

NDA PROMOTES ORAL HEALTH EQUITY

Expanding National Dental Association project takes action on view that access to oral health is a matter of social justice.

► page A14

**ENDO TRIBUNE****MEETING PREVIEW: AAE15**

Endodontists from around the world to gather in Seattle.

► page B1

IMPLANT TRIBUNE**AO BRINGS TOGETHER SPECIALISTS, GPS**

Nearly 2,000 clinicians attended Academy of Osseointegration meeting.

► page C1



Art intersects with science at Anaheim dental conference

California Dental Association annual spring meeting is April 30–May 2

As one of the largest dental conventions in the nation, CDA Presents The Art and Science of Dentistry, from April 30–May 2, provides attendees with seemingly countless opportunities. Attendees at the California Dental Association meeting can earn C.E. credit while learning the latest clinical and technological advancements, get a close look at hundreds of West Coast product launches and explore a comprehensive exhibit floor featuring approximately 575 companies.

And, of course, you also get to take the family to one of the most popular attractions there is, Disneyland, which is right across the street from the meeting's host facility, the Anaheim (Calif.) Convention Center.

New products to fill exhibit hall

The 135,000-square-foot exhibit hall floor at CDA Presents expects nearly 100 product launches this year, enabling

attendees to stay current on the latest trends in the industry. Hours are 9:30 a.m.–5:30 p.m. on Thursday and Friday, April 30–May 1, and 9:30 a.m.–4:30 p.m. on Saturday, May 2. Family hours each day are from 9:30 a.m.–noon.

Plenty of time to get to class

In most cases, speakers will end their course 10 minutes prior to the hour to give attendees enough time to walk to their next course. However, CDA Presents is encouraging attendees to allow time in their schedules and not plan courses back-to-back to provide the best possible experience.

In another change this year, for the most popular courses, additional overflow rooms are being added, and reserved-seating options are being expanded (you can reserve seats through cdapresents.com).

► See ANAHEIM, page A2



More than 28,000 dental professionals and approximately 575 exhibiting companies are expected at CDA Presents, April 30–May 2, at the Anaheim Convention Center.

Photo/Robert Selleck, Dental Tribune

INDUSTRY EDUCATION A4

• Bahamas site of implant training and conference

EVENTS A4–A7

- In May: The Journées Dentaires Internationales du Québec presents courses in French and English
- American Association of Pediatric Dentists to hold annual meeting in Seattle from May 21–24
- Florida Dental Association meeting goes 'Beyond the Tooth' and focuses on career and life balance
- AGD gathering features new continuing education tracks
- Premier Canadian conference is short flight away

INDUSTRY CLINICAL A8–A9

• Bar and counterbar system with composite veneering illustrates interaction of analog and digital dentistry

INDUSTRY NEWS A10–A14

- Be the first to see the 'Visible Difference'
- Extraction Academy teaches clinicians to safely, effectively and confidently perform extractions
- Family-owned Flow Dental adds to digital imaging line
- National Dental Association project brings access, awareness, hope

AD

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◀ ANAHEIM, page A1

Sunday courses

CDA Presents added a two-day-track course on Saturday and Sunday, “The Smart Dentist Training | Maximize Your First Three Years.” A detailed description is at cda.org/max3. This course will be of particular interest to new dentists.

Stimulating C.E.

Whether it’s hands-on workshops performed on fresh cadavers or learning the latest restorative techniques in the U.S. and beyond or gaining an international perspective on dentistry with experts from Mexico and Germany, the comprehensive offering of continuing education sessions is one of the main reasons CDA Presents is viewed by many as a must-attend meeting for dental professionals from throughout the country.

World-renowned speakers

Included on the speaker list this year are Pascal Magne, DMD, PhD, and Gerard Chiche, DDS. Magne is a professor of esthetic dentistry in the Division of Restorative Science at the Herman Ostrow School of Dentistry at USC. Chiche is the Thomas P. Hinman endowed chair of restorative dentistry and director of the Center for Esthetic and Implant Dentistry at the Medical College of Georgia School of Dentistry in Augusta, Ga.

New way to pick up your badge

On-site pickup for badges is different this year compared with recent years. The “on-demand” system was launched at last year’s fall meeting, CDA Presents in San Francisco. Intent is to eliminate lost badges and tickets and enable attendees to change registration information right up until the convention without the delay of returning any materials.

Download the app

With CDA Presents at your fingertips, you can search courses by day, topic or speaker; find exhibitors by name and product categories and locate them directly on the exhibit hall map; link straight to the C.E. website and save a stop at the C.E. Pavilion; download course handouts; and even take notes.


The CDA Presents app can be downloaded from the App Store for iPhones/iPads or the Google Play Store for Android. Learn more at www.cda.org/apps.

Disney tickets

Buy discounted Disneyland Resort theme park tickets at cdapresents.com or disney.conventionear.com/ZMCD15A (until 9 p.m., April 29, online only, separate from registration, valid from April 27–May 8).

(Source: California Dental Association)

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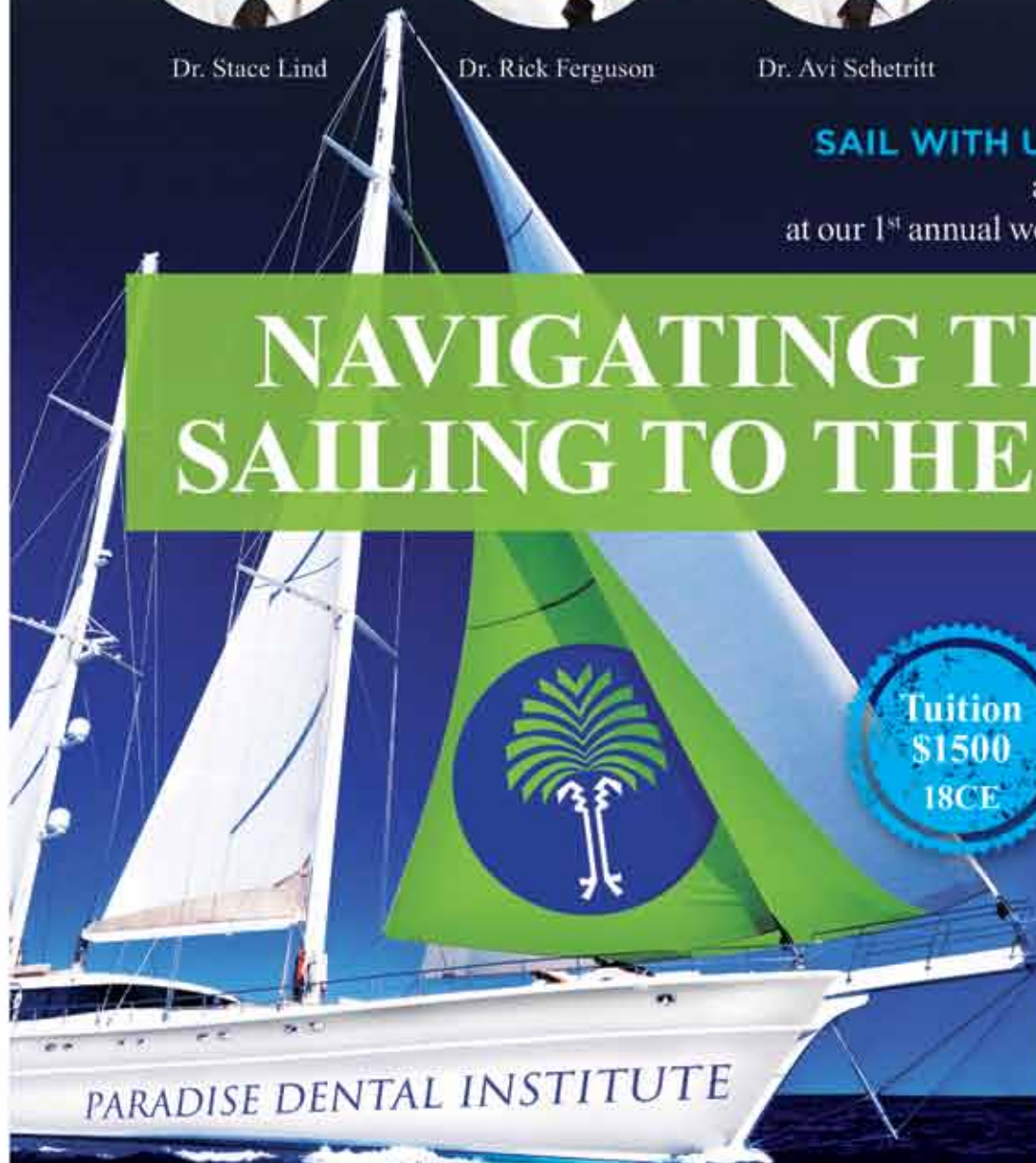


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The Summers in Paradise conference will be at the Atlantis Resort in the Bahamas this summer. The conference is being presented by Paradise Dental Institute, www.paradisedentalinstitute.com, (844) 229 - 7192. Photo/Provided by Paradise Dental Institute

Bahamas site of implant training and conference

'Summers in Paradise' conference will be from July 30–Aug 1 in Nassau

By Paradise Dental Institute Staff

Nassau, Bahamas-based Paradise Dental Institute formerly launches this July with a live-surgery implant training course followed by a working conference.

The working conference, "Summers in Paradise," which the institute intends to hold annually, will be from July 30 to Aug. 1 at the Atlantis Resort and Casino. Themed "Navigating the Past, Sailing to the Future," the conference will explore the exciting but challenging

world of implant dentistry. The institute will feature its faculty members as speakers ("captains") and also have guest speakers, with sessions ranging from an introduction to single-tooth implants to full-mouth reconstruction surgery and prosthetics.

The speakers will navigate traditional, sound surgical practices of the past and sail to guided treatment planning and surgery, which are both the present and future of dentistry.

The three-day working conference will help dentists improve their ability to diagnose, treatment plan, perform surgery, manage post-surgery needs (including potential complications) and deliver a final prosthesis. The interactive sessions will provide dental professionals — whether new or experienced with implant dentistry — with a deeper understanding of the "when, why and how."

Following is the conference schedule:

- **July 30:** "Introduction to Implants and Soft-Tissue Grafting" with speakers Dr. Rick Ferguson and Dr. Avi Schetrit.

- **July 31:** "Predictable Impression Taking and Temporization" with speaker Dr. Stace Lind.

- **July 31, 6–9 p.m.:** "Official Launch Party" (all-white attire on the beach).

- **Aug. 1:** "Guided and Non-Guided Full-Mouth Reconstruction — Implant-Supported Zirconia Bridge Surgery and Prosthetic Parameters for Success" with speaker Dr. Michael Tischler and "Maxillary Arch Regenerative Strategies — Single-Tooth to Full-Arch Reconstruction" with speaker Dr. Michael Pikos.

Each day will include continental breakfast from 7–8 a.m. Lectures will be from 8 a.m.–1 p.m., with breaks in between. Lunch and exhibit-only hours will be from 1–3 p.m., with a live calypso band, local and American cuisine and a happy hour with the exhibitors. After 3 p.m., guests can continue with happy hour or explore Atlantis. Friday night is the official launch with an all-white-attire beach party and cultural entertainment.

Bringing families is encouraged. Atlantis has something for everyone, and the group rate (\$226 per night, including spouses and children) is available three days before and after the conference.

The institute and the summer conference are the brainchild of founder and CEO dental technician Indira Darling and co-founder and clinical director Dr. Derwin Munroe. The pair, both Bahamian-born and American-trained, will combine their love of dentistry and their beautiful country to provide a comprehensive implant-training program with the philosophy, "No man is an island."

The institute will provide dentists and all team members with the surgical, theoretical, clinical and business skills needed to build a successful implant practice. The faculty comprises oral surgeons, American Board of Oral Implantology-certified dentists, hygienists, lab technicians, surgical assistants and office managers. The faculty will provide continued mentoring and support to dental teams as they begin or advance in implant dentistry. You can learn more by calling (844) 229-7192.

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JDIQ courses in French/English

The Journées Dentaires Internationales du Québec, Canada's largest bilingual dental meeting, according to organizers, is from May 22–26 (Friday through Tuesday) in Montréal. Online registration is available at www.odq.qc.ca.

Meeting apps for Apple and Android phones and tablets can be downloaded through www.odq.qc.ca, the App Store or the Play Store. On-site at the meeting, free WiFi will be available to all delegates and exhibitors at the venue, the Palais des congrès de Montréal.

The meeting's educational program has more than 125 prominent speakers from Canada, the United States and Europe presenting approximately 175 educational sessions in English and French

during the five-day convention.

Among the educational sessions: "Lights, Camera, Action! Patient Photography Made Easy — A Hands-On Workshop," "Endodontics for General Dentists: Advanced, Comprehensive and Practical Hands-On Training," "Oral Surgery for the General Dentist: Faster, Easier, and More Predictable" and "Hands-on Infection Control Workshop."

Many other lectures and workshops are scheduled, with details in the program online.

225 companies, 500 booths

The exhibition hall will feature more than 225 companies in 500 booths in the 133,563-square-foot space.

More than 2,000 company representatives will be on hand to help you see, compare and make decisions on new furniture, equipment, instruments, techniques and other products and services — all under one roof.

One C.E. hour per day can be earned by visiting the exhibit hall. Just be sure to have your badge scanned at the entrance.

The exhibition hall hours are 8 a.m. to 6 p.m. on Monday, May 25, and 8 a.m. to 5 p.m. on Tuesday, May 26.

The organizers invite you to join the more than 12,000 expected delegates to meet, learn, share and enjoy this gathering of friends and colleagues.

(Source: JDIQ)



JDIQ is May 22–26 at the Montréal Convention Centre (Palais des congrès de Montréal). Photo/MTTQ/Marc Cramer, Tourism Montréal

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Association of Endodontic Clinicians (AEC)

AAPD to be in Seattle, May 21–24

Pike Place Market, the Space Needle, the EMP Museum and some of the top thought leaders in pediatric dentistry are among the reasons to be in Seattle May 21–24 for the American Academy of Pediatric Dentistry (AAPD) annual session.

Scientific sessions are at the Washington State Convention Center, in the heart of downtown, adjacent to hotels, restaurants, nightlife and shopping. Taking advantage of the location, the welcome reception on Thursday, May 21, features exclusive access to the Space Needle, EMP Museum and Chihuly Gardens.

The keynote, on May 22, features Frank Abagnale with "The True Story of Catch Me If You Can." An authority on forgery, embezzlement and secure documents, Abagnale became an expert of sorts 40 years ago as a world-famous con man, as depicted in his best-selling book, "Catch Me If You Can." Leonardo DiCaprio and Tom Hanks starred in a Steven Spielberg film based on the book.

Three-day exhibit hall

Products and services in the meeting's exhibit hall will be geared toward pediatric dental practices. An AAPD booth will have a bookstore, which will have copies of the Coding Manual, the new pediatric dentistry handbook. Also in the exhibit hall will be the Healthy Smiles, Healthy Children Donor Lounge, where you can learn more about Access to Care Grants and donate to its supporting foundation.

A hospitality area on the exhibit hall floor will offer a continental breakfast, and there will be complimentary beverages each morning and afternoon and lunch available for purchase.

You can register for the meeting online by visiting www.aapd.org/annual.

(Source: AAPD)

Florida Dental Association meeting goes ‘Beyond the Tooth’

The Florida Dental Association will hold its annual meeting, the Florida Dental Convention (formerly the Florida National Dental Convention — FNDC) at the Gaylord Palms Resort & Convention Center in Orlando from June 11–13. This year’s scientific program is themed “Dentistry Beyond the Tooth — Career & Life in Balance.” With more than 100 lectures, 33 workshops and three mini-residencies, there should be

something for every dental team member. Each day begins with a “High Energy — High Impact” speaker, selected for demonstrated ability to move and inspire. Dentist, life coach, nutritionist and athlete Uchi Odiatu opens on Thursday with “Living Your Dreams.” On Friday, Dave Weber presents “Conquering Your Goliaths.” Morris Morrison will be the final keynote on Saturday with “Lead-ur-ship Starts With You.”

Courses and workshops, many worth C.E. credit, are designed to help you and your team incorporate emerging technology and techniques to optimize skills, business growth and team building. Topics include compeoneers, one-step dentures, sleep dentistry, head-and-neck dissection, cone-beam anatomy, HPV and biofilm control and prevention. New this year are courses for new den-

tists, a “free” dental hygiene C.E. course on Saturday and one-hour “hot topics.” The nightly parties are designed to be family friendly and include a “magical” night out at Disney’s Magic Kingdom on Saturday. Learn more at www.floridadentalconvention.com or call (800) 877-9922.

(Source: Florida Dental Association)

AGD gathering features new continuing education tracks

At AGD 2015, from June 18–21 in San Francisco, the Academy of General Dentistry (AGD) intends to not just embrace “constant change,” but celebrate it. The meeting, at the Moscone West Convention Center in San Fransisco, will showcase new technologies and C.E. courses for dentists and staff.

Keynote speaker Terry Jones, founder of *Travelocity.com* and *Kayak.com* and executive chairman of Wayblazer, will share insight on creating a culture of innovation and embracing opportunities in today’s age of information. The presentation is sponsored by Colgate. Innovation will be on display at “Modern Practice for Today’s Patients” presented by Henry Schein Inc. Located in the exhibit hall, this display invites attendees to imagine the possibilities of a technologically enhanced dental office. Visitors will be able to try out cutting-edge equipment, use patient management software and see esthetic options for transforming a practice space. Clinical and research e-poster presentations feature captivating digital displays by today’s dental students and residents presenting ideas for shaping the dental landscape of tomorrow. New C.E. tracks will enable dental team members to focus on specific subject areas, such as endodontics, implants and special-patient care. Also new will be a 90-minute live-patient dental implant course hosted by Engel Institute founder Todd B. Engel,

DDS, and fundamental and intermediate Invisalign® courses for dentists and their teams. Friends and family can attend the “President’s Celebration to Honor Fellows and

Masters” for dining and live music and the AGD Foundation’s “5K Fun Run/Walk” for oral cancer awareness and research. Register at www.agd2015.org. The official hotel is the San Francisco Marriott Mar-

quis. Early reservations are encouraged, at resweb.passkey.com/go/AGD2015, (877) 622-3056 or (415) 896-1600 (international).

(Source: AGD)

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(Source: Pacific Dental Conference)

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Bar and counterbar system with composite veneering illustrates interaction of analog and digital dentistry

By **Giuliano Bonato**,
Dental lab owner, Italy

At times, dentists send my dental lab a prototype (a copy of the provisional item tested in the patient's mouth), asking us to finalize it and make a definitive product. It is interesting in such cases to see how manual finishing skills intersect and integrate with advanced digital tools and machines — confirming that the “mouse operator” also needs a solid background as a “dental technician.”

Early concerns that machines would ultimately deprive dental technicians of their central role have given way to acknowledgement that the dental technician's hand is essential, especially in complex work requiring precision and customizing — at least for the immediate foreseeable future.

Only a dental technician's mind can easily switch between digital and manual tasks to produce — with the dentist — high-quality products suited to the final and primary goal: preservation of the patient's oral health.

The following case highlights this interaction between manual work and now-essential CAD/CAM systems. The case is not unusual: Lab assistance was requested of us after implant of a provisional

prosthesis that was made by another laboratory. The request was for a final prosthesis with a primary bar in titanium, screwed onto implants, and a counterbar, also in titanium, with retention clips. The specialist requested composite veneering material.

After a master model was developed, we then improved proportional aspects, alignment of the teeth and esthetics of the product wherever possible. Everything was “recorded” via a silicone mask, packed inside a verticulator system (Fig. 1).

This “recording” enables us to store, with accuracy and repeatability, the shape and volume of the product. Through the mask on the verticulator, we mold an acrylic (or composite for a provisional item) duplicate on the model. In the latter case, the milling enables discarding of the necessary amount of volume, creating the right design for a suitable support for future veneering with a composite esthetic material.

The resulting prototype was sent to the milling center to be scanned — and using an innovative technique — “virtually divided” into a primary bar and a counterbar, adding retention clips in a single file (Fig. 2). This ability with CAD/CAM to design, produce and mill the two units at the same time, on the same titanium disc, achieves excellent coupling precision.



Fig. 1



Fig. 2

**CDA
BOOTH
NO. 2155**



Fig. 3



Figs. 4, 5



Figs. 6-8



Figs. 9-11



Fig. 12



Figs. 13-15



Figs. 16, 17



Fig. 18



Fig. 19

Photos/
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The initial virtual design, displayed with a 3-D program, enables the technician to analyze and make note of crucial aspects arising from CAD modeling. Everyone communicates remotely and simultaneously, with the same images on everyone's monitors, enabling careful configuration of the structure's design. With this case, adjustments were made to the volume and extent of future pink flanges of the prosthetic body and optimized, by advantageously varying the position, the retention clips (ball-attachment), embedding them in adequate volume areas within the counterbar.

To prepare the device for the practice's functional and esthetic testing, the portion of prosthetic body was partially reduced in thickness using the micromotor, and pink wax was added. Testing also enables the patient to clearly see the boundary between the pink gum and the arch of the teeth (Fig. 3). The dentist/specialist checks accuracy of fit, articulation with the antagonist and functionality of eccentric movements. For the transformation of the esthetics, we use a joint casing in the mold with a silicone base sufficient to place the counterbar. Simple steel wire sections (for hooks) with a diameter of 0.9/1.0 mm applied on the model act as channels for injecting the composite. With this case, once the base silicone mold was isolated and the joint casing lid closed, we were ready to cast the transparent silicone (22 shore hardness). Polymerization of this takes place under pressure (4/6 bar) for 30 minutes (Figs. 4, 5).

The counter die, separate from the base, was put aside, and we used the micromotor for milling, preparing the cut of the enamel on the model. The aim was to create sufficient space to be able to insert the characterization between dentin and enamel, with effects and contrasts to highlight transparencies, color and mamelons. Using a second cover (having prepared the injection channels again), we proceeded as in the previous phase to the casting of the transparent silicone.

This technique provides obvious advantages: First, we will be able to use the initial prototype/model in every way, thus avoiding repeating any phases. The material reduction for the enamel cut, carried out with the micromotor, reduces risk of hitting the metal in the structure. With practice, it's possible to correctly calibrate the volume between dentin and enamel, for inserting the color effects. Going back to the practical phases, we can now free the armor and treat the metal by sandblasting (Al2O3), silicification, salinization and laying of the opaque, curing and self-curing (Figs. 6-8).

A first application of colored dentine, with joint casing open, created more depth in the holes of diatoric teeth and in interproximal areas. To intensify the color of the canines, we applied a type of "shell" with a more intense color mass so that the dentin, once thinly injected, reveals a color with a more pronounced tone.

Everything was pre-polymerized through a "quick" device to proceed to closing the joint casing. The spout of the syringe was inserted, then starting from one of the more distal injection channels, we extruded the material. Because of the transparency of the counter die, we were able to confirm complete filling of the space with the dentin mass. If necessary, we can use the other channels by progressively moving the syringe into the other holes (Figs. 9, 10). The joint casing, being filled in this way, must be kept in the dark for 10 minutes before proceeding with curing,

enabling release of any small excess of injected material (Fig. 11). Being able to accurately calibrate the exact amount of material needed to fill the cavity reduces waste.

Once curing was complete (a few minutes is enough), we separated the counter die and, without touching the dentin, cut the injection channels with a scalpel. This characterization phase, with the creation of contrasts by inserting colored and translucent masses, is typically considered the most creative part of the transformation process (Fig. 12).

Keeping the surface "dispersion phase" of the pre-polymerized composite intact maximizes adherence of the characterization and the enamel injected in the counter die (with the complete anatomy of the arch). Again, with the joint casing closed, the transparency enables identification of spaces that need to be filled by injecting enamel through the provided injection



Fig. 20



Fig. 21

channels (similar to Figs. 9-11). As previously noted, it is good practice to let the joint casing "rest" in the dark for 10 minutes to let any excess injected material flow from the channels.

Pre-polymerization takes about one minute with the cover. Once removed from the mold, the product is again exposed to light as recommended by the manufacturer's instructions (Figs. 13-15).

Accuracy of the materials used, combined with the described transformation system, does not allow chewing mounts to be inserted. The more accurate the model-

ing phase, the quicker the finishing times.

To coat the gum portion, we first treated and opacified the metal and, to also identify the pink prosthetic body, applied a paste composite by hand (Figs. 16, 17).

The product (Figs. 18, 19) still deserved a few considerations.

For the retention system used between the bar and the counterbar, we took advantage of the accuracy and versatility of the CAD/CAM systems and decided to use a modern interpretation of a "simple ball attachment." Starting from the principle that the nylon retention cap can be replaced at

See INTERACTION, page A12

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