maxillary overdenture and the mandibular prostheses is shown in centric occlusion (Fig. 3d). Acceptable articulation for this type of situation is either group function or balanced.

Resorbed maxillary anterior ridge



The occlusal view of a maxillary resorbed anterior ridge is presented (Fig. 4a). Two treatment options are available: a fixed prosthesis using soft and hard tissues grafting and implant procedures rendering the treatment expensive and lengthy; or a removable overpartial prosthesis using 2 implants connected with a Hader bar. A view of tooth-implant-borne RPD metal framework is shown in Fig. 4b. Please note the 2 positive rests on the teeth and the 2 metal-to-metal contacts on the bar by the RPD framework. These positive “metal-to-metal” contacts are taking the occlusal load off the plastic Hader clip. A view of the implant Hader bar is shown (Fig. 4c) as well as the occlusal view of the implant-tooth-supported removable partial denture (Fig. 4d). (Courtesy of Jack Koumjian, DDS, FACP, Palo Alto, CA)

Conclusion

The dental literature has demonstrated that the use of dental implants improve the support and the retention of IRPDs, and has provided positive data in improving the treatment outcome regarding the following factors: quality of life and patient satisfaction, prosthesis survival, effect of implant location on the survival of abutment teeth, improve mastication with increasing the number of occluding teeth, bone stimulation with implants over time, and cost-effectiveness.¹¹ ■

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Maxillary unilateral extension base situation where the right cuspid is missing



Placing one implant in the middle of the edentulous ridge improves the stability of the RPD by making it a tooth-implant supported prosthesis (Fig. 5a). The IRPD is shown in the patient's mouth (Fig. 5b).



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Clinical considerations for porcelain veneers

Alejandro Sánchez-Lara Murguía,
DDS

Prosthodontists are frequently faced with challenging decisions regarding esthetic dental rehabilitations of patients presenting with complex treatment needs.

In this context, the literature shows that porcelain veneers are an integral part of prosthodontic treatment, have high survival rates¹⁻⁴, and are well accepted by our patients.⁵⁻⁸ Some of the objective parameters that contribute to the “success” during treatment with porcelain veneers include proper marginal adaptation, absence of recurrent caries, long-term color stability, low marginal cement degradation, absence of marginal leakage, and resistance to fracture. On the other hand, subjective measures that may influence the outcome include patient and dentist satisfaction.^{9,10}

While these objective and subjective endpoints are of paramount importance for the final outcome, it is through adequate consideration and analysis of diagnostic parameters and the achievement of resultant treatment objectives that a successful treatment can be achieved. In this light, a diagnostic wax-up, tooth preparation designs, and material selection assume particular importance.

Diagnostic wax-up

An analog or digital diagnostic wax-up (mock-up) is a fundamental step that allows three-dimensional communication with our patients on the proposed esthetic and functional result before the actual treatment begins.¹¹ The diagnostic wax-up also serves as a reduction guide during tooth preparation, therefore minimizing enamel removal, aids during the provisionalization procedures, and is an indispensable asset for communication with the dental technologist team member.

The esthetic pre-evaluative temporaries or APT can often be used for this purpose.¹² Using a duplicate of the diagnostic wax (silicon index) over the unprepared patient teeth, bis-acrylic material is injected into the index and secured to the teeth by spot etching to mimic the planned outcome.

Depth cutters of variable thickness, depending on material selection, are then used to dictate the desired facial reduction while preserving the maximum amount of enamel, essential for predictable bonding procedures. The use of color markings may be helpful to visualize unprepared areas.



Fig. 1: APT

Once the desired preparation is completed, any remnant of the bis-acrylic material is removed and the preparation finished with fine fissure diamond rotary instruments and abrasive disks¹²⁻¹⁴ (Figure 1).

Advantages of the APT include precise and controlled preparation workflow, preservation of enamel, and pre-treatment determination of final incisal length. With the use of this technique, over 80% of tooth preparation can generally be located on enamel.¹²⁻¹⁴

Material selection

Material selection for porcelain veneers depends on the treatment goal necessary to address the patient's chief complaint. In cases where tooth discoloration is present and a higher value of the final restoration is requested, a ceramic material with greater opacity (i.e. lithium disilicate restorations instead of feldspathic) can be selected in order to avoid excessive

enamel removal, or, on the other hand, when the shape of the tooth needs to be improved, but no discoloration is present, a ceramic material such as feldspathic porcelain can be used. Adequate diagnostic considerations of the patient occlusal forces must also be taken into consideration for material selection as the mechanical properties of the chosen material can clearly affect longevity.

Tooth preparation

The type of preparation design can vary in terms of tooth reduction in the incisal and proximal areas. For the incisal area several solutions can be adopted depending on the treatment goals.^{6,14,15} The “butt joint” and “butt joint with wrap around” designs can be used if the value and translucency or the length of the incisal part of the tooth needs to be modified. If the tooth length is adequate, but the shade has to change then a “window” or “feather edge” designs might be more appropriate (Figure 2).

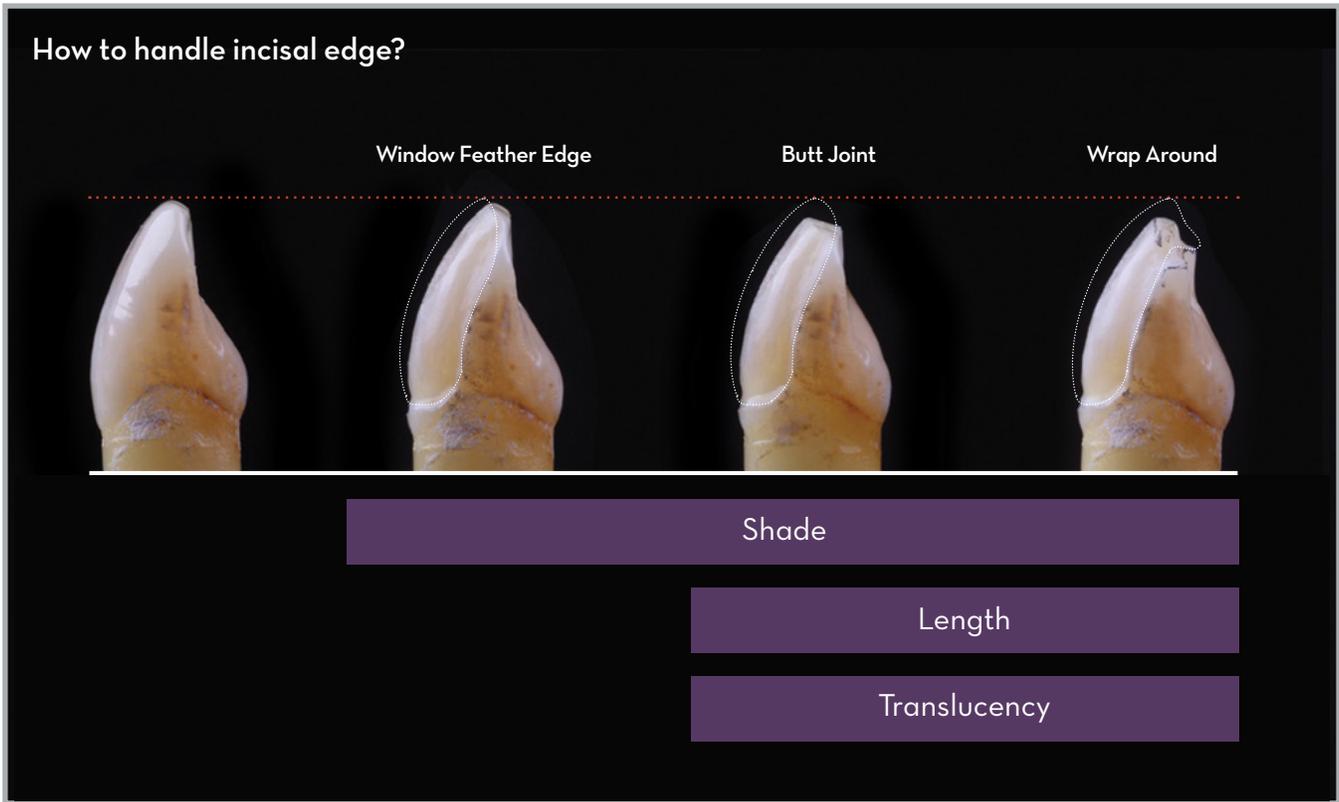


Fig. 2: Different types of incisal edge reduction.



When tooth preparation is not adequately extended on the proximal surfaces, it is common to observe, in these areas, the presence of unsightly unprepared tooth structure. This is often being seen in the proximal cervical areas. In order to avoid this problem, the interproximal margin can be either located in a more lingual location in the cervical area creating a “deep interproximal elbow” or completely remove the proximal contact point, therefore locating the finish line in a more palatal position (Figures 3-4).



Limitations and Indications

One of the potential limitations for the use of porcelain veneers includes the correction of moderate to severe deviation of the dental midline. While porcelain veneers can certainly be considered, their potential to correct midline deviation, without orthodontic treatment might be limited (Figure 5). In these cases, dentists and patient must understand these limitations at during the treatment planning phase and consider eventual adjunctive treatment

Fig. 3: The “interproximal elbow”.

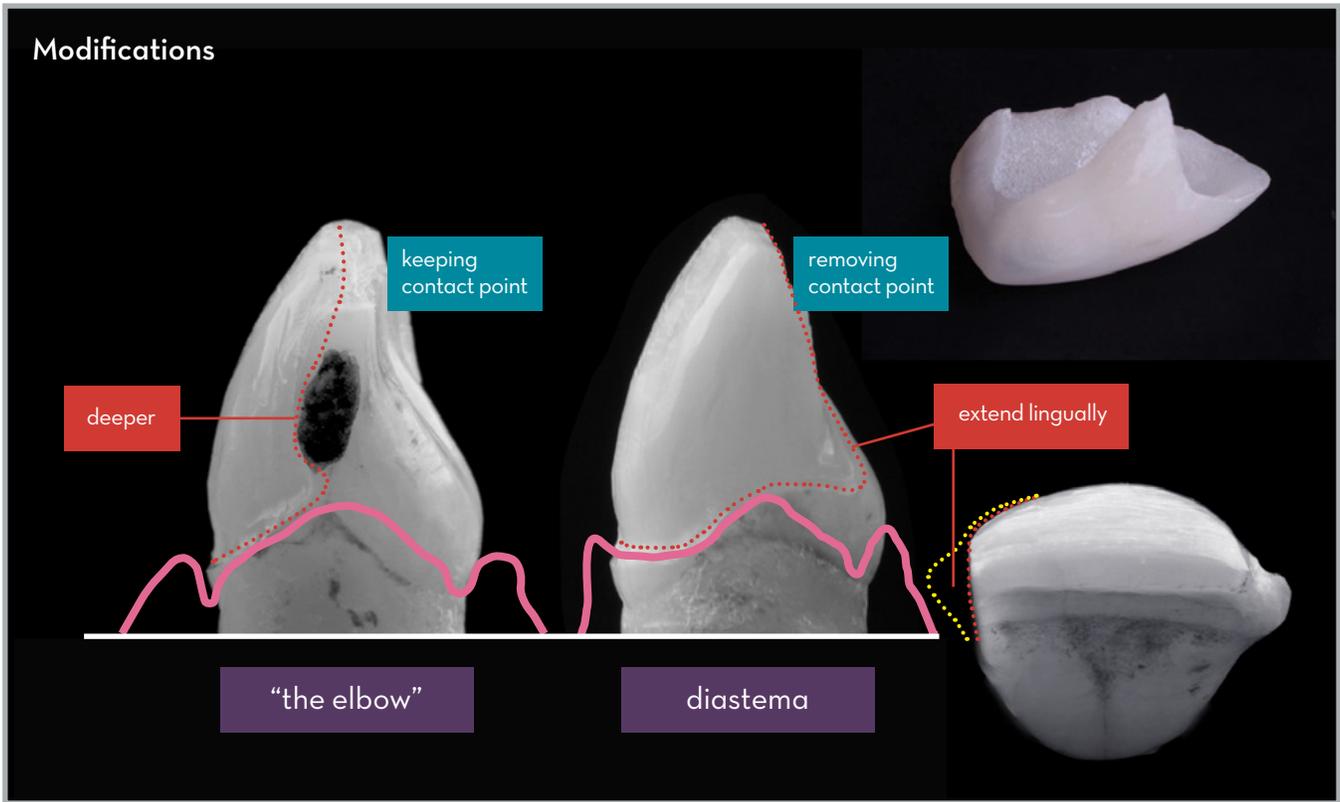


Fig. 4: Contact point modification.



Fig. 5: Correction of midline deviation.

In order to develop an accurate diagnosis, understand patients' expectations, and frame them within the possible treatment options, prosthodontists should engage in an open-ended conversation revolving around the patient's chief complaint. Questions such as "What do not you like in your smile?" or "How can I help you improve your esthetic appearance?" should be asked before starting any treatment and tentative solutions incorporated within a diagnostic mock-up. Often and especially in patients with high smile lines and gingival display, the treatment might include periodontal soft-tissue esthetic optimization and other adjunctive procedures, such as surgical lip repositioning. Crown lengthening is a commonly performed periodontal surgery which can be used to address soft tissue asymmetries and improve the overall esthetic results when combined with porcelain veneers (Figure 6).



Fig. 6: Improved esthetics by correction of soft tissue asymmetries and porcelain laminate veneers.

The proper identification of patient-driven esthetic complains, the appropriate consideration of functional demands, such as occlusal forces, and the nature of the tooth substrate available for bonding will generally dictate the type of preparation and material selection for porcelain veneers, so that mechanical and biological complications can be minimized. ■

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“Often times, I’m asked by prosthodontists...”

Fred Heppner

As prosthodontists seek to transition out of private practice, these commonly asked questions are top of mind for everyone going through the process. Fred Heppner, a transitions consultant, provides some insight.

Q: How long will it take to sell my practice?

A: Each situation is different, and the process can go quickly in say three to four weeks. Other times, it may take up to eight months. If there are complications that may delay the process, desires by either buyer or seller to structure the transaction so that it makes sense for both parties, or if there aren't any prosthodontists searching for an opportunity in the immediate market, then it could take quite a bit longer; perhaps up to a couple of years. Sure, the price at which a practice is presented may contribute to the timeline; then again, location may be a hindrance or an advantage to the time it takes to effectuate a transaction.

Q: How long should I stay on after the sale to facilitate an easy transition?

A: This is entirely up to the buyer and seller to discuss and agree. Without question, a couple of topics must be addressed. If the practice is an entirely self-referring practice, then theoretically, the transition could be short – say two to four weeks. On the other hand, if the prosthodontic practice is heavily referral-based, then a longer transition may be sensible to transfer the goodwill of the referral base. The buyer may want the seller to stay on board for a time to provide some understanding of how the business systems of the practice function and to perhaps have the seller provide some kind of mentorship. Lastly, the productivity of the office may have influence on what buyer and seller objectives ultimately decide, post-closing. If the practice has room for a second doctor to stay on board and still be productive, then perhaps the buying prosthodontist may keep the seller around to assist not only in the transition, but in meeting the clinical demands of the practice.

Q: What do I tell my patients? What about my staff?

A: First, the short answer to your patients and staff: You have decided to {retire from private practice, take up a teaching position, etc.} and pass along the responsibility of the ongoing care to a {well-qualified; board eligible; board-certified...} prosthodontist who has acquired the practice. Second, do not disclose anything to patients or staff until the contracts are signed, and if possible, until the money transfers and the buyer has taken possession of the practice. Countless cases are documented where selling doctors have informed patients, staff, and referral sources that the practice has been sold, only to have the deal fall apart at the last minute. They find that referral sources dry up, team members panic and may leave for another job, and patients, although far less likely, start looking for another practice. Damage control is not fun. Keep the announcements private until the transaction is final.

Q: Do I need to finish all my cases?

A: In broad general terms, anything the doctor started the doctor would want to complete, such as, teeth prepared for crown and bridge work. Larger cases, which may involve implants that have been placed and restorations are on hold until the healing process is complete, may be taken over the by new owner of the practice, because the prosthodontist who is taking over the practice oftentimes is credentialed and qualified to provide the care the patients are destined to undertake. In some cases, the selling doctor may have specific cases he/she would prefer to finish, and in this situation, both parties need to simply agree as to how these cases would be managed. Financially, both parties must discuss and agree to how payments for these services will be handled.

The art of leadership

Robert M. Taft,
DDS, FACP
ACP President

What did I learn as President of the ACP? Above all, I found that the art of leadership is an evolving process that requires continuous learning.

Regardless of the number of books read or seminars attended, leadership concepts may appear to be easy and sensible, but more often they are very challenging to implement. Life can be stressful and disciplining our behaviors is increasingly difficult.

As leaders, monitoring our behaviors is exceedingly important. Our team members are evaluating us and our demeanor is being emulated. Consequently, our behaviors create the entire team culture as the leader owns the culture, which in turn dictates the team performance. Spend time to prepare your team for the common goal. If we all pursue a uniform goal, we must embrace the following assumptions:

- Everyone wants to feel worthwhile.
- Everyone needs and responds to encouragement.
- People will buy into the leader before they buy into the plan.
- Some people don't know how to be successful, and others do.
- People are naturally motivated.
- Most people will move once they feel empowered and are properly equipped.

George Washington Carver wrote, "No individual has any right to come into the world and go out of it without leaving behind him distinct and legitimate reasons for having passed through it."

I have learned to consider the following:

- A purpose will motivate you.
- A purpose will keep your priorities straight.
- A purpose will develop your potential.
- A purpose will give you power to live in the present.
- A purpose will help you evaluate your progress.
- Let those around you be your purpose.

The good news is as leaders, while much of what we are responsible for lies outside our direct span of control, our behaviors are exceptions. We control our behaviors 100% of the time.

Once I fully understood this principle, I exerted more effort and energy in monitoring my behaviors and identifying errors. But of utmost importance is that knowledge was gained from those missteps and I developed my own management style. I reminded myself of the profound impact my behaviors have on team culture and performance.

During my leadership journey, through reading, observing, or studying, the importance of my behaviors always was at the forefront. Consequently, when faced with a challenging situation, especially during a vulnerable time when life was/is a bit hectic and the stress level peaking, I was better prepared to react appropriately.

Why is it so important for us to consider the “art of leadership” as a part of our lifelong learning principles? Albert Einstein stated, “Intellectual growth should commence at birth and cease only at death.” Blowing out someone else’s candle won’t make yours brighter!

Wondering today about where you are?

Where the mind goes
The person follows
You own where you are

Now, own where you’re going, but be mindful that the only things you control 100% of the time are your behaviors. ■

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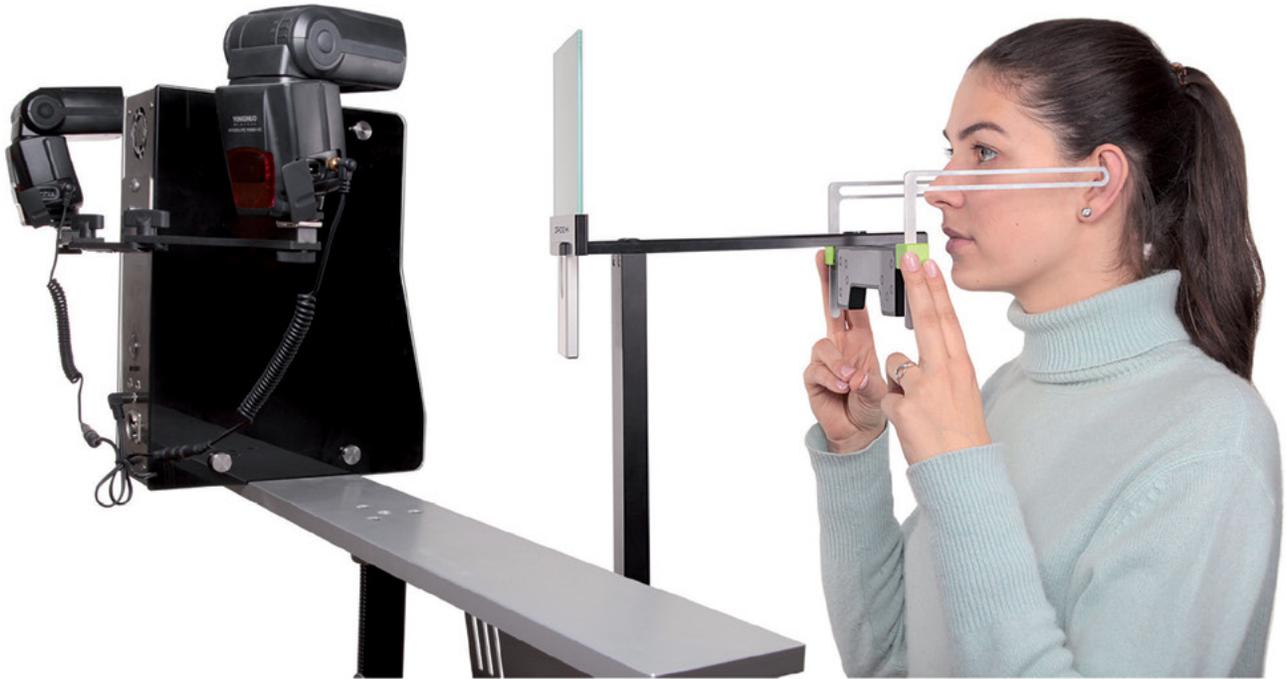
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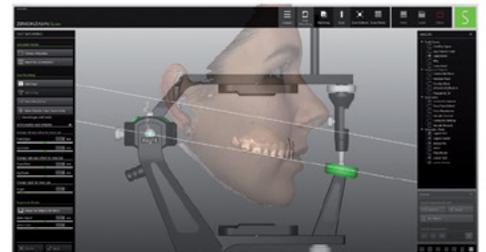
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Supporting the path to leadership through research

Alireza Moshaverinia,
DDS, MS, PhD, FACP

Richard Cardoso,
DDS, FACP

The ACP Education Foundation provides research awards and grants to advance the specialty of prosthodontics. The ACPEF interviewed past recipients to find out how the ACPEF research program has impacted their careers.



Since Dr. Alireza Moshaverinia's residency at University of Southern California, he has been awarded all three of the ACPEF's research grants and awards. He will present during the ACP Annual Session in Baltimore on the "Regenerative

Treatment of Periodontitis and Peri-Implantitis Using Dental-Derived Mesenchymal Stem Cells".

What did it mean for your projects to receive these grants and awards?

The ACPEF Research Fellowship in 2012 was among the very first funding that I received for my stem cell research, which was so encouraging. As a junior investigator at that time, this fellowship and the Sharry Award gave me more enthusiasm and more funding to continue my research projects on dental stem cell-mediated tissue engineering. The Fellowship and Sharry Award paved the path to the GSK Prosthodontist Innovator Award in 2013 and 2015 and many more research awards that I received since then.

How did these grants impact your career?

As a clinician-scholar and one of very few board-certified prosthodontists who does stem cell biology and tissue engineering research, these grants and

awards are extremely helpful to excel in your academic career by showing the impact of your work to your peers and both clinicians and scientific communities. It helped me to secure a desirable academic position and work on high-end clinical settings at the same time.

What are some of your highlights since receiving these grants?

I have secured a tenure track position at UCLA School of Dentistry, Division of Advanced Prosthodontics. Moreover, I am a member of ACP Research Committee and ACPEF Annual Appeal Committee. I also sit on several NIH Center for Scientific Review (CSR) panels.

Where are you now and what is the main focus of your work?

In addition to my clinical practice which is limited to prosthodontics and implant dentistry, I am the director of the Laboratory for Biomaterials Innovations & Tissue Engineering (BITE) at Weintraub Center for Reconstructive Biotechnology at UCLA School of Dentistry. My NIH funded research projects are focused on development of novel dental biomaterials and studying the basic mechanisms which regulate stem cell-mediated tissue regeneration and the immune cell-stem cell cross talk and the role of biomaterials.

What can you tell us about your path to becoming a leader in the specialty and how the ACPEF has impacted your path?

ACP has had an important role in my career development and progress and I would like to pay it back by serving on ACP/ACPEF committees and becoming part of the advancement of our students, residents, future leaders, and our specialty!



Dr. Richard Cardoso was awarded the ACPEF Research Fellowship in 2011. He is a maxillofacial prosthodontist at MD Anderson Cancer Center. Dr. Cardoso presented at the 2018 Prosthodontic Review Course on “Oral Morbidities Associated with Radiation”.

What did it mean for your project to receive the Research Fellowship and how did it impact your career?

When I received the Research Fellowship, I was most excited that, to some extent, it meant that my project satisfied a gap in the literature and was interesting enough to fund. It inspired me to continue researching the oral morbidities associated with head and neck cancer. While these oral morbidities are well described in the literature, it’s amazing how little we know about how they impact patients’ quality of life.

What are some of your highlights since receiving the Research Fellowship?

Our results showed that about 30% of patients developed trismus (restricted mouth opening) post-radiation therapy for oropharyngeal cancer. My project placed an emphasis on the importance of mouth opening in patients that underwent radiation therapy and thus it is routine to measure oral opening for all patients presenting to the dental service. Soon after my project was completed, a large randomized clinical trial comparing photon radiation (IMRT) to proton radiation therapy (IMPT) in head and neck cancer was being implemented. Because of my results, we were able to include mouth opening as an outcome measure for this potentially landmark study.

Where are you now and what is the main focus of your work?

I am more involved in research than I ever thought I would be! Completing this project encouraged me to further research other oral morbidities (i.e. xerostomia, dental issues post radiation therapy), placing an emphasis on patient-reported outcomes. We recently published data that showed 45% of long-term survivors of oropharyngeal cancer complained of at least one moderate/severe oral morbidity.

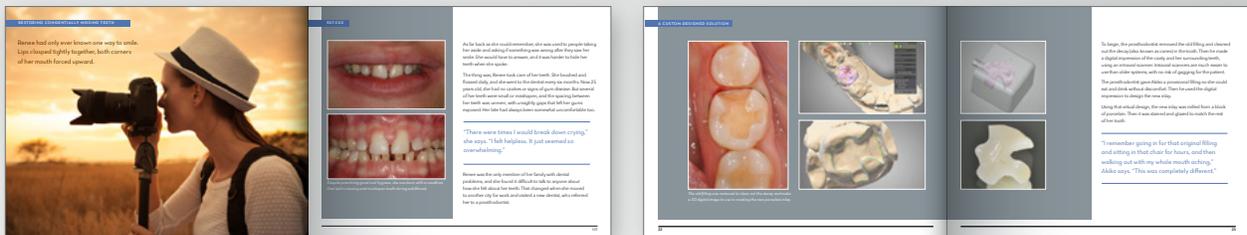
What can you tell us about your path to becoming a leader in the specialty and how the ACPEF has impacted your path?

Thanks to Research Fellowships like this one, I was led down a research path that allows us to fill a gap in the literature and be able to present my findings at national conferences like the Prosthodontic Review Course. It is quite an honor to present next to these eminent figures. I never saw myself as a national speaker... but here I am! ■

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Survey of Prosthodontists Results in *Journal of Prosthodontics*

Now online in the *Journal of Prosthodontics*, Dr. Kent Nash and Dr. Douglas Benting present the results of the latest prosthodontic private practice survey, noting trends and changes in characteristics impacting the private practice of prosthodontists over time using results from six surveys completed in 2002, 2005, 2008, 2011, 2014, and 2017.

Drs. Nash and Benting examine trends including age, gender, and experience of private practicing prosthodontists. Their results include analysis of the types of practice (e.g., solo practitioner, group practice), number of patient visits, hours in the practice, employment of staff, referral sources, and financial conditions (e.g., gross receipts, expenses in the practice, and net income).

“The average age of prosthodontists has declined since 2010. Hours in practice and hours treating patients have declined at a rate of about 1% per year since 2001. Mean net earnings of prosthodontists have declined at a rate of 1.6% since 2001 and 3.1% per year since 2007. The prosthodontist private practice industry, not unlike dentistry as a whole, has undergone economic and practice challenges that have affected the conditions of private practice during the last decade.”

Full-text *Journal of Prosthodontics* articles are always free to ACP members through the ACP website.

Citation: Nash KD, Benting DG: Private Practice of Prosthodontists in the United States: Results from the 2017 Survey of Prosthodontists and Trends Since 2001. J Prosthodont. doi: 10.1111/jopr.12923

2018 GSK Prosthodontist Innovator Award

The ACP Education Foundation is proud to announce the 2018 GSK Prosthodontist Innovator Award. The goals of this sponsored research are to advance the understanding of prosthodontics-related biological and/or materials systems, human behavior, cost and care delivery, as well as economic modeling and quality of life investigations.

Sponsored by GlaxoSmithKline Consumer Healthcare through an unrestricted educational grant, single-year funding to initiate or foster research in specific areas of interest relating to prosthodontic care will be awarded to an ACP prosthodontist and to his/her institution. This research grant is open to prosthodontist members (Members, Fellows, International members, International Fellows) of the ACP who are full-time faculty at a US or a Canadian dental school or a related academic institution. Applicants must be within 10 years of their first academic appointment after completing their ADA accredited prosthodontic residency and show outstanding promise in their research area.

Submission guidelines can be found on acpef.org. Applications must be received by the ACP Education Foundation by Nov. 9, 2018.

Upcoming Events

48th Annual Session

Oct. 31-Nov. 3, 2018
Baltimore
acp48.com

Digital Dentistry Symposium

Feb. 19-20, 2019
Chicago
Prosthodontics.org

National Prosthodontics Awareness Week

April 7-13, 2019
Prosthodontics.org

2018 Prosthodontic Review Course



The 2018 Prosthodontic Review Course was held on Sept. 7-8 in Seattle with 86 attendees. Led by Dr. Nadim Z. Baba, speakers covered the spectrum of prosthodontic methods and materials, ranging from traditional to innovative. Topics included digital dentistry, implant treatment, common misconceptions, surgical considerations, and more.

“The Prosthodontic Review Course is the most concise and best source of relevant dental education available,” said Dr. Richard Buck, ACP Fellow. “The presenters

are cutting-edge masters of their field and the topics are varied and clinically relevant. Attending this course is the best way to quickly catch up on current trends in prosthodontic principles.”

Thanks to Zest Dental Solutions for their sponsorship of the course.



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Georgia (Atlanta) – Job Opening Maxillofacial Prosthodontist. State of the Art Prosthodontic & Maxillofacial Prosthetic practice is seeking Maxillofacial Prosthodontist for Associateship to Partnership. Visit Orofacialcenter.com for info. Email jamesadavisjrmd@gmail.com, or call 678-858-2383. Will consider training Prosthodontist if has sufficient art skills and interest in the field.

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Maine (Portland) – Established Comprehensive Prosthodontic Practice Seeking Associate: A terrific opportunity exists for an experienced outgoing prosthodontist associate to join an established comprehensive practice offering aesthetic, fixed, implant and removable prosthodontics as well as comprehensive dental care. Associateship with a view toward partnership. Located in a newly expanded office in Portland, Maine. In-house lab on site. Please e-mail resume / C. V. and photos of work to info@prosthodonticsassociates.com.

Maine (University of New England) – The University of New England College of Dental Medicine invites applications for a Prosthodontist. This is a full-time clinical faculty position (Assistant / Associate Professor).

The College of Dental Medicine's mission is to "improve the health of Northern New England and shape the future of dentistry through excellence in education, discovery and service."

The University of New England College of Dental Medicine is well positioned to successfully pursue this lofty goal. The interprofessional education we provide, in cooperation with UNE's Colleges of Health Professions, Medicine, and Pharmacy, equips our graduates to improve not only the oral health, but also the overall health of the patients they treat.

Responsibilities: Didactic and clinical instruction in prosthodontics to pre-doctoral dental students will be core responsibilities for this position. This position reports to the Associate Dean of Curriculum Integration and Analytics for academic/didactic matters and to the Associate Dean of Clinical Education & Patient Care for matters relating to clinical operations.

Qualified candidates must possess a D.D.S./D.M.D. degree or international equivalent. The candidate must be licensed, or, be eligible for licensure in Maine and have successful completion of NBDE I & II. Candidates must also have completed advanced training in a CODA-approved prosthodontics program and be board eligible, or certified by the American College of Prosthodontists. Candidates must demonstrate a passion

for dentistry and a strong desire to teach students in a demanding, fast-paced, academic environment. Candidates must demonstrate the ability to contribute to and participate in a humanistic environment of learning and discovery. The successful candidate is expected to be able to provide direct clinical supervision of predoctoral dental students and to provide clinical care in the group practice. Salary and rank will be commensurate with experience. Interviews of qualified candidates will begin immediately and continue until the position is filled.

Months: 12 Campus: Portland, ME
Documents Needed to Apply:
1. Cover Letter 2. Curriculum Vitae
<https://une.peopleadmin.com/postings/3213>

Massachusetts (Boston University) – Boston University Henry M. Goldman School of Dental Medicine seeks applicants for a full-time nontenure track position in the Department of General Dentistry at the Clinical Instructor or Clinical Assistant Professor level. Applicants must have a DDS/DMD degree, or foreign equivalent, and prior teaching and/or private practice experience, and be eligible for full or limited dental licensure in the Commonwealth of Massachusetts. Advanced training at a Prosthodontic Program is required. Training in CAD/CAM and Cone Beam Computed Tomography would be an advantage.

Responsibilities will include pre-clinical and clinical teaching to undergraduate dental students. A demonstrated record of teaching experience, involvement in leadership in dentistry at the local or national level, with participation in community service also being desirable.

Academic rank and salary will be commensurate with qualifications and experience. The Henry M. Goldman School of Dental Medicine is located within the Boston University Medical Center which offers significant resources and important opportunities for collaboration and advanced training.

Electronic responses are preferred. Evaluation of applications will begin immediately and will continue until the position is filled. Salary and academic rank will be commensurate with qualifications and experience. Applicants should submit a personal statement

delineating qualifications and goals, along with curriculum vitae and the name/title/addresses of three professional references who hold academic credentials to Trang Tran at trtran16@bu.edu.

Boston University is an equal opportunity employer and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability status, protected veteran status, or any other characteristic protected by law.

Michigan (Oakland County) – Excellent Opportunity for Associate/Partner: Practice opportunity for a new partner in a well-established and thriving Implant, Fixed, Removable and Maxillofacial Prosthodontic Practice. A wonderful support staff, including two full-time technicians, and a state of art facility ensures your success. Oakland County, MI area with an excellent referral base and high income. Call (248) 496-1842

New York (Manhasset / North Shore Long Island) – Great employment opportunity for Prosthodontist. Newly renovated High-End Practice 2-3 days per week. Unique opportunity for qualified person. Please contact Vanessa via email at 2prosthodontics@optonline.net.

New York (Syracuse) – Syracuse Prosthodontic and Implant Practice Leading to Ownership: Thriving 33-year-old Prosthodontic practice looking for qualified candidate to buy in 6 months to 1 year. Gross revenues are over \$1.2 million on 30 hours per week with low overhead. 2000 sq/ft office located in medical and hospital district with 4 fully equipped ops, all digital including new Sirona Galileos 3D, T-scan, TruDenta Diagnostics, latest CEREC Acquisition unit and MCXL Milling unit, Piezosurgery, fully computerized office. Good size fully equipped laboratory. Placing 70 implants per year. Central New York has the beautiful Finger Lakes with the opportunity to live on the water and commute to work easily. We are surrounded by wineries, great hospitals with easy access to medical care, several major universities, medical school, VA hospital, and a vibrant

downtown. The university has competitive Division I sports programs. It is a great place to raise a family with affordable housing and good schools. Please send resume and cover letter to jbsprotho@gmail.com.

Oregon (Portland) – Seeking a Prosthodontist seeking a career in the Northwest. Fusion Dental Specialists is located in Happy Valley, Oregon; a county viewed as having the most rapid growth community in the whole state. We are less than 30 minutes from downtown Portland. Our practice combines specialties in a digital environment to offer a comprehensive, predictable treatment center for patients. We believe in excellence, communication, and compassion. This opportunity is full time with a goal of partnership. Please email resume to admin@fusiondentalspecialists.com.

Pennsylvania (Lancaster) – Seeking Part Time Prosthodontist / Maxillofacial experience: The Lancaster Cleft Palate Clinic is offering a unique opportunity to treat patients with facial clefts, head and neck cancer, and other craniofacial conditions. The clinic is home to the first cleft and craniofacial team in the United States and runs a multi-specialty medical and dental practice. The position is part time, but full time work may be arranged. An academic appointment, hospital privileges and loan repayment may be available for the interested candidate. Interested candidates may email Lprada@cleftclinic.org.

Pennsylvania (Phoenixville) – Full specialty family owned practice: part-time prosthodontist: Outstanding opportunity for a talented, caring, energetic Prosthodontist with excellent verbal and interpersonal skills. Beautiful office with exceptional laboratory support. We are looking for a long term team member that wants to grow with us. We are a full service dental office, busy and successful. Immediate opening! Our practice name is Liberty Dental Group. Please submit resume/ CV by email to angeli.agarwal@gmail.com for consideration.



Pennsylvania (Temple University) – Assistant or Associate Clinical Professors in Prosthodontics: The Maurice H. Kornberg School of Dentistry is seeking applicants for full-time faculty positions at the Assistant or Associate professor level with a DMD or DDS and eligibility for an unrestricted license to practice dentistry in the Commonwealth of Pennsylvania. Applicants must have completed advanced training in a CODA-approved prosthodontics program and be board qualified, or certified by the American Board of Prosthodontics. Candidate must currently be active clinicians and 3-5 years clinical experience in a prosthodontic practice or an academic setting will be preferred. Applicants with certificates or degrees from a CODA accredited postgraduate programs, but with an international dental degree, are eligible to apply and may be granted a restricted teaching license.

Successful candidates must be highly competent or proficient in diagnoses, treatment planning, restorative and prosthetic care, periodontal care, and restoration of implants. Experience with digital dentistry will be an asset. Candidate with additional advanced skills will be preferred. Candidates must demonstrate evidence of collaborative team work and leadership, professionalism, and ethical practice.

The selected faculty are expected to be:

- Competent to lecture in, and possibly direct didactic courses
- Proficient to practice dentistry at the dental school or affiliated clinics
- Competent to provide comprehensive care
- Competent to provide hands-on clinical teaching in a comprehensive care clinic at the dental school
- Capable of changing and adapting to new evidence in dental practice.

Intramural or extramural private practice at Temple University dental clinics may also be available. Interested applicants should send a cover letter indicating date of availability, a current curriculum vitae and three references to: Ms. Jo Ann Allen Nyquist, Search Committee Chair, Temple University Kornberg School of Dentistry, 3223 North Broad Street, Philadelphia, PA 19140, or via email at: jo.ann.nyquist@temple.edu. Temple is an equal opportunity/affirmative action employer. Women and minorities are encouraged to apply.

Texas (Dallas)—Seeking BOTH Surgical & Restorative Prosthodontists. Description: Perform all phases of implant prosthetic dentistry. Will have leadership role in the center with an emphasis on increasing center profitability. Possess a patient-centered mindset and approach to treatment planning and daily center operations. Consult with new patients. Possess excellent social skills

Requirements: Professional Degree: DDS/DMD; Certificate in Prosthodontics from an ADA accredited program. Licensed in Texas. IV Sedation License preferred (willing to pay to obtain)

Salary and Benefits: Competitive salary and bonus based on production.
Email dra@fastnewsmile.com

Texas (Dallas-Ft. Worth)— Seeking Associate/ Partner: Solo Private Practice seeks ambitious, strong work ethic, high quality oriented Prosthodontist Associate leading to Partnership. Low volume/ high production practice (\$2 million/year). Must have U.S. DDS or DMD degree. Great opportunity in one of the strongest economies in the country. www.dentalimplantcenter.com Email: david_mcfadden_dmd@yahoo.com

GUNDERSEN HEALTH SYSTEM®

Wisconsin (La Crosse)—Gundersen Health System based in La Crosse, WI is recruiting for a Prosthodontist to join the Department of Dental Specialties. This strong clinical practice encompasses the full scope of prosthodontics and maxillofacial prosthetics. You will have the opportunity to collaborate within a large, fully integrated system that is academically affiliated with the UW Madison. Proficiency in fixed, removable and implant prosthodontics and experience in maxillofacial prosthetics is desired. DDS/DMD degree with completion of an ADA accredited advanced education program in prosthodontics is required.

Gundersen Health System is a physician-led, non-profit, multi-specialty healthcare system that serves a multi-state region of WI, IA and MN. We employ over 650 medical staff and nearly 8000 total employees in our integrated system. Jon Nevala, jnnevala@gundersenhealth.org, 608-775-4224, gundersenhealth.org

Wisconsin (Waukesha)— EON Clinic is seeking a Prosthodontist in Waukesha, Wisconsin: Since 2008 EON Clinics (eonclinics.com) have been a leading provider of dental implants in the greater Chicago area. Our state of the art, all-in-one treatment facilities are equipped with modern technology, including advanced 3D CAT scan capabilities and a full-service on-site lab that supports the highest standard of care.

If you are a skilled practitioner with a patient-centered mindset, high ethical standard and professional demeanor, an incredible opportunity exists for you to join our world class EON team in Waukesha, Wisconsin. You will perform all phases of prosthetic dentistry and related dental implant services, plan treatments, oversee day-to-day operations and lead the team. A strong ability to communicate well and be open-minded are keys to success. EON offers a competitive salary, bonus based on production, complete coverage for group health insurance for employee and dependents as well as malpractice insurance.

Please email resume to Peg Rey, HR Manager, peg.rey@eonclinics.com; questions can be directed to 630-308-8663. Apply today!

Practices for Sale

Arizona (Phoenix/West Valley)— Established thirty-four year old prosthodontic specialty practice for sale in Phoenix, Arizona. Full spectrum of prosthodontic services offered. Implant based care a major portion of patient treatment including surgical placement and adjunctive grafting and enhancement procedures. One million plus collections for over sixteen years. Fee for service, no HMO, PPOs or insurance contracts. Dentrix office management, digital radiography, and 3Shape lab scanner. Owner will remain per request of new doctor in transition and/or mentor surgical skills for implant based procedures. Enjoy year round outdoor activities in one of the fastest growing cities in the United States. Contact Fred Heppner, fredh@arizonatransitions.com, #480-513-0462.

California (Beverly Hills)—Unique opportunity to own a prosthodontic practice in the heart of Beverly Hills. Will also consider associateship leading to buy out. This opportunity presents tremendous potential to grow to a larger multispecialty practice. For inquires and further information, please contact us at beverlyhillsdentalpractice@gmail.com.

California (Escondido)—Prosthodontic practice in Escondido, CA (North San Diego County). Successful fee for service Practice over 50 years, with current prosthodontist owner since 1999. 4 fully equipped operatories in 2200 sq. ft, beautifully designed environment in a standalone building, with ample parking and room for expansion. 760-443-3603

California (Central Coast)— Prosthodontic Practice & Dental-Office Building for Sale: Well-managed and very profitable prosthodontic practice in California's beautiful Central Coast. Just five minutes from the beach, this practice boasts all of the benefits of an exclusive quality-patient referral base, doctor-owned office building and Mediterranean weather to boot. The practice's technology is state-of-the-art, including a brand-new 3D conebeam machine and Schick digital x-ray. 2018 annual collections are projected at just over \$1 million. Good will is easily transferred, and the Seller is willing to work back. The completely remodeled building is also for sale. For more information, call Darren at Integrity Practice Sales - DRE #01911548 at (805) 878-0633 or email me (darren@integritypracticesales.com).

California (San Francisco Bay Area)— San Francisco Bay Area Prosthodontic Practice: Out-of-network with insurance industry. Located in affluent suburb adjacent to Bay Area's premier retirement community. 2017 billed \$1.21 Million, collected \$1.18 Million. Doctor took 7-weeks off. 4-days/week of Hygiene booked 6-months in advance, Doctor booked 3-months. Beautifully designed suite has "town & country" feel in peaceful garden setting. Paperless charting. Doctor shall provide whatever transition assistance is requested. Stellar opportunity! For additional information, contact Ray Irving at 415-899-8580 or Ray@PPSsellsDDS.com. For full particulars, go to www.PPSsellsDDS.com.

Florida (Lady Lake)—Prosthodontic practice for sale in The Villages, Lady Lake, FL, Florida's Friendliest Hometown. Owner needs to retire because of health issues. Sees patients 3 days a week, 5 hrs. each day, 15 hrs. a week. Will gross around \$400,000 a year. Successful fee for service practice since 2003, no contracted plans with insurance companies. 2 fully equipped operatories with a fully equipped laboratory in a 1200 sq. ft. office space. Has an iTero imaging scanner, a Scan

X digital radiograph scanner, and a Panorex. Great growth potential. Motivated seller – Flexible Transition. For more information: Tel. 352-259-6646 or Email: davilaprosth@hotmail.com.

Michigan (Southeast Michigan) – SE Michigan Established Prosthodontic Practice with flexible transition plan looking toward retirement. The practice offers steady revenue of 1.6mm with excellent cash flow, 100% fee for service, well established hygiene program, fully trained staff and doctor ready to transition ownership. After tax cash flow and practice proforma available after NDA in place. Please send confidential response to: michigandentist2017@gmail.com.

South Dakota (Black Hills) – Excellent opportunity in the Black Hills of South Dakota. Be the only Prosthodontist in the region. State of the art office, collecting \$500,000. Priced to sell. Room for expansion. Call 605-645-2744. Email sgraslie@aftco.net. GPs with interest in implants, TMD, sleep apnea should inquire.

Virginia (Central Virginia) – Prosthodontic Practice Opportunity in Central Virginia: Perfect opportunity to be a part of a successful prosthodontics practice, ideal long term transition plan. Work alongside a master at his craft. Above average fee parity, fee for service, 1 million plus producing business make this the ideal scenario for a young highly skilled professional. Please go to www.commonwealthtransitions.com and register as a buyer for free to find out more details.

Services Available



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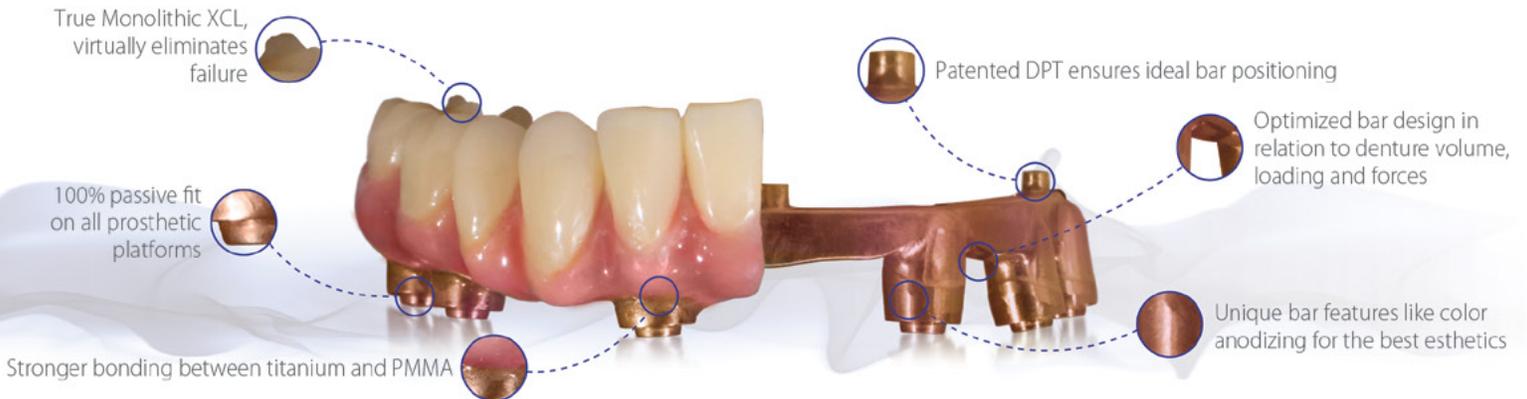
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We offer an array of CE courses for the prosthodontist including: implants, dentures, veneers, bleaching, CEREC appointment efficiency and a three-day Learning Lab Co-Op in the exhibit hall with our amazing partners in dentistry, our laboratory technicians! The program will feature world-renowned speakers such as Jeff Brucia, Gordon Christensen, Van Haywood, Brian LeSage, David Little, Joseph Massad, Nadir Sharifi, Todd Davis among others!

Registration opens Tuesday, December 4, 2018. Dentist registration fee only \$195 (register before 2/21/19).

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