

DENTAL DIMENSIONS

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IN THE SPOTLIGHT

Dr. Philomena Oboh

PAGE 33

A PUBLICATION OF THE SAN FERNANDO VALLEY DENTAL SOCIETY

UPCOMING EVENTS *CE Courses*

AUGUST
23

Saturday, 8:30 - 12:30 pm

3D Printing Hands-On Workshop

Join us for 3D printing and its integration into dental practices on practical applications and insurance considerations. Learn crown characterization techniques using pre-printed crowns.

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AUGUST
27

Wednesday, 6 - 9 pm

Responsibilities & Requirements of Schedule II Opioids

Learn how dentists and oral surgeons can help combat the opioid epidemic in our communities, and how to responsibly prescribe opioids when necessary.

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SEPT
24

Wednesday, 2 - 8 pm

OSHA, Infection Control, Violence Prevention, and CDPA

Learn the essential infection control topics for dental settings and updated on COVID-19 and OSHA regulations. This webinar also covers workplace violence prevention and an overview of the Dental Practice Act.

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SEPT
27

Saturday, 11 - 2 pm

Afternoon Tea Party

Discover how to achieve balance from a functional medicine perspective and understand how stress impacts cortisol levels, inflammation, and overall well-being.

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OCT
29

Wednesday, 2 - 9 pm

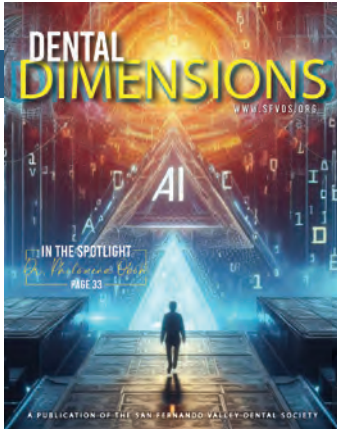
Holistic Orthodontics & Modern Endodontics

Learn how breathing, tongue position, oral muscles affect smile health, and the importance of the first 1,000 days. Attendees will also discover the latest technology in root canal procedures.

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IN THIS ISSUE

Summer 2025



CALL FOR SUBMISSIONS

Do you have an unusual case study or an interesting article you would like to have published? Dental Dimensions is looking for articles from our members so we can share our collective knowledge. Articles should be 500-1000 words with references where applicable and photos if possible. Send your submissions to: exec@sfvds.org or contact the dental society office at 818-576-0116.



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FROM YOUR PRESIDENT



Dear Colleagues and Friends,

It's truly hard to believe that we are already eight months into 2025. Time has flown by, and I am deeply honored to serve as the President of the San Fernando Valley Dental Society (SFVDS) this year. I am grateful for the opportunity to lead such a vibrant and dedicated organization. These first few months have been filled with energy, enthusiasm, and a shared commitment to excellence in dentistry and service to our community.

We began the year with a strong focus on education and professional growth. Our continuing education (CE) programs have always been a cornerstone of our society, and 2025 is no exception. So far, we've presented an engaging series of lectures and workshops covering essential topics such as Practice Management, OSHA Infection Control, Workplace Violence Prevention, Social Media Strategy for Dental Professionals, and Employment Law. These programs were well-received and provided valuable tools and insights that we can all use to enhance our practices and patient care.

One of my deepest personal passions is community service, and I am proud to see SFVDS continue to make a meaningful impact beyond the walls of our offices. For several years now, I have been volunteering with Healing California, an incredible nonprofit organization that offers free dental and vision services to underserved populations across the state. These events are often the only opportunity some patients have to receive much-needed dental care, and the gratitude expressed by those we serve is deeply humbling.

So far in 2025, I have participated in two Healing California clinics – one in

El Monte and another in Santa Clarita. The Santa Clarita event was particularly special, as it marked a collaboration between Healing California and SFVDS. Several of our board members generously volunteered their time and skills at the event. Over the course of the two-day clinic, a total of 167 patients received treatment, ranging from preventive care to extractions and restorative procedures. Many of the volunteers were UCLA dental students working under the guidance and supervision of Dr. Elbert Tom. It was inspiring to witness the next generation of dental professionals giving back to the community with such enthusiasm and compassion.

The SFVDS Foundation played a key role in supporting this event. In addition to donating two ultrasonic scalers and various dental supplies for use in future clinics, the Foundation also provided lunch for all volunteers during both days of the event. These contributions are a testament to the generosity and community spirit that define our society. I want to extend a heartfelt thank you to every member who donated their time, resources, or energy to this cause.

Looking ahead, our Foundation is already preparing for one of our most meaningful annual initiatives – the Veterans Day Dental Event. This program offers free dental services to veterans in our community, many of whom struggle to access adequate dental care through traditional channels. Several of our member dentists have graciously committed to opening their offices to provide care to veterans during this event. Your willingness to participate in these types of initiatives reflects the core values of our profession – compassion, service, and integrity. For those who have volunteered in the past, thank you. For those considering getting involved



this year, I warmly encourage you to join us.

In addition to our community outreach efforts, we have an exciting slate of upcoming CE programs. In June, we are honored to welcome Dr. Ray Bertolotti and Dr. Raj Swamidass as guest lecturers. Both are highly regarded in their respective fields and are sure to provide enlightening and practical presentations.

In September, we look forward to hosting our annual Afternoon Tea Party, an event that has become a beloved tradition for our members. This gathering offers a more relaxed opportunity for networking, learning, and connecting with colleagues. It is always well attended and provides a welcome moment of camaraderie and reflection.

We will close out our CE calendar in November with a lecture featuring two distinguished speakers: Dr. Stanley Malamed and Dr. Bruce Crispin. These individuals bring a wealth of knowledge and experience to the table, and their presentations will help ensure that our members remain informed about the latest research, trends, and innovations in the field of dentistry.

I would like to take this opportunity to extend my sincere gratitude to our SFVDS Board Members for their unwavering support, tireless work, and shared dedication to our mission. Your leadership and collaboration are what make this organization thrive. I also want to thank each of our SFVDS members – whether you're new to the society or have been with us for years – for your continued engagement, professionalism, and commitment to excellence.

As we move forward into the rest of the year, I invite you to stay involved, attend our events, volunteer when you can, and share your ideas. Together, we can make 2025 a year of growth, impact, and inspiration – for our profession and for our community.

Wishing you all continued health, success, and fulfillment in the months to come. I look forward to seeing you at our upcoming events!

Warmest regards,

Dr. Alan B. Taylor

FROM YOUR EDITOR

When I started my private practice 35 years ago, the FAX machine felt revolutionary. I couldn't believe I could get an immediate answer to a patient's medical history without waiting for it to arrive by mail. As the years went by, I continued to marvel at the rapid advances in technology: deep tank film exposure gave way to digital imaging, appointment reminders became instant, traditional PVS impressions were replaced with high-tech scanners, and CAD/CAM technology made it possible to mill crowns with precision. And now, AI is the next frontier.

Just the other day, I saw a car transporting passengers without a driver—Waymo's self-driving technology! Or Coco, a robotic food delivery system, operating without human intervention. These breakthroughs made me wonder: what are the implications of AI, and how will it impact our profession?

AI is transforming dentistry by enhancing diagnostic accuracy, optimizing treatment planning, and personalizing patient care. Its ability to analyze vast amounts of imaging data, detect patterns, and predict potential risks allows dentists to identify diseases earlier, create more precise treatment plans, and tailor care to each patient's unique needs. In essence, AI is a powerful tool for advancing oral health management.

KEY WAYS AI IS REVOLUTIONIZING DENTISTRY:

- **Improved Diagnosis:**

AI algorithms can analyze X-rays and intraoral images to detect cavities, gum disease, and even oral cancer with greater accuracy and earlier detection compared to traditional methods.

- **Enhanced Treatment Planning:**

AI can generate detailed 3D models of teeth and jawbones, enabling dentists to plan complex procedures like implants and orthodontics with remarkable precision.

- **Predictive Analytics:**

By analyzing patient data, AI can predict the risk of future dental issues, allowing for proactive prevention and personalized treatment plans.

- **Augmented Reality (AR):**

AI-powered AR tools offer real-time visual overlays during procedures and help patients visualize treatment outcomes before committing to them.

- **Patient Education:**

AI-driven chatbots can provide tailored oral hygiene advice and answer common dental care questions, empowering patients to take charge of their oral health.

- **Practice Management:**

AI streamlines administrative tasks such as appointment scheduling, billing, and patient data analysis, improving efficiency and workflow in dental practices.

POINTS TO CONSIDER WITH AI IN DENTISTRY:

- **Support, Not Replacement:**

AI is designed to assist dentists by enhancing their clinical expertise and decision-making, not to replace them.

- **Data Matters:**

The accuracy of AI tools depends heavily on the quality and diversity of the training data used.

- **Ethical Considerations:**

Patient privacy and data security must be prioritized when integrating AI into dental practices.

Whether we like it or not, technology and advancements are here to stay. The onus is on us to adapt, embrace these changes, and use them to enhance patient care and elevate our profession.

Dr. Elbert Tom



BCR TRUSTEE REPORT

As most of you know that Board of Component Representatives was established as a result of the Board Composition Resolution to act as a liaison between the local components and CDA BOD. As the BCR representative for SFVDS, I do my best to bring all your concerns and issues to the BOD and recommend resolutions.

On May 9, 2025, BCR members had a virtual meeting and received reports on the following issues

- **Chair Report:** The chair provided opening remarks and updates from recent CDA Board of Directors meetings, including appreciation for TDIC's strong response to members impacted by California's wildfires. The chair shared BCR 2026 meeting dates and referenced a recent series of ADA-hosted meetings focused on ADA finances and the Fonteva rollout.
- **Insurance Benefits Portal Requirements (SBVCDs):** Prior to the meeting, BCR received four questions regarding insurance benefit portals and requirements. The author of this item was seeking input from other dental societies to help shape a potential house resolution. As an advisory committee for the house, BCR shared feedback received from their boards, and staff answered questions on legal insurance requirements.
- **Council on Professionalism and Mediation:** BCR received an update on the newly established Council on Professionalism and Mediation, formed following the adoption of Resolution 3-2024-H. Members were briefed on the council's composition, mission and goals, and were advised that the council will be engaging dental society executive directors to obtain feedback for developing an effective mediation program. The program is expected to launch in Q4 2025 or early 2026.
- **Fonteva Implementation for Local Dental Societies:** BCR received an update on the implementation of CDA's instance of Fonteva, including the local dental society rollout and training approach. Staff noted challenges and lessons learned and shared how issues are being resolved and communicated to dental societies. BCR was reminded of the importance of ongoing collaboration, patience and transparent communication with local dental societies and CDA to ensure a successful rollout.
- **BCR Self-Evaluation:** Drawing on BCR's development over the past three years, Jill Parish, ThinkDev, LLC, led a self-assessment exercise to help members reflect on their reasons for joining and evaluate the group's performance in fulfilling its responsibilities. Members participated in small breakout groups to discuss BCR's duties, purpose, governance structure, current mindsets, strengths and areas for improvement. BCR was asked to complete a board self-evaluation survey by May 31, 2025. A summary of the results will be provided to BCR members mid-July for further discussion at the August meeting.
- **BCR Engagement on Issues:** The chair emphasized BCR's role leading up to the house of delegates, encouraging members to facilitate feedback, bring ideas for discussion and serve as communication conduits between BCR and the local dental societies.

If you have any questions regarding role of BCR want to present an idea or resolution to the CDA BOD or HOD, please don't hesitate to reach out to me by contacting our office.

Respectfully submitted,

Dr. Mahfouz Gereis



LEGISLATIVE REPORT

**Advocating for Our Profession
and Our Patients**

To all esteemed members of the San Fernando Dental Society, I would like to share an update on the important work being undertaken by our Legislative Committee. As your chairman, I am committed to ensuring that our profession remains strong, informed, and actively engaged with the legislative landscape that affects us all. The committee is dedicated to serving your interests as dental professionals while also promoting the well-being of the patients and communities we serve.

Our current focus includes a comprehensive analysis of legislative proposals and regulatory developments at the local, county, state, and federal levels. We are carefully studying the pros and cons of each issue—not just from the standpoint of how they impact your practices, but also how they affect access to care, patient safety, and public health. This balanced approach ensures that our advocacy efforts support both the profession and the population we are privileged to care for. We are also staying vigilant regarding any new mandates or rule changes from government agencies that may influence the delivery of dental care or the operation of dental practices.

Importantly, we will be calling on you—our valued members—for your involvement when the need arises. Whether it's contacting your representatives, participating in surveys, or lending your voice to support or oppose proposed legislation, your engagement will be critical to our success. Together, we can ensure that the interests of dentistry and the patients we serve are represented with strength, clarity, and unity.

Your Servant,

Dr. Gib Snow



FROM YOUR NEW DENTIST COMMITTEE CHAIR

Strengthening the Future of Dentistry Through Innovation, Leadership, and Service

As Chair of the Committee of New Dentists and a proud board member of the San Fernando Valley Dental Society (SFVDS), I am pleased to share several key highlights and initiatives from this year that reflect our ongoing commitment to innovation, professional development, and community service.

This spring, I had the privilege of organizing Revolutionizing Dentistry, a well-attended event designed to introduce both emerging and established dental professionals to the evolving role of artificial intelligence in modern dental practice. The program explored how AI-enhanced tools are being integrated into diagnostics, treatment planning, patient communication, and office management. The goal was to expand our members' perspectives on how these technologies can improve clinical accuracy, increase time efficiency, and enhance cost-effectiveness across various practice models. The overwhelmingly positive response from attendees reaffirmed the importance of embracing innovation as a core element of dental excellence.

In addition to advancing clinical knowledge, our committee remains dedicated to serving our community. Through a strong partnership with Healing California, I participated in multiple health fairs throughout the San Fernando Valley, providing free dental care to underserved populations. Many of the patients we treated were low-income individuals and those in recovery from substance use, for whom access to oral healthcare is often limited. These outreach efforts, supported by SFVDS, are central to our mission of improving health equity and exemplify the vital role dental professionals play in public health.

On a personal note, I am honored to have been nominated and accepted as a Fellow of the International College of Dentists, District 13 – California. This recognition, grounded in service, leadership, and integrity, reflects not only my personal journey but also the strong foundation SFVDS has provided in fostering professional growth and ethical leadership.

As a mother of two young children and a private practice owner, I am continually grateful for the opportunity to balance clinical care with community involvement. The ability to give back—whether through mentorship, education, or direct patient care—is one of the most fulfilling aspects of my career. San Fernando Dental Society has played a pivotal role in supporting this balance, offering a platform to connect with peers, exchange knowledge, and lead initiatives that make a measurable difference in our field.

Looking ahead, our Committee of New Dentists remains focused on engaging recent graduates, expanding access to mentorship, and promoting continued education that empowers dentists to thrive in an evolving landscape. We encourage all members to take advantage of the society's many resources and events, and to actively participate in shaping the future of dentistry in our region.

It is both an honor and a privilege to be part of such an extraordinary dental society—one that truly embodies professional excellence, compassion, and a shared commitment to creating healthy, confident smiles in every corner of the San Fernando Valley.

*Dr. Nikki
Babrood*



WHAT ELSE CAN AI DO IN MY DENTAL PRACTICE?

BY JOSH SUMMERS, CEO

INTRODUCTION: THE GROWING ROLE OF AI IN DENTISTRY

Artificial intelligence (AI) is rapidly transforming industries across the globe, and dentistry is no exception. Traditionally, dentists have relied on their skills and experience to diagnose, treat, and care for their patients. However, AI is increasingly being integrated into dental practices, enhancing everything from diagnostics to patient communication.

Initially, AI made its mark in dentistry through advancements in X-rays and treatment planning. These tools have made it possible for dentists to diagnose conditions with unprecedented accuracy, streamline treatment processes, and offer better care to their patients. Now, AI is beginning to influence patient care options directly, making it a key player in every aspect of dental practice management. This technology is not only helping dentists with clinical decisions but is also revolutionizing how they engage with their patients outside of the dental chair.

As the demand for efficiency and personalized care increases, AI is stepping up in areas such as patient follow-up, treatment plan reminders, recare management, and marketing. This article explores how AI is shaping the future of patient communication, enabling dental offices to connect with their patients more effectively and efficiently than ever before.

AI in Diagnostics and Treatment Planning

One of the most significant impacts AI has had on dentistry is in the realm of diagnostics and treatment planning. Traditionally, the interpretation of X-rays and other diagnostic images relied heavily on the expertise of the dentist. However, even the most skilled professionals can sometimes overlook subtle signs of dental issues. This is where AI comes into play.

AI-powered software can analyze dental images with incredible precision, identifying cavities, gum disease, and other conditions at their earliest stages. These systems learn from vast amounts of data, continuously improving their diagnostic accuracy. For example, AI can compare a patient's current X-ray with thousands of others to detect anomalies that might go unnoticed by the human eye.

Furthermore, AI is revolutionizing treatment planning by offering evidence-based recommendations. After analyzing a patient's dental records, AI can suggest the most effective treatment options, predict outcomes, and even provide alternative solutions. This not only saves time but also enhances the quality of care by reducing human error and ensuring that each patient receives the best possible treatment.

AI'S EXPANDING ROLE IN PATIENT COMMUNICATION

While AI's contribution to diagnostics and treatment planning is

well-established, its role in patient communication is rapidly expanding. Dental practices are beginning to recognize that effective communication is just as important as clinical excellence in delivering top-notch patient care. AI is stepping in to bridge the gap between dental offices and their patients, ensuring that follow-ups, reminders, and marketing efforts are handled seamlessly.

AI tools are now being used to automate routine communications, such as appointment reminders, treatment plan follow-ups, and recare scheduling. This automation ensures that patients are consistently engaged with their dental care, improving treatment adherence and overall satisfaction. Moreover, AI-driven communication is highly personalized, taking into account each patient's unique needs and preferences.

AI-DRIVEN PATIENT COMMUNICATION TOOLS

The scope of AI in patient communication is vast, with various tools available to dental practices:

- **Text Messaging:** AI-powered text messaging systems can automatically send reminders for upcoming appointments, follow-up after procedures, and provide updates on treatment plans. These messages can be personalized to include the patient's name and specific details about their care. Additionally, AI can handle patient responses, answering common questions or directing them to the appropriate resources.

- **Voice Communication:** AI-driven voice assistants and automated phone calls are becoming increasingly common in dental practices. These systems can remind patients of their appointments, confirm attendance, and even reschedule if necessary. AI voice assistants can also answer patient queries, provide information about procedures, and handle other routine tasks, freeing up time for dental office staff to focus on more complex interactions.

- **Email Marketing:** Email remains a powerful tool for patient communication, and AI is making it even more effective. AI can automate the creation and distribution of personalized emails, such as newsletters, special offers, and educational content. By analyzing patient data, AI can tailor the content of these emails to match the interests and needs of each recipient, increasing engagement and improving patient retention.

AI ON SOCIAL MEDIA AND WEBSITES

In today's digital age, a strong online presence is crucial for any dental practice. AI is helping dental offices manage their social media accounts and

websites more efficiently, ensuring that patients receive timely responses and valuable content.

- **Social Media:** AI can automate social media posting, ensuring that your dental practice stays active and engaged with its audience. It can also analyze engagement metrics to optimize posting schedules and content types. Furthermore, AI-powered chatbots can handle basic inquiries on social media platforms, providing instant responses to patient questions and directing them to appropriate resources.

- **Website Chatbots:** AI-driven chatbots on dental websites offer real-time assistance to visitors. These chatbots can answer frequently asked questions, provide information about services, and even help schedule appointments. By offering instant support, AI chatbots enhance the patient experience, ensuring that potential patients receive the information they need without delay.

THE FUTURE OF COMMUNICATION IN DENTISTRY WITH AI

The integration of AI into dental practice communication is just beginning, and the future holds even greater possibilities. As AI technology continues to advance, dental offices will be able to create even more seamless and personalized communication channels.

AI has the potential to transform the way dental practices interact with their patients, leading to improved satisfaction, better treatment outcomes, and stronger patient relationships. By automating routine tasks and offering personalized communication, AI allows dental professionals to focus on what they do best—providing exceptional care.

For dental practices that are willing to embrace AI, the future is bright. Those who integrate AI into their communication strategies will be better equipped to meet the demands of modern patients, who expect convenience, responsiveness, and personalization in their healthcare experiences.

CONCLUSION

AI is no longer just a tool for diagnostics and treatment planning in dentistry. It's becoming an essential part of how dental offices communicate with their patients, from automated reminders and follow-ups to social media engagement and website support. The ability to connect with patients more effectively and efficiently is a game-changer for dental practices, leading to higher patient satisfaction and better care outcomes.

As AI technology continues to evolve, dental practices that adopt these tools will find themselves at the forefront of a new era in patient communication. The future of dentistry is not just about providing the best clinical care; it's about ensuring that every aspect of the patient experience is optimized—and AI is the key to making that happen.

By embracing AI, dental practices can enhance their communication strategies, improve patient engagement, and ultimately, provide a higher level of care. The future of dental marketing and patient communication is indeed bright, with AI leading the way.

FUTURE OF AI IN ENDODONTICS

Artificial intelligence may have applications in endodontics. However, there are currently gaps in the understanding of how AI may be utilized in this field.

In a study published in the International Endodontic Journal, investigators examined the current and potential clinical applications of AI, ethical considerations of data use to implement the technology as well as limitations and barriers preventing its incorporation in endodontics.

The investigators found that AI has previously been used by endodontists to detect radiolucent lesions, analyze root canal morphology and predict treatment outcomes such as postoperative pain. Although AI deep learning models have demonstrated efficacy—representing its potential to aid in endodontic diagnostics, treatment planning and education—there continue to be challenges in model interpretation and generalizability that could hinder its real-world adoption into clinical practice.

The investigators concluded that novel initiatives are needed to adequately train endodontists on the applications of AI and facilitate the reliable integration of the technology and into endodontics.

DENTAL HYGIENIST MAY BE ONE OF MOST SOUGHT-AFTER US JOBS

A review has found that dental hygienists may be among the top 10 most desirable jobs in the United States.

Investigators examined Google search volumes and number of searchers for 105 jobs over a 12-month period, according to a report from Becker's Dental + DSO Review. They then compared the data with state population information.

The investigators found that dental hygienist ranked in the 10th position with about 22,300 searches, following behind realtor, travel agent, firefighter, nurse, ultrasound technician, electrician, therapist, pharmacist and paralegal.

The findings highlighted the increasing demand for dental services and qualified dental hygienists.

From: ADA News



MERCURY EXPOSURE IN THE DENTAL SCHOOL SETTING

ELBERT TOM, M.P.H., D.D.S.

INTRODUCTION

Past scientific studies have indicated that the improper handling of silver amalgam may potentially create hazardous air concentrations of mercury vapor.^{1,2} Patient exposure has not been a problem, but dentists, dental assistants and other allied dental health personnel may be exposed to hygienically significant exposure due to the improper handling of dental amalgam and mercury vapor.^{3,5}

The handling of dental amalgam seems to play a chief role in its contamination in the dental environment. For instance, accidental spillage or removal of amalgam without proper ventilation and without water can all lead to improper mercury exposure.^{4,5} Additionally, dental staff may be exposed by using ultrasonic amalgam condensers, mechanical amalgamators, heating the amalgam carrier to dislodge set particles, and improper dry heat sterilization of amalgam contaminated instruments in U.S.^{5,6,8} Agencies such as the Bureau of Sanitation/ Industrial Waste are recommending amalgam waste best management practices when managing potentially harmful dental materials.¹⁶

With the advent of cosmetic dental materials, dentists are removing amalgam restorations to satisfy the cosmetic needs of their patients. Composite restorations, which were once weak and could not withstand biting forces, were considered to be inferior to amalgam restorations. However, our newer generation composite restorations are stronger and cosmetically pleasing to the point where amalgams are now being replaced on a regular basis.⁷ The removal of amalgam restorations, the possible leaching of mercury vapor in the environment at an unsafe level, the possible health hazards to the dental office personnel,^{5,10} are all issues of concern to be addressed in this paper. The UCLA School of Dentistry, through its Environmental Health and Safety Division, set out to address these concerns by conducting a study at the School of Dentistry. It is believed that when best practices for amalgam removal and waste management are exercised, there is no significant health risk posed.¹⁴

ABSTRACT

Ensuring the preservation of our natural environment through sustainable dental practices is crucial for the well-being of both humans and the broader ecosystem. A growing concern among consumers pertains to potential health risks associated with the removal of dental amalgam in dental offices. However, extensive studies and the implementation of best practices in amalgam removal demonstrate that there are no adverse effects on the practitioner, their staff, or the patient.¹⁶

Research conducted at the UCLA School of Dentistry, involving simulated amalgam removal across various case scenarios and subsequent testing of mercury vapor emissions, has yielded significant findings. These findings

unequivocally support the assertion that there are no harmful health consequences following the removal of dental amalgam. Such insights serve as invaluable resources for educating practicing dentists about the best practices for safe and effective amalgam removal procedures.

OCCUPATIONAL EXPOSURE REGULATIONS & PROFESSIONAL BENCHMARKS

The maximum safe environmental concentration of mercury vapor in air has been specified by different agencies. Cal/OSHA has determined a standard maximum exposure to mercury vapor at $25 \mu\text{g}/\text{m}^3$ ($0.025 \text{ mg}/\text{m}^3$) in air as an 8-hour Time-Weighted Average (TWA) Permissible Exposure Limit (PEL) and a Ceiling Limit of $100 \mu\text{g}/\text{m}^3$ ($0.10 \text{ mg}/\text{m}^3$) designed for healthcare workers in the workplace.¹³

The American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV) recommends that the amount of metallic mercury vapor in workplace air be limited to an average level of $0.025 \text{ mg}/\text{m}^3$ as an 8-hour Time-Weighted Average (TWA).¹⁵

The National Institute of Occupational Safety and Health (NIOSH) recommend that the amount of metallic mercury vapor in workplace air be limited to an average level of $0.05 \text{ mg}/\text{m}^3$ during a 10-hour work shift.¹⁵

Due to potential exposure to mercury in the school environment, 5 UCLA's Office of Environment, Health & Safety (EH&S) conducted an industrial hygiene exposure assessment and local exhaust ventilation survey in order to evaluate the potential for faculty and student exposure to mercury vapor at the UCLA School of Dentistry (SOD) in November 2013.

RECORDS RESEARCH & DOCUMENTATION REVIEW

As part of this investigation, EH&S reviewed technical documents to provide background data for the exposure assessment, methodological consistency with other studies, and to provide regulatory standards and professional guidelines for workplace exposures.^{17,18,19,20,21,22,23,24,25,26}

MATERIALS AND METHODS

The UCLA School of Dentistry uses Contour Pre-encapsulated Dental Amalgam capsules manufactured by the Kerr Corporation. According to the manufacturer's 2006 Material Safety Data Sheet (MSDS) the Contour capsules contain 47% mercury by weight.

The manufacturer states in the Physical/Chemical Properties of the SDS, "This MSDS addresses the mercury (liquid) portion of the product, which is a known health hazard. The powder portion is not considered to be hazardous."

The amalgam was removed at different times for study for mercury exposure

in dental laboratory areas of the UCLA School of Dentistry and instrumentation was used to measure mercury release.

EH&S worked with faculty at the UCLA School of Dentistry and determined that the following methodology would be employed in mercury vapor evaluation:

- Direct-reading Instrumentation Sampling
- Personal Breathing Zone (PBZ) Sorbent Tube Samples
- PBZ Passive Samplers (Diffusive Badges)
- Visual Evaluation
- Ventilation Evaluation

DIRECT READING INSTRUMENTATION SAMPLING

Direct-reading instruments are valuable tools for detecting and measuring worker exposure to gases, vapors, aerosol, and fine particulates suspended in air.^{10,20} These instruments permit real-time or near real-time measurements, and their use is specifically required by some OSHA standards.^{10,20} There are many types of instruments available, each of which is designed for a specific monitoring purpose.

A Jerome J505 mercury vapor analyzer was used by EH&S in sample mode with a 1 µg limit of detection and set to auto sample at one minute increments. The J505 employs atomic fluorescence spectroscopy with a resolution of 0.01 µg/m³ in standard test mode.^{10,11,15,20} Prior to the start of each sampling period, the J505 was zeroed with the Zero Air Filter (AZI P/N Z2600 3905) to verify proper instrument operation.

PERSONAL BREATHING ZONE (PBZ) SORBENT TUBE SAMPLES

The sampling is "personal" because it evaluates an individual employee's exposure to a chemical as opposed to area sampling that measures the concentration of a substance in a given area (i.e. the amount of carbon monoxide in a warehouse where gasoline-powered forklifts are being used). The best indicator of a person's actual exposure comes from personal sampling since the sample is collected by equipment that is actually worn by the employee during the day.¹⁰ Because the samples are collected at the employee's nose and mouth, they are called "breathing zone" samples. The breathing zone can be visualized as a hemisphere about 6 to 9 inches around the employee's face. Breathing zone samples provide the best indication of the concentration of contaminants in the air the employee is actually breathing.^{10,15,20}

PBZ PASSIVE SAMPLERS (DIFFUSIVE BADGES)

Passive Samplers are small plastic enclosures about half the size of a pager. They are filled with a granular solid sorbent such as activated charcoal that has an affinity for organic gases and vapors.¹⁰ One section of the enclosure is open to the air. Organic gases and vapors in the air that pass through the opening by diffusion are adsorbed, or trapped by the sorbent material.¹⁰

PERSONAL BREATHING ZONE (PBZ) SAMPLING PROCEDURES

Thirty six mercury vapor samples were collected over a four week sampling period (31 PBZ sorbent tube sample and 5 PBZ passive diffusive badges). Six mercury vapor PBZ sorbent tube samples were collected during a follow up sampling evaluation in the 4th Floor Dental Lab of the UCLA School of Dentistry. All of the 8 hour TWA samples evaluated full shift exposures.

Personal Breathing Zone sorbent tube sampling was conducted according to NIOSH Method 6009 (Inorganic Mercury) using SKC Low Flow Pocket Pump 210 Series connected to Anasorb C300 200 mg solid sorbent tubes (SKC 226-17-1A). The negative pressure pumps were calibrated before and

after sampling with a TSI Primary Calibrator, Model 4146. The sampling tubes were clipped to the employee's disposable gown in the PBZ area. All PBZ samples were sent to EMSL Analytical, Inc., a California ELAP, AIHA and LACSD certified commercial analytical laboratory for analysis using appropriate laboratory instrumentation outlined in NIOSH Method 6009.

PBZ PASSIVE BADGE SAMPLING

PBZ passive diffuse badge sampling was conducted in accordance with OSHA Method ID-140 (Inorganic Mercury) using Inorganic Mercury Passive Samplers containing Anasorb C300 sorbent capsules and reusable capsule holder (SKC 520-02A and 520-03). The sampling badges were clipped to the employee's disposable gown in the PBZ area. Administrative staff was chosen for full shift sampling to ensure adequate volume of air in accordance with OSHA Method ID-140. All PBZ samples were sent to EMSL Analytical, Inc., a California ELAP, AIHA and LACSD certified commercial analytical laboratory for analysis using appropriate laboratory instrumentation outlined in NIOSH Method 6009.

RESULTS

DIRECT READING INSTRUMENTATION RESULTS

The Jerome J505 mercury vapor analyzer was used in conjunction with each PBZ sample. A unique identification number, J505 ID# was assigned to each J505 sampling procedure to connect with its respective PBZ tube sample.

PBZ RESULTS

One of the PBZ samples exceeded the selected 0.025 mg/m³ reference level corresponding Cal/OSHA PEL for inorganic mercury as an 8 hour Time-Weighted Average (TWA), as well as the Cal/OSHA ceiling level of 0.01 mg/m³.

A summary of all TWAs by sample number and activity is presented in Table 1 and 2 below.

PERSONAL BREATHING ZONE RESULTS

A single result was found to have been associated with the use of multiple amalgam capsules and a dry extraction procedure which also was associated with an LEV operating at less than optimal conditions during the lab procedure. The error in using a dry extraction technique in the absence of LEV was explained to the student during the interview. Additional PBZ sampling was conducted in the 4th Floor Lab to assess the validity of this data point as Table 3.

Personal breathing zone results were generally greater in the 4th Floor Lab than in the Clinics. Although no specific causation can be identified in this study, there may be a correlation to factors such as, lack of experience using dental amalgam, dry extraction instead of wet methods, and the use of LEV without a Front Scoop attachment.

SUBSEQUENT LOCAL EXHAUST VENTILATION EVALUATION

Within the profession, dentistry uses LEV in the form of chairside high volume suction as a standard practice for various procedures and purposes. The chairside filter traps have 2 stages, low volume suction (LVS) and high volume suction (HVS). These measures are in place to minimize the exposure of particulate matter.^{11,14}

TABLE 1: TIME WEIGHTED AVERAGE SUMMARY-PBZ TUBE SAMPLES

Sample #	Functional Area	Job Title	Activity	TWA (µg/m³)
14-014	2nd Floor Clinic	Staff	Administrative	0.12
14-015	2nd Floor Clinic	Student	Amalgam extraction with HVS	0.09
14-016	2nd Floor Clinic	Faculty	Amalgam Procedure Review	0.08
14-017	2nd Floor Clinic	Student	Amalgam Extraction without Suction and Amalgam resto	0.97
14-018	Venice Clinic	Student	No amalgam procedure	0.20
14-019	Venice Clinic	Staff	Administrative Duties	0.26
14-023	3rd Floor Clinic	Staff	Administrative Duties	0.10
14-032	3rd Floor Clinic	Student	Amalgam Restoration	0.09
14-054	4th Floor Lab	Staff	Administrative Duties	2.97
14-055	4th Floor Lab	Student	Amalgam Restoration	3.35
14-057	4th Floor Lab	Student	Dry Extraction	123.50

TABLE 2: TIME WEIGHTED AVERAGE SUMMARY-PBZ PASSIVE SAMPLES

Sample #	Functional Area	Job Title	Activity	TWA (µg/m³)
14-014	2nd Floor Clinic	Staff	Administrative Duties	<1.04
14-022	Venice Dental Clinic	Staff	Administrative Duties	<1.04
14-023	3rd Floor Clinic	Staff	Administrative Duties	<1.03
14-024	Venice Dental Clinic	Faculty	Dental Procedure Review	<1.05
14-029	3rd Floor Clinic	Staff	Administrative Duties	<1.03

TABLE 3: TIME WEIGHTED AVERAGE SUMMARY-PBZ TUBE SAMPLES

Sample #	Functional Area	Job Title	Activity	TWA (µg/m³)
14-122	4th Floor Dental Lab	Student	Amalgam Restoration	0.43
14-123	4th Floor Dental Lab	Student	Amalgam Restoration	2.25
14-124	4th Floor Dental Lab	Student	Amalgam Restoration	0.34
14-125	4th Floor Dental Lab	Student	Amalgam Restoration	0.31
14-126	4th Floor Dental Lab	Faculty	Dental Procedure Review	0.74
14-127	4th Floor Dental Lab	Faculty	Dental Procedure Review	0.53

A removable front scoop with a Plexiglas shield directs the LEV closer to the specimen on the bench top. Students were observed working with dental amalgam specimens on the bench top and without the front scoop attachment.

WASTE HANDLING

EH & S observed dental amalgam waste containers in the 2nd and 3rd floor Clinics which may be a source of mercury vapor in air due to its high vapor pressure. Keeping these containers closed would eliminate this source. Dental practitioners should also consider keeping dental amalgam waste containers closed for this reason.

DENTAL AMALGAM HYGIENE PLAN DEVELOPMENT

A plan to develop a Dental Amalgam Hygiene Plan (DAHP) has been developed within the SOD which includes corrective actions.

RECOMMENDATIONS FOR CORRECTIVE ACTION

1. Disclose the results of the study to current and incoming students.
2. Provide formal and documented instruction for safe dental amalgam use and disposal as part of the curriculum. Students should understand that improper technique and /or improper use of LEV, for example, may increase their exposure to mercury.

3. Prohibit dry dental amalgam extraction.
4. Require HVS with wet methods during clinical amalgam extraction, if operationally feasible.
5. Keep all used mercury containing vessels closed.
6. Develop a dental amalgam hygiene plan, including Standard Operating Procedures (SOPs), and re-evaluate/update annually.

DISCUSSION

In recent years, the use of dental amalgam in private practices has seen a decline, primarily attributed to growing concerns related to its appearance and preference for more aesthetically pleasing alternatives. However, amidst debates surrounding its safety, particularly during removal, proponents have raised apprehensions regarding potential health risks.

This study offers a nuanced perspective, shedding light on the intricate dynamics involved. Contrary to the assertions of some proponents, comprehensive research, and findings from the UCLA SOD EHS study, indicates that the likelihood of mercury vapor exposure during dental amalgam removal procedures is notably low. Furthermore, it emphasizes that practitioners, when adhering to established best practices for amalgam removal, need not harbor significant concerns regarding adverse health ramifications.

By delving into the specifics of this study, practitioners can gain a deeper understanding of the risk landscape associated with dental amalgam removal. Such insights are crucial for informed decision-making and ensuring the well-being of both dental professionals and patients alike.

CONCLUSION

The results of the exposure assessment indicated that mercury vapor exposure was significantly less than the 8 hour Time Weighted Average (TWA) Cal-OSHA Permissible Exposure Limit (PEL) and Ceiling Limit, and was in full compliance with all applicable, relevant and appropriate regulations. The School of Dentistry is in compliance with best dental practices of dental amalgam waste elimination employing the use of wet removal of amalgam under HVE conditions thereby minimizing ambient mercury exposure to the dental team. It is our recommendation that all dental facilities should employ best dental practices of dental amalgam removal and waste disposal and biomaterials research should aim at discovering dental materials conducive to our environment for the future preservation of our generations.

DISCLOSURE

The mercury study, data and results were conducted by the UCLA Office of Environment, Health & Safety Department under the direction of Gillian I. Marks, PhD, MPH, Environmental Compliance Program Manager and Neil Mansky, MS, Senior Industrial Hygienist.

CONFLICT OF INTEREST

There is no conflict of interest.

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68 year old male without a significant medical history presents to the UCLA School of Dentistry. Radiograph indicates internal resorption of #9. Tooth is asymptomatic. Patient reported no history of trauma. What's your diagnosis?

INTERNAL VS. EXTERNAL RESORPTION

Internal and external resorption are both types of tooth root destruction, but differ in their origin: internal resorption starts within the pulp chamber, while external resorption starts on the tooth's outer surface.

Here's a more detailed explanation:

INTERNAL RESORPTION

- **Origin:** Starts on the innermost surface of the tooth root, where the root surface forms the boundary of the tooth's nerve chamber.
- **Cause:** Can be caused by trauma, dental infections, or restorative procedures.
- **Appearance:** Radiographically, it appears as a circular radiolucency continuous with the pulp canal space.
- **Treatment:** Root canal therapy is often the first step, followed by a definitive restoration.
- **Prognosis:** If the defect is too large, the tooth may mechanically fracture and fail, even with treatment.
- **Less Common:** Internal resorption is less common than external resorption.

EXTERNAL RESORPTION

- **Origin:** Starts on the outermost surface of the tooth root, where the tooth's root connects to the jawbone through the ligament that holds it within its socket.
- **Cause:** Can be caused by trauma, orthodontic treatment, infections, and genetic predisposition.
- **Appearance:** Radiographically, it appears as a defect on the outer surface of the root.
- **Treatment:** Treatment depends on the severity and location of the resorption, and may include root canal therapy, surgical repair, or extraction.
- **More Common:** External resorption is much more common than internal resorption.

EVIDENCE-BASED SUMMARY OF LOW-LEVEL LASER THERAPY (LLLT) WITH VIOLET-BLUE, BLUE LIGHTS, AND LASERS IN DENTISTRY



ARDAVAN ETEMADI, ET. AL., ELBERT TOM, DDS

1 | Introduction

Photobiomodulation therapy (PBMT) is a non-invasive treatment that refers to the irradiation of tissues with a laser or light-emitting diode with a wavelength of 400-1100nm^{1,2}. This treatment can either enhance healing or inhibit it in different circumstances³. In addition to coagulation and antibacterial properties, Photobiomodulation (PBM) can also detoxify root surfaces, remove smear layers, and even recontour bone and remove calculus⁴. Moreover, it can reduce inflammation and promote tissue regeneration, as well as aid with pain relief^{5,6}. These effects of PBM have been reported in different cell types in culture, such as fibroblasts, osteoblasts, muscle cells, and endothelial cells⁷⁻¹³.

The efficacy of PBM depends on applying the correct parameters and indications¹⁴. A correlation exists between the parameters of the energy deposited and the biological tissue response¹⁵. This treatment modality targets specific chromophores, predominantly cytochrome C oxidase, light-sensitive ion channels, flavin, and flavoprotein to initiate several non-thermal and biological reactions¹⁶⁻¹⁹. Secondary mechanisms tend to converge on pathways induced by increases in reactive oxygen species (ROS) production²⁰. An ex vivo study with Sprague Dawley rats suggests that using the visible (blue and green) and the far infra-red (around 1500 nm) lasers in surgery and LLLT is ideal²¹. Blue laser diode at 445 nm, with the highest absorption rate of hemoglobin and melanin, achieves better cutting quality and minimizes tissue thermal damage^{22,23}. However, there is considerable controversy surrounding the use of blue light, as the line between 'safe' blue light and potentially damaging ultraviolet (UV) light is unclear²⁴. The evidence supporting the use of blue light in PBMT is centered around reducing inflammation in superficial tissues²⁵ promoting wound healing²⁶, limiting bacterial

growth²⁷, increasing cell proliferation and differentiation in vitro, and being involved in the process of regeneration tissue engineering in vivo²⁸.

This literature review aims to summarize the effects of violet-blue and blue wavelengths either as a laser or an LED on different cell lines as reported in the literature.

2 | Methodology

2.1 Literature Search

A comprehensive literature search was conducted across four electronic databases: PubMed, Web of Science, Google Scholar, and Scopus. The search strategy included a combination of keywords and phrases such as "Blue laser," "Blue laser in dentistry," "low-level LASER therapy," and "Photobiomodulation," connected by the Boolean operators AND and OR. We limited the search to articles published in English from March 2013 to June 2023 to focus on contemporary data and trends.

2.2 Selection Criteria

Studies were included if they presented original research on the Blue lasers and Photobiomodulation in dentistry. Review articles, editorials, and commentaries were excluded. In-vitro, In-vivo, and Animal studies were included. Therefore, in the first search, 170 articles were found and in the next step they were filtered by the title to 82 articles and after that filtered to 28 articles by their abstracts, and finally 17 articles were included based on their full content. (Table1)

2.3 Study Selection

Six independent reviewers performed initial screening based on titles and abstracts. Discrepancies were resolved by consensus or by consulting a seventh reviewer. The full texts of selected articles were then reviewed for inclusion based on the predefined criteria.

2.4 Data Extraction

Data on study design, wavelength, energy density, cell line, and effects were extracted using a standardized form. The first author conducted the data extraction, which was then independently checked for accuracy by the fourth author (Table 1).

2.5 Data Synthesis

A narrative synthesis approach was used to summarize and interpret the findings. The synthesis focused on identifying common effects and efficacy of Photobiomodulation with violet-blue and blue lights and lasers in inducing osteogenic differentiation of undifferentiated mesenchymal stem cells and in the proliferation of human gingival fibroblasts and wound healing.

2.6 Limitations of the Methodology

The search was limited to articles published in English, which may have resulted in language bias. Additionally, unpublished studies and grey literature were not included, which could contribute to publication bias.

3 | Discussion

3.1 Osteogenic differentiation:

Both CRY1 And COL1 are known as osteogenic differentiation indicators which are associated with extracellular calcium deposition. In 2009 kushibiki and Awazu demonstrated the positive effect of 180s irradiation of 405 nm continuous blue laser on extracellular calcium deposition of MSCs through Cryptochrome 1(CRY1)²⁹. CRY1 is one of the core circadian genes, which is associated with bone metabolism and upregulates in the osteogenic differentiation process³⁰. Elevated levels of collagen type 1 (COL 1) which is a protein found in the extracellular matrix and shown to promote osteogenesis amongst increased alkaline phosphatase (ALP) levels were also reported in a study by Fekrazad et al. However, osteocalcin (OCN) and the two

mentioned markers were increased significantly by infra-red and red lasers compared to the 485 nm blue laser³¹ on the contrary, alizarin red staining assay conducted by Wang et al. demonstrated higher levels of mineralized nodule formation of adipose-derived stem cells (ADSCs) irradiated by blue laser compared to red and infra-red wavelengths which indicate better osteogenic differentiation. Moreover, this study demonstrated a significant effect of 420 nm blue laser to increase intracellular calcium deposition³². Intracellular calcium concentration can regulate the expression of osteogenic genes such as Runx2, OCN, and Osterix (OSX)¹⁸. Sherif A. Mohamad et al also confirmed 405nm blue light's ability to increase mineralized nodule formation in human dental pulp cells (HDPCs) by conducting an AR-S assay. ALP and dentin matrix protein1 (DMP-1) levels were also increased by different irradiation parameters. Therefore, considering its inhibitory effect on cell proliferation the potential cellular shift from stem cells toward odontogenic differentiation could be hypothesized³³. A study by Chen et al also confirmed the promoting effect of blue LED on osteogenic differentiation of HDPCs³⁴. Other than the mentioned cell lines, blue light's capacity to promote osteogenic differentiation in apical papilla-derived stem cells (SCAPs) via increased ALP levels and new mineralized nodule formation was also demonstrated in the literature³⁵. Unlike the positive effect of LLLT with blue lasers on osteogenic differentiation, blue laser indicated adverse effects on chondrogenic differentiation and much more unreliable results compared to red wavelengths. Schnieder et al estimated a relationship between chondrogenic differentiation and Reactive Oxygen Species (ROS) which are generated during PBM³⁶.

3.2 Reactive Oxygen Species:

ROS stimulation can activate pathways that may lead to cell growth and differentiation. However, high ROS levels are poisonous and can cause cell DNA damage and apoptosis³⁷. This matter demonstrates the importance of photobiomodulation's effect on ROS generation. There are conflicting views within the literature as to the effect of blue wavelengths on ROS generation. Yoshida et al reported on 460 nm blue LED's ability to increase ROS levels which led to cell proliferation inhibition³⁸. Blue laser capacity to generate ROS was also reported much higher in comparison to the red and infra-red laser³⁹. On the contrary, two studies reported inhibitory effects of blue laser on ROS generation^{40,41}.

3.3 Cell proliferation and wound healing:

The positive effect of blue laser on increasing proliferation of human gingival fibroblast cells (HGFCs) has been noted in the literature⁴¹⁻⁴³. These cells are in charge of the extracellular matrix, collagen formation⁴⁴, and breaking down the fibrin clot⁴⁵ which makes them extremely important in the wound-healing process. In 2021 Astuti et al evaluated wound healing properties of a 403nm violet-blue laser on Wistar rats and reported elevated Collagen-1 α , Fibroblasts, and Lymphocytes levels which represents the inflammatory and proliferative phase of the wound healing procedure⁴⁶. A scratch assay conducted by Etemadi et al also approved the mentioned results regarding wound healing effects. Contrary to the mentioned studies, a recent study by Hafezimotlagh et al. not only demonstrated no significant effect of applying 445 nm blue laser on HGFCs but also cell necrosis and scattered cell surfaces on in SEM (scanning electron microscopy) images⁴⁷, either inhibitory or no significant effect was demonstrated for other cell lines such as ADSCs¹⁸, HDPCs³³ human mesenchymal stem cells⁴⁸, and SCAPs³⁵.

4| Conclusion:

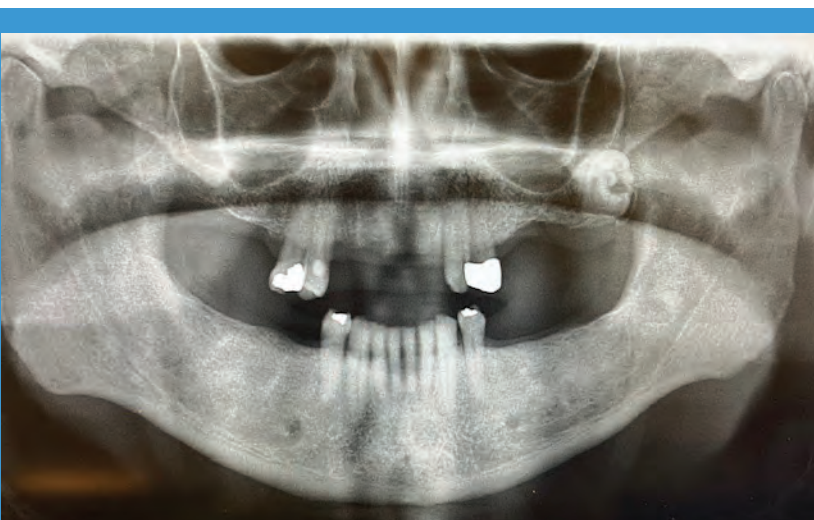
Reviewing articles showed that Photobiomodulation with violet-blue and blue lights and lasers is effective in inducing osteogenic differentiation of undifferentiated mesenchymal stem cells with different origins such as gingival fibroblasts, human dental pulp cells, adipose tissue, and apex. Moreover, cell proliferation assays that have been performed indicated stimulatory effects, which have a notable effect on wound healing. Regarding the capacity of blue laser to elevate wound healing procedures in-vivo and in-vitro, further studies should consider the pain-relief-related properties of blue laser following periodontal surgeries.

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CASE STUDY

59 Y.O. Black Male presents for routine dental care. Was diagnosed with AIDS in 2006 with CD4 count less than 200. Current labs: CD4%: 9.9%, Neutrophil count 4.3, Platelet count 216. Had an upper partial denture made 5 years ago and presents with panoramic radiographic for routine diagnosis. Upper left mass in upper hamular notch region noted. Intra/Extra-orally, nothing palpable and patient has never reported any pain or had he been told there was anything of an abnormal nature. What's your diagnosis?

ANSWER: Paramolar—benign structure composed of tooth elements, unerupted and unlikely to cause problems.

Statement on Dental Insurance Company's Acquisition of Dental Practices

FOR IMMEDIATE RELEASE

CHICAGO, July 2, 2025 – The American Dental Association (ADA) is aware of the acquisition of a chain of dental practices known as Cherry Tree Dental by Delta Dental of Wisconsin, an insurance company. The ADA, along with the Wisconsin Dental Association, believes this development raises deep concerns and important questions about the impact to dental professionals and patients, particularly if these types of acquisitions increase nationwide.

The ADA is actively reaching out to Delta Dental of Wisconsin to gain a clearer understanding of the nature and scope of this transaction. In parallel, we are assessing any potential legal and regulatory implications that may arise from this acquisition.

When an insurance company becomes both health care provider and insurance payer, questions arise regarding potential conflict of interest. From a business standpoint, dental insurance companies seek to minimize cost and maximize profit. As a result, patients may find their treatment options limited to what is most cost-effective for the insurer, not necessarily what is most effective for their oral health. The ADA believes that the health interests of patients are best protected when dental practices and other private facilities for the delivery of dental care are owned and controlled by a dentist licensed in the jurisdiction where the practice is located.

As always, the ADA remains committed to advocating for a fair environment in which all dentists, whether employed or practice owner, can thrive. The ADA's priority is to ensure that dentists can continue to practice with autonomy and integrity, and that the patients they serve receive the highest standard of care.

We will provide updates on this matter as more information becomes available.

CURRENT ADA POLICIES

The following ADA policies were adopted by the ADA House of Delegates and are current as of press date.

Ownership of Dental Practices (Trans.2000:462)

Resolved, that the Association supports the conviction long held by society that the health interests of patients are best protected when dental practices and other private facilities for the delivery of dental care are owned and controlled by a dentist licensed in the jurisdiction where the practice is located.

Regulating Non-Dentist Owners of Dental Practices (Trans.2011:491; 2019:255)

Resolved, that in order to protect the oral health and safety of patients, and to ensure their continuity of care, the ADA, urge and assist constituent societies to advocate for the regulation of entities that provide dental services but are owned or controlled by non-dentists, non-dentist corporations, or dentists not licensed in that state, and be it further

Resolved, that licensing and state authorities be urged to establish regulations

which hold entities providing dental services that are owned by non-dentists, non-dentist corporations, or dentists not licensed in that state to the same ethical and legal standards as those that are owned by state licensed dentists, and be it further

Resolved, that any entity providing dental services should be required to register with their state dental licensing board and obtain a business license from the appropriate state agency as required by law.

ABOUT THE AMERICAN DENTAL ASSOCIATION

The not-for-profit ADA is the nation's largest dental association, representing 159,000 dentist members. The premier source of oral health information, the ADA has advocated for the public's health and promoted the art and science of dentistry since 1859. The ADA's state-of-the-art research facilities develop and test dental products and materials that have advanced the practice of dentistry and made the patient experience more positive. The ADA Seal of Acceptance has long been a valuable and respected guide to consumer dental care products. The [Journal of the American Dental Association \(JADA\)](#), published monthly, is the ADA's flagship publication and the best-read scientific journal in dentistry. For more information about the ADA, visit [ADA.org](#). For more information on oral health, including prevention, care and treatment of dental disease, visit the ADA's consumer website [MouthHealthy.org](#).

RFK Jr. Acknowledges Consequences of Ending Water Fluoridation



Robert F. Kennedy, Jr., secretary of the U.S. Department of Health and Human Services, suggested that the removal of fluoride from public drinking water could raise the number of dental caries.

Sound evidence has demonstrated fluoride's effectiveness in reducing dental caries because of its ability to restore tooth enamel, according to a report from Newsweek. As a result, the Centers for Disease Control and Prevention recommended that fluoride be added to community water systems to protect against dental decay.

Antifluoride campaigns fueled by RFK, Jr.'s comments have propelled Utah and

Florida to enact statewide bans on fluoridated drinking water and encouraged states such as Nebraska, Kentucky, Louisiana, Massachusetts and Oklahoma to pursue legislation in favor of its removal – citing new studies linking fluoride exposure to low IQs and developmental issues in children. The HHS secretary has also made false claims about fluoride to support the anti-fluoride campaign, including that the mineral can cause thyroid issues, reduced bone density and arthritis as well as that it is banned in Europe, where community water fluoridation is actually in practice. However, dental and medical professionals have argued that the data used in the IQ studies are of low quality, and that the cessation of community water fluoridation could destabilize efforts to prevent dental decay, particularly among underserved populations.

As RFK, Jr. continues his Make America Healthy Again messaging, experts such as Brett Kessler, D.D.S., president of the ADA, have warned against the repercussions of removing fluoride from public drinking water.

"It is dangerous and cruel to make a public policy decision knowing that it will have a negative health impact. Yet, some politicians still errantly believe a ban on fluoride will make our country healthier when the opposite is true. Good oral health is health, and it is essential," Dr. Kessler underscored. "As dentists, we see the negative impact fluoride removal has on our patients. It is a real tragedy when policymakers' decisions hurt kids and adults in the long term. Blindly calling for a ban on fluoridated water will hurt people's health and cost them more money," he concluded.

Read more: [Newsweek](#)

Millions of student loan borrowers could face garnished wages



ADA-SUPPORTED BILLS WOULD REDUCE LOAN BURDEN FOR DENTISTS

Nearly 2 million student loan borrowers are at risk of having their wages garnished by the government this summer, according to [TransUnion](#).

The credit-reporting company found that roughly six million federal student loan borrowers were 90 days or more past due between February and April, making them delinquent. Approximately one third of them, or 2 million borrowers, could default in July.

Data shows a sharp increase in the number of delinquent borrowers following the end of a pandemic-era reprieve on student debt payments. Borrowers fall

into default when they fail to make a loan payment for 270 days, at which point the government can send it for collections, garnish wages or take money from Social Security payments or tax refunds.

TransUnion data also revealed that student loan holders who have recently entered delinquency have suffered an average credit-score reduction of 60 points.

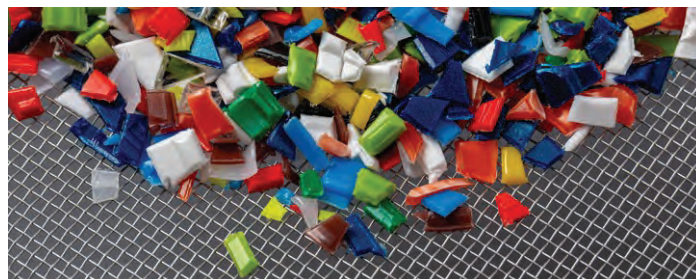
The ADA has expressed support for the [Resident Education Deferred Interest Act](#), known as the REDI Act, which would reduce the loan burden for dentists. The bill was reintroduced in the U.S. House, H.R. 2028, and Senate, S. 942, this year and, if passed, would allow medical and dental students to defer payments on federal student loans and delay interest accrual until after completing their residency programs.

The ADA is also supporting the [Protecting Our Students by Terminating Graduate Rates that Add to Debt Act](#), known as the POST GRAD Act, which would reinstate eligibility for graduate and professional students with financial need to receive Direct Subsidized Stafford Loans, which are now only available to undergraduate students. All student loan interest would be paid by the Department of Education while the borrower is in school at least half-time, for the first six months after the borrower leaves school, and during a period of deferment.

While these pieces of legislation alone won't solve the student debt crisis, the ADA said, they would provide much-needed relief for millions of students and bolster a strong financial base for early-career health professionals.

For more information on this topic or to follow all the ADA's advocacy efforts, visit [ADA.org/Advocacy](#).

Mitigating exposure to microplastics, nanoplastics



In a commentary published in *Brain Medicine*, authors detailed that recent findings have, drawn from a paper in [Nature Medicine](#), indicated that the human brain could harbor larger quantities of microplastics and nanoplastics compared with other organs and that deceased patients with dementia had greater amounts of these particles deposited in their brain tissues. They noted that microplastic and nanoplastic emissions are expected to continue rising if interventions are not implemented to reduce their release into the environment.

Among the health consequences of microplastic and nanoplastic exposure are oxidative stress, inflammation, immune dysfunction, altered biochemical/energy metabolism, impaired cell proliferation, abnormal organ development, disrupted metabolic pathways and carcinogenicity. However, these adverse effects have all been drawn from animal and cell culture studies.

Individuals were advised to make several lifestyle and dietary adjustments to

decrease their exposure to microplastics and nanoplastics – including drinking tap water, avoiding plastic-containing tea bags, using glass or stainless steel rather than plastic containers, limiting consumption of canned foods, reducing intake of ultraprocessed foods and installing high-efficiency particulate air filters. HEPA filters are known to remove significant amounts of airborne microplastics and may reduce health risks.

The investigators emphasized the critical need for large-scale human studies to explore strategies to accelerate the clearance of microplastics and nanoplastics from the body, determine the long-term risks of exposure related to chronic health issues and establish exposure limits.

Read more: [Brain Medicine](#)

Modifiable risk factors at midlife could determine life span



The absence of five cardiovascular risk factors at the age of 50 years could increase the life expectancy by more than one decade.

In a study published in *The New England Journal of Medicine*, investigators assessed the data of over 2 million individuals from 39 countries to determine the effects of arterial hypertension, hyperlipidemia, abnormal body mass index, diabetes and smoking status on long-term outcomes.

Compared with men and women who had all five risk factors, men and women with none of the risk factors had a respective 21% vs. 38% and 13% vs. 24% lifetime risk of cardiovascular disease prior to 90 years of age. Further, the participants who modified their hypertension and smoking status between 55 and 60 years experienced the greatest changes in their cardiovascular disease and mortality risks, respectively.

The findings revealed that approaches designed to treat and prevent these five modifiable risk factors could extend the life expectancy across the world.

Read more: [The New England Journal of Medicine](#)

Nasal powder approved for migraine

The U.S. Food and Drug Administration has approved the use of dihydroergotamine nasal powder (Atzumi) to treat patients with acute migraines.

The dihydroergotamine nasal powder formulation is designed to be administered via an intranasal system, according to a news report from *Pharmacy Times*.

The FDA's approval follows positive results from a phase I pharmacokinetic study as well as a phase III clinical trial. Both studies demonstrated that the nasal powder achieved rapid absorption and sustained plasma concentrations of dihydroergotamine.

Despite the results of the trials, the treatment resulted in adverse effects such as rhinitis, pharyngitis, altered taste, nausea, dizziness, somnolence, vomiting and diarrhea and included a boxed warning and contraindications.

Read more: [Pharmacy Times](#)



Oral microbiome composition could differ based on different self-reported sleep duration

Sleep duration could play a role in oral microbiome diversity among adolescents and young adults. The findings were presented at the 39th Annual Meeting of the Associated Professional Sleep Societies.

Investigators used data from the 2011 to 2012 National Health and Nutrition Examination Survey to examine the oral microbiomes of more than 1,300 participants aged 16 to 26 years. They then categorized the participants' self-reported sleep durations as very short, short, healthy or long.

The investigators found that oral microbiome diversity was positively associated with longer sleep duration among teenagers and young adults. They hope that the results of their study build a foundation for further research to determine the potential mechanisms behind the associations observed in this study.

Read more: [Sleep](#)



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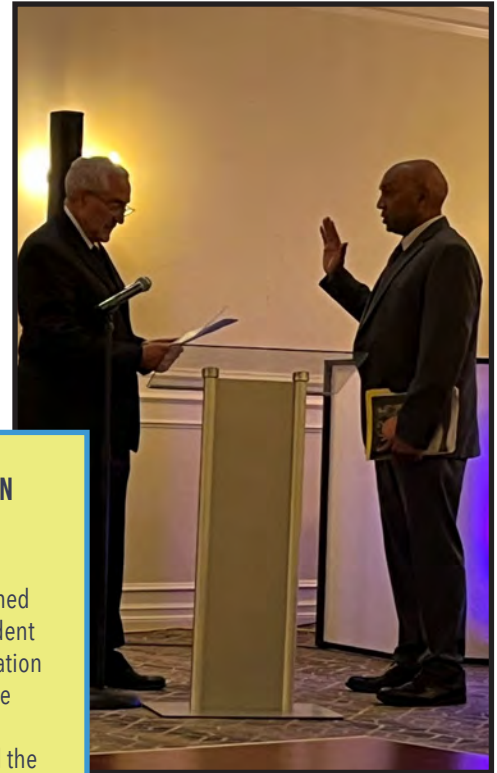
JANUARY 2025 • JUNE 2025

MEM BER SHIP

diary

BY DR. ANETTE MASTERS

JANUARY 2025



SFVDS INSTALLATION DINNER 2025 - DR. ALAN TAYLOR

SFVDS proudly welcomed Dr. Alan Taylor as President during the 2025 Installation Dinner—a memorable evening honoring leadership, service, and the future of organized dentistry.

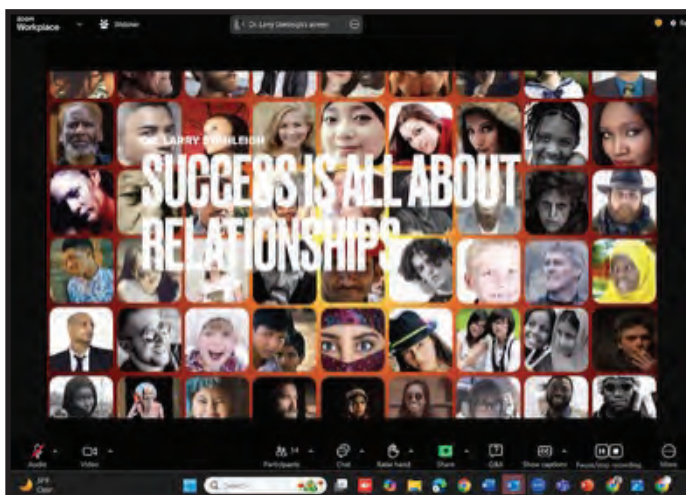






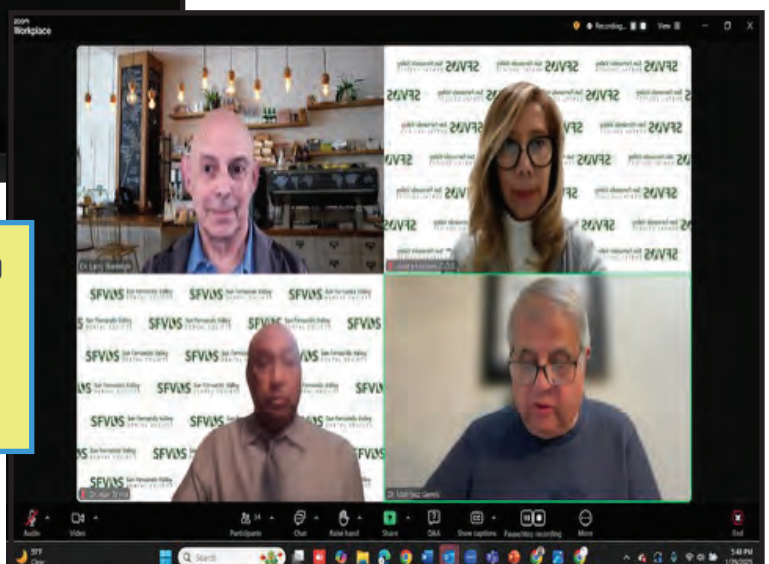
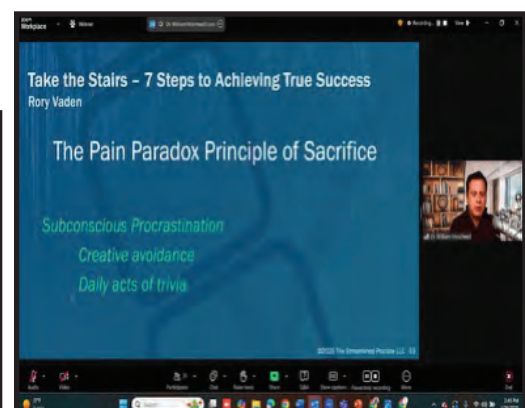
DENTAL ASSISTANT TRAINING PROGRAM 2025 (CDA + GLOBAL DENTAL ASSISTANT PROGRAM)

In partnership with CDA and the Global Dental Assistant Program, SFVDS launched a no-cost training initiative through the CDA Workforce Grant to empower the next generation of dental assistants.



PRACTICE MANAGEMENT WEBINAR WITH DR. WILLIAM MOORHEAD & DR. LARRY STANLEIGH

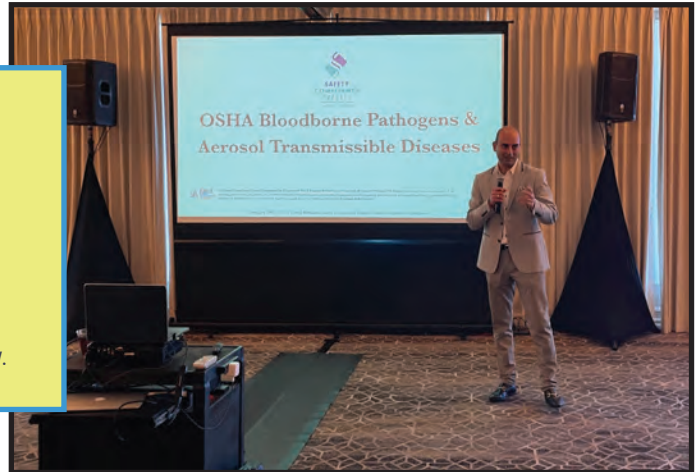
Dr. William Moorhead and Dr. Larry Stanleigh shared invaluable insights on effective practice management during an engaging SFVDS-hosted live webinar.



FEBRUARY 2025

OSHA INFECTION CONTROL, VIOLENCE PREVENTION, AND CDPA - EIMAN RAHNAMA & SEAN DUMM

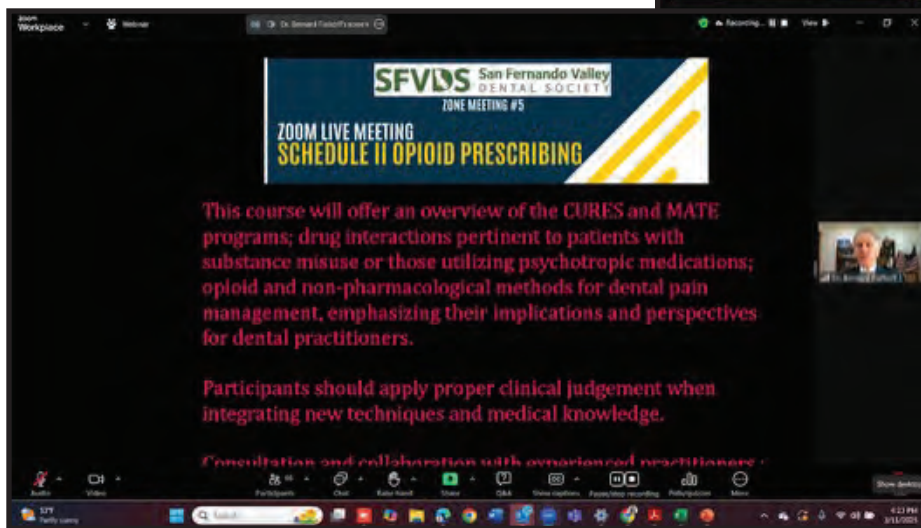
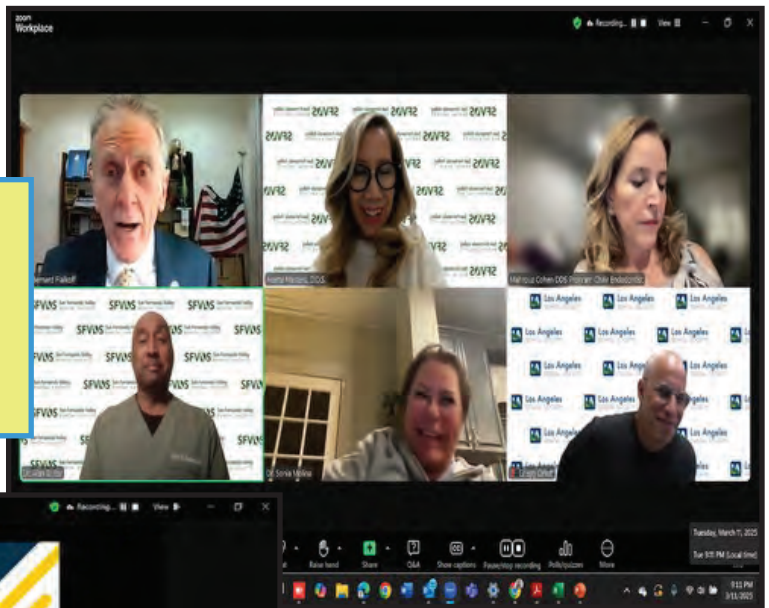
Eiman Rahnama and Sean Dumm delivered an essential training session on OSHA compliance, Infection control, and Violence Prevention, equipping attendees with critical workplace safety knowledge. Sean Dumm, a seasoned attorney in healthcare law, delivers practical insights to help attendees navigate legal responsibilities and maintain ethical standards in dental care delivery.



MARCH 2025

RESPONSIBILITIES & REQUIREMENTS OF PRESCRIBING SCHEDULE II OPIOIDS WITH DR. BERNARD FIALKOFF

Dr. Bernard Fialkoff addressed the responsibilities and regulatory requirements for prescribing Schedule II opioids, guiding clinicians on best practices and compliance.



REVOLUTIONIZING DENTISTRY WITH ADRIAN LEFLER

Adrian Lefler captivated attendees with forward-thinking strategies on how artificial intelligence and social media are revolutionizing dental marketing and patient engagement.



CDA LEADERSHIP CONFERENCE 2025

SFVDS Board of Directors represented the Society at the CDA Leadership Conference 2025, engaging in advocacy, leadership development, and strategic collaboration.



MARCH BOARD OF DIRECTORS MEETING 2025

The SFVDS Board of Directors convened for its March 2025 in person meeting to discuss society goals, program updates, and initiatives advancing dental care and member engagement. Dr. Scott Kim, Treasurer of the CDA, attended to provide an update on current CDA activities.



ELIMINATING DENTAL INSURANCE DEPENDENCE WITH AIMEE NEVINS

Fortune Management joined SFVDS members at the Central Office to share innovative strategies for building sustainable, insurance-independent dental practices.





SCHLEP & SHRED EVENT 2025
 Members participated in SFVDS's annual Schlep and Shred event—securely disposing of confidential documents while promoting environmental responsibility.

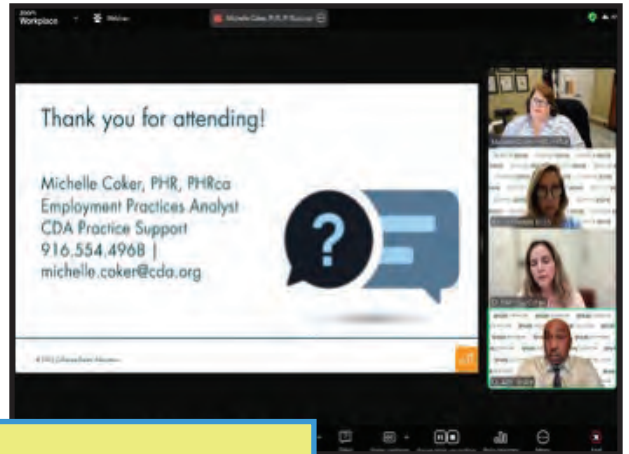


HEALING CALIFORNIA SANTA CLARITA VALLEY 2025
 SFVDS volunteers proudly supported Healing California 2025, providing no-cost dental care to underserved communities in need.





APRIL 2025



EMPLOYMENT LAW WITH MICHELLE COKER

Michelle Coker from CDA Practice Support delivered a comprehensive update on employment law, helping members stay compliant and informed on current regulations.

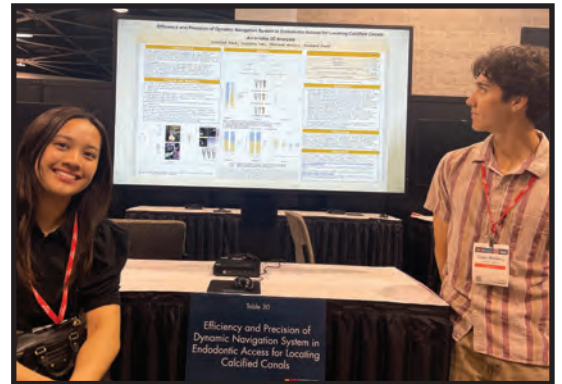
MAY 2025



CDA PRESENTS IN ANAHEIM

SFVDS members attended CDA Presents, engaging in premier clinical education, networking opportunities, and hands-on learning from industry leaders.





7TH ANNUAL SFVDS SPEED PAIRING

SFVDS collaborated with Provide and Henry Schein for a fast-paced Dental Practice Speed Pairing event, connecting buyers and sellers for practice ownership success.



JUNE 2025

ADHESIVE AND BIOMIMETIC DENTISTRY WITH DR. RAY BERTOLOTTI

Attendees gained insights into the science of dental adhesion and learn how biomimetic principles mimic natural tooth structure to restore strength, function, and longevity. The presentation emphasized minimally invasive strategies and evidence-based materials that enhance patient outcomes and long-term success.



VAROUJ ARABIAN - SEXUAL HARASSMENT PREVENTION TRAINING

Varouj Arabian led an important training session on sexual harassment prevention, ensuring dental teams understand compliance obligations and workplace respect.





IN THE SPOTLIGHT

DR. PHILOMENA OBOH

Dr. Oboh's commitment to service began in dental school in Nigeria, where she served as treasurer of her student dental association. After moving to the U.S. and passing her boards, she opened her practice in Van Nuys in 1996. A conversation with Dr. Harry Dougherty Jr., who was involved with the SFVDS, sparked her interest in joining the Society. Though financial constraints delayed her membership, she eventually got involved through Angel City Dental Society—and never looked back.

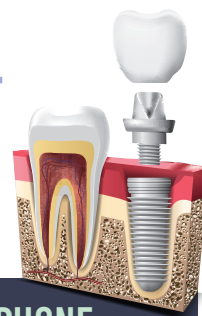
She has since served as SFVDS President and is currently the Leadership Chair. At Angel City, she's been a chaplain and actively recruits future leaders. In 2014, she helped launch a pediatric dental clinic at High Desert Health System to serve the community.

Dr. Oboh is passionate about travel, worship, and gathering with her faith community. She also enjoys cooking and hosting large meals for friends and neighbors. Married for nearly 37 years, she is a proud mother of two daughters and two sons, all successful medical professionals. Known for her compassion and adaptability, Dr. Oboh leads with heart and is always ready to help others—both in and out of dentistry.

MEMBER RESOURCE BOOKLET

[CLICK HERE](#)

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Michael L. Abelson, DDS	27450 Tourney Rd Ste 260, Valencia, CA 91355-5625	(661) 254-9640
Matthew J. Okui, DDS	16055 Ventura Blvd Ste 820, Encino, CA 91436-2610	(818) 990-5222
Kory M. Zussman, DDS	16311 Ventura Blvd Ste 625, Encino, CA 91436-4317	(818) 907-1318
Richard Benveniste, DDS	19231 Victory Blvd Ste 256, Reseda, CA 91335-6347	(818) 881-7337
Homan Hanasab, DDS	7239 Van Nuys Blvd # 6, Van Nuys, CA 91405-5863	(818) 785-2424
Tyler J. Hendry, DDS	411 N Central Ave Ste 220, Glendale, CA 91203-2020	(818) 240-4555
Sohail S. Parham, DDS	4955 Van Nuys Blvd #520, Sherman Oaks, CA 91403-1801	(818) 990-5795
Sean A. Sakhai, DDS	6342 Fallbrook Ave Ste 101, Woodland Hills, CA 91367-1613	(818) 887-7772
Rodica S. Grasu, DDS	16055 Ventura Blvd Ste 405, Encino, CA 91436-2608	(818) 990-5090
Gary W. Green, DDS	16133 Ventura Blvd Ste 1040, Encino, CA 91436-2423	(818) 995-0294
Taylor M. Hoang, DDS	3808 W Riverside Dr Ste 204, Burbank, CA 91505-4339	(818) 842-6162
Michael B. Imberman, DMD	18740 Ventura Blvd Suite 305, Tarzana, CA 91356-6669	(818) 345-5300
Franklin D. Niver, DMD	16311 Ventura Blvd Ste 1110, Encino, CA 91436-4354	(818) 788-6600
Sam I. Naim, DDS	16661 Ventura Blvd Ste 308, Encino, CA 91436-1919	(818) 336-1120
Stephen A. Horowitz, DDS	16311 Ventura Blvd Ste 980, Encino, CA 91436-4341	(818) 654-8310
Sara Tanavoli, DDS	6325 Topanga Canyon Blvd Ste 202, Woodland Hills, CA 91367-2015	(818) 606-7871
David F. Levine, DDS	3808 W Riverside Dr Ste 305, Burbank, CA 91505-4339	(818) 558-7454

FROM YOUR MEMBERSHIP CHAIR



Strengthening our *Professional Community*

The San Fernando Valley Dental Society (SFVDS) remains a vital force in organized dentistry, driving professional growth, advocacy, and community service. Active participation in professional organizations like SFVDS, the California Dental Association (CDA), and the American Dental Association (ADA) strengthens our collective ability to influence legislation and safeguard the interests of dentists and patients alike. Understanding regulatory changes and licensure requirements ensures members stay ahead of shifts in policies that directly impact their practice.

SFVDS members have access to invaluable resources, including the CDA Practice Support Center, which provides essential guidance on practice management, associateship opportunities, lease negotiations, and licensure compliance. These services empower professionals to navigate complex career transitions with confidence.

In 2026, CDA will integrate the Fonteva software, revolutionizing the way members access their accounts and professional information. To ensure a seamless transition, SFVDS is working to update membership records, and we urge members to verify and update their details on their CDA Account. Additionally, adding a profile picture to the ADA Account enhances visibility in the Find-a-Dentist app, making it easier for patients to connect with practitioners.

Mentorship plays a pivotal role in shaping the future of dentistry, and SFVDS encourages experienced professionals to guide and support newcomers. Sharing knowledge and expertise strengthens the dental community and ensures the continued growth of the profession.

SFVDS remains committed to improving access to oral healthcare through partnerships with nonprofit organizations. This year, our collaboration with Healing CA in Santa Clarita Valley led to nearly 200 patients receiving essential dental care, reflecting our dedication to serving the broader community.

We continue to offer timely courses to meet licensing requirements and provide insights into the latest advancements in AI and dental technology, helping practitioners integrate innovative tools into their practice.

As SFVDS prepares for the Fonteva integration, we ask all members to update their CDA and ADA Accounts to ensure uninterrupted access to critical resources. Keeping member records current strengthens our network and enhances professional opportunities. Together, through advocacy, education, and mentorship, we shape the future of dentistry, and we thank you for your ongoing commitment to SFVDS.

Dr. Anette Masters



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WELCOME NEW MEMBERS

AMNA KHALID ABUJALHOOM, DDS
General
Mexico-Universidad De La Salle, 2024

FIRAS ALMHESAN, DDS
General
MI-University of Michigan, 2025

SHOHREH AMERI POUR, DDS
General
Mexico-Universidad De La Salle, 2024

SOLEIL AMINI, DDS
Pediatric Dentistry
CA-Herman Ostrow School of Dentistry of USC, 2022

MARIA PATRICIA ASUNCION, DMD
General
MA-Tufts University, 2025

LOURDES CAPULONG, DDS
General
Philippines-Univ of the Philippines, 1988

EDEN CHAIMOV, DMD
General
International, 2022

FELIX COOPER, DDS
General
International, 2023

AARON DARDASHTI, DDS
Periodontics
CA- Herman Ostrow School of Dentistry of USC, 2025

JASSEL FERNANDEZ, DDS
Oral Surgery
CA-UCLA School of Dentistry, 2020

OLENA GEGAMIAN, DMD
General
MA-Boston University, 2024

LUBNA GHILZAI, DDS
General
Mexico-Universidad De La Salle, 2024

VANESSA GOMEZ, DDS
General
Mexico-Universidad De La Salle, 2024

SOLOMON HEIFETS, DDS
General
International, 2023

EDISON ALBERT ISHAYA, DDS
General
IL-Chicago College of Dental Surgery, 1994

VAAGN KARAKHANYAN, DDS
General
International, 2023

MARITZA LAZCANO, DDS
General
CA-Herman Ostrow School of Dentistry of USC , 2007

MARYAM MAHMOOD, DMD
General
AZ-Arizona School of Dentistry and Oral Health, 2015

ERICA MAIRE, DDS
Pediatric Dentistry
NJ-Rutgers The State University of New Jersey, 2022

KYLE MALONEY, DDS
General
OH-Ohio State University, 2023

DEEPAI PEDNEKAR, DDS
General
CA-UOP SF, 2015

MARIA CORAZON CARLOS RABONZA, DDS
General
Philippines-Centro Escolar Univ, 1990

SAMIR YOUNAN, DDS
General
Mexico-Universidad De La Salle, 2024

ASHLEY ZHANG, DMD
General
UT-Roseman University of Health Sciences, 2024

JEFFREY SHAWN ZHAO, DDS
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MN-University of Minnesota, 2024

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