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DENTAL HYGIENE'S PROUD PAST

WHO WAS ALFRED C. FONES?

CLINICAL DENTAL HYGIENE THEN AND NOW

IRENE WOODALL, RDH, PHD

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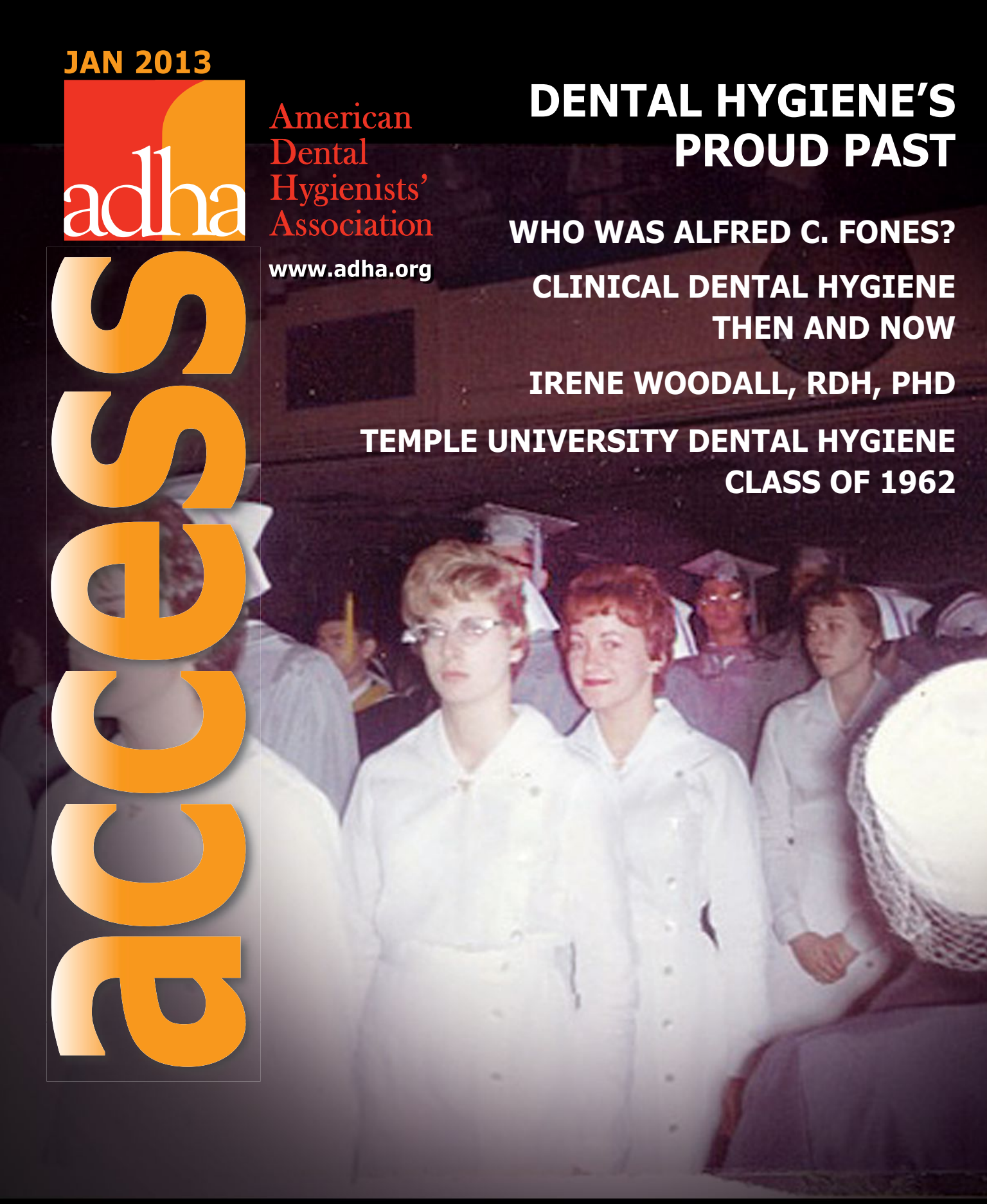


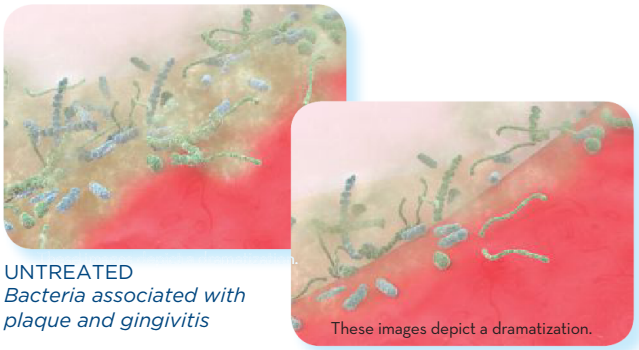
—plus—

TRANSITIONS ***New Column!***

Uncover the true potential of stabilized stannous fluoride toothpaste.

The antibacterial action of stabilized stannous fluoride

Stannous fluoride has long been recognized as a fluoride source that exerts antibacterial actions against the bacteria that cause plaque and gingivitis; however, in order to deliver the full therapeutic potential of stannous fluoride, the ingredient has to be stabilized. The result is a stabilized stannous fluoride toothpaste that not only fights caries, plaque, and gingivitis, but also treats dentinal hypersensitivity. Data show Crest® PRO-HEALTH® inhibits the bacteria that cause plaque and gingivitis for 12 hours and reduces the bleeding associated with gingivitis by 57%.[1]



UNTREATED
Bacteria associated with plaque and gingivitis

12 HOURS AFTER USE OF STABILIZED STANNOUS FLUORIDE TOOTHPASTE

Two effective ingredients, 7 clinical benefits

It's important to understand that while the first formulations to include stannous fluoride were effective, they were not optimal. Early products either did not stabilize the stannous fluoride or had drawbacks of extrinsic staining and an astringent taste.

To deliver all of the benefits without the trade-offs, Crest PRO-HEALTH was developed. It is the first and only toothpaste to utilize a balance of ingredients, including stannous fluoride and sodium hexametaphosphate.

Effective stain removal that's safe on enamel

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The particles will begin dissolving immediately when they interact with saliva and are in no way harmful to enamel. The sodium hexametaphosphate disrupts the stain on the tooth's pellicle to remove existing stains and binds at the tooth surface to prevent new stains from forming.

Sodium hexametaphosphate stays on tooth surface and in pellicle to displace existing stains and help protect against future stains.[2]

Give patients 7 benefits in one toothpaste

Stabilized stannous fluoride
- Reduces plaque
- Reduces gingivitis
- Protects against hypersensitivity
- Fights caries and strengthens enamel
- Reduces halitosis

Sodium hexametaphosphate
- Removes extrinsic stains and protects against future staining
- Helps prevent calculus

For more information on stabilized stannous fluoride toothpaste and the 80+ clinical trials performed that validate its benefits, visit dentalcare.com.

References: 1. Mankodi S, Bartizek RD, Winston JL, et al. Anti-gingivitis efficacy of a stabilized 0.454% stannous fluoride/sodium hexametaphosphate dentifrice. *J Clin Periodontol.* 2005;32(1):75-80.
2. Baig AA, White D, van der Mei H, et al. Hexametaphosphate dentifrice effects pellicle conditioning films. *J Dent Res.* 2006;85(spec issue). Abstract 694.

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THANK YOU
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For the past 100 years, each and every day, dental hygienists have touched the lives of their patients in some way.

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Thank you, hygienists!

continuing the care that starts in your chair

Crest + Oral-B

American Dental Hygienists' Association

JAN. 2013 VOL. 27 NO. 1

contents

On the cover: ***Temple University (T.U.) School of Oral Hygiene graduation ceremony, 1962***

Developing Empowering Supporting

Center For Lifelong Learning at the 90th Annual Session

This June 19–25, ADHA celebrates 100 years of dental hygiene at the Center for Lifelong Learning at the 90th Annual Session in Boston, Massachusetts. This once-in-a-lifetime event will offer an unrivaled selection of top-notch CE courses, exhibits and networking opportunities to ***develop, empower and support*** dental hygiene professionals and the entire dental team.

Be a part of the celebration of the century! Turn to pages 26-27 in this issue of *Access* to pre-plan your CLL/Annual Session experience. Register online at www.adha.org/annualsession starting January 9.

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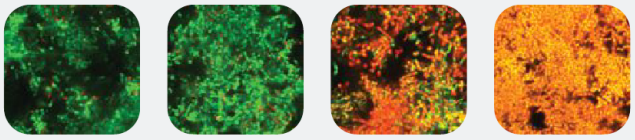

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guest editorial

ADHA Past President

Reflections on Our Proud Past

By ***Beverly P. Whitford, RDH, BS***

After years of anticipation and planning, New Year's Eve 2012 was particularly exciting for the dental hygiene community. Amidst cheering, horns blowing and confetti flying, the ball descending at New York City's Times Square ushered in dental hygiene's centennial celebration. This milestone event caused me to reflect on my career, mentors who have affected both my personal and professional growth, association involvement and how dental hygiene practice has evolved.

In 1947, a toothache at age eight caused my parents to take me to a dentist. Lucky for me, they chose the only dentist in town who had a dental hygienist. My second appointment was to have my teeth "cleaned." My apprehension vanished when standing before me was this kind, smiling woman in an ankle-length white starched uniform and crisp purple-banded cap. She took my small hand in hers and guided me into her treatment room. She taught me how to brush my teeth correctly and talked about eating good food. She polished my teeth using a belt-driven handpiece. I fell in love with this tall lady in white, the late Laura Peck Fitch, RDH, who served as ADHA president in 1953-54 and became my lifelong mentor and friend.

Let's strive to start dental hygiene's second century by personally extending the hand of friendship to students and new members we meet.

Following World War II, the G.I. Bill offering financial educational assistance to veterans allowed my uncle, Erich Kellner, to attend Temple University Dental School. His influence and encouragement were paramount in my decision at age 12 to become a dental hygienist. During my early teen years, babysitting for the children of Dr. Robert S. Gray, an orthodontist, and later occasionally substituting for his dental assistant on Saturday morning further reinforced this desire.

The late Louise Hord, RDH, and late Barbara Schulze, RDH, were inspiring role models during my years at the Forsyth School for Dental Hygienists in Boston, Mass. Along with clinical skills, they taught me professionalism by example.

After graduating in 1959, clinical practice filled my days, but something was missing. An active member of the Junior American Dental Hygienists' Association at Forsyth, I missed that connection. Fortunately, in recent years ADHA has made great strides in smoothing this transition from student to active member status. In 1960, District I trustee, the late Ethel Swimmer, RDH, took me under her wing and invited me to join her at the ADHA District I meeting in Portland, Maine. Little did I know this would be a preview of what was to become a very important part of my life. In the mid 1960s, Connecticut Dental Hygienists' Association President Lynn Ironside, RDH, recruited me to assist her in starting a component association in my area, and the Eastern Connecticut Dental Hygienists' Association was born. Lynn's confidence in me played a major role in my becoming immersed in organized dental hygiene.

After a four-year hiatus from clinical practice when my sons were young, I sought to update my clinical skills by attending a periodontal continuing education course given by Esther Wilkins, RDH, DMD, at Tufts Dental School in Boston. I learned that scaling below the free gingival margin had become the "norm" and was no longer forbidden. I learned to use Gracey curettes and scale subgingivally. Dr. Wilkins played a pivotal role in my transition to contemporary dental hygiene practice and sparked my passion for lifelong learning.

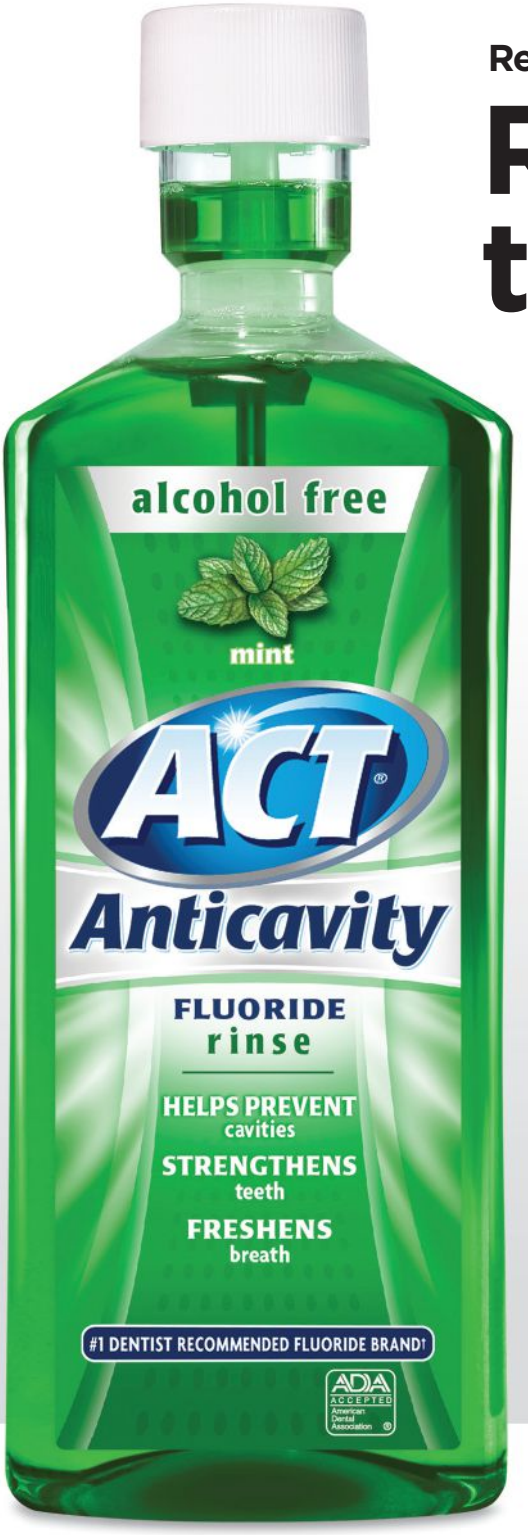
Realizing the important role mentors had played in my life, a top priority of my presidential year, 1998–99, was to make students feel an integral part of ADHA. During travels nationwide, I was honored to visit with students in 23 dental hygiene programs. My hope is that by sharing "my story," others will be moved to become mentors. Preparing others to take our place after we're gone is an important part of life. Let's strive to start dental hygiene's second century by personally extending the hand of friendship to students and new members we meet.

One of ADHA's major concerns was the adoption of resolutions to lower the standards of dental hygiene education by the American Dental Association House of Delegates in October 1998. The American Association of Dental Schools opposed ADA's action. ADHA focused on strengthening ties with educators and increasing public relations efforts to educate the public. We believed informed consumers would demand quality care.

ADHA was finally becoming recognized in governmental oral health care circles and being sought after for input. ADHA officers and staff; Washington, D.C. counsel Karen Sealander; and New Mexico member Barbara Posler, RDH, worked with New Mexico Senator Jeff Bingaman on the Children's Dental Health Improvement Act. Meeting with Senator Bingaman upon his request on February 22, 1999, the ADHA "team" made an impressive, polished presentation for maximum utilization of dental hygienists in legislation being developed.

The following day, February 23, 1999, I represented ADHA at a special event at the White House where President William Clinton officially announced a special CHIP/Medicaid Outreach Program. Invited were groups publicizing the CHIP program and the "1-877-Kids Now" toll-free number. Few associations were recognized by name, but when the Presi-

guest editorial *continued on page 30*



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1. (a) Naumova EA, et al. Influence of individual saliva secretion on fluoride bioavailability. *The Open Dentistry Journal.* 2010:4;185-190. (b) Hurlbutt M, et al. Dental caries: a pH-mediated disease. *CDHA Journal.* 2010:25(1)9-15. (c) Lagerlof F, Oliveby A. Caries protective factors in saliva. *Adv Dent Res.* 1994(8)229-238. **2.** Data on file. Chattem, Inc., a Sanofi Co. **3.** Hind V. Fluoride mouthrinses. *British Journal of Orthodontics.* 1999:26(3);242-243. **4.** Heifetz SB, Meyers RJ, and Kingman A. A comparison of the anticaries effectiveness of daily and weekly rinsing with sodium fluoride solutions: final results after 3 years. *Journal of Dental Research.* 60 (Special Issue A). Abstract 645 (March 1981). **5.** Wallace MC, et al. The 48-month increment of root caries in an urban population of older adults participating in a preventive dental program. *J Public Health Dent.* 1993 Summer;53(3)133-137.

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president's message

10 Reasons to Celebrate 100 Years

By ***Susan Savage, RDH, BSDH, ADHA President***

Today, in 2013, dental hygienists are celebrating the centennial of our profession. In a current environment where we rely on data and not emotions for decision making, let's take a minute to think about the reasons we celebrate milestones.

Formal observation of traditions expresses a group's values. Is the 100th anniversary really that much different from the 99th or the 101st? In some ways, no. But taking our collective time and focusing our collective energy to gather around a milestone marker shows that we as a profession share pride in dental hygiene. Although our workdays vary widely from hygienist to hygienist, there are certain values common to all of us. They are evident in our standards of practice and our code of ethics, and in the many ways we present ourselves as dental hygienists to the world.

Celebration provides an opportunity to reflect on progress. As a forward-looking profession, dental hygiene needs to make room for the acknowledgment that at least a part of our unlimited future depends on our proud past. When we look back and see how far we've come, we see the events, decisions and actions — the turning points that refined us and the launching pads that propelled us forward and have attuned us to recognizing future opportunities. Over the past 100 years, we have grown as a profession. We are wiser, and our greater perspective gives us the ability to position ourselves to best advantage.

> *We've looked to other professions for guidance as our own profession continues to grow, but no other profession has our unique collection of experiences, challenges and successes — and no other has our* people.

Celebration provides an opportunity to recognize survival and adaptation through changing environments. Yes, we have come a long way, but the importance of the changing terrain through which we've travelled can't be discounted. The first hygienists learning their profession by night in Dr. Fones' practice and going out into schools to educate children about home care lived in a different type of world and faced far different challenges than the first Advanced Dental Therapists of today. We celebrate our obstacles because of what they've helped us achieve.

Celebration provides an opportunity for deserved self-congratulation. Dental hygienists are just not naturally self-congratulatory, because for every cause for celebration, there is another hard task ahead, another challenge to be faced, and we like to work. But now more than ever, we have the opportunity to emphasize the slogan that supports your professional association's brand: it's all about YOU!

Celebration is a way to call others' attention to the profession, its accomplishments and its goals. We have always been a collaborative profession, recognizing that many working together can achieve more than any working alone. Today, with the benefit of communications technology, the potential is limitless. If we can use this year's fireworks as a signal to other groups advancing health care for everyone, we can help attract a diverse, eager and powerful community of partners.

Celebration is also a great way to include our current alliances in our successes and plans for the future. It's the perfect opportunity to acknowledge their role in our accomplishments, say thank-you and express our commitment to continuing to work together toward common goals.

Celebration is a boost of encouragement to keep moving forward. I am confident that dental hygienists are among the most hardworking, tenacious and optimistic professionals there are. But with the challenges we face, not the least of which is the huge number of people who do not receive adequate oral health care, we can sometimes feel overwhelmed. Let the power of this centennial be the momentum behind our efforts, collectively, for sure, but also for every individual hygienist who comes home from a long day's work needing to reconnect with peers and reignite enthusiasm for dental hygiene.

Celebration emphasizes the importance of recording and studying history so that nothing is lost. We've looked to other professions for guidance as our own profession continues to grow, but no other profession has our unique collection of experiences, challenges and successes —

president's message *continued on page 20*

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S.T.A.M.P. of Approval:

The Use of Specifically Targeted Antimicrobial Peptides in the Reduction of Dental Caries

By ***Rebekah Hinkle, RDH; Leah Beckum, RDH*** *and* ***Terri West, RDH***

Dental caries remains the leading cause of tooth loss among adults and continues to be problematic for children, especially from lower socioeconomic sectors of the population.[1] According to the National Institute of Dental and Craniofacial Research, 92 percent of adults ages 20 to 64 have had dental caries in their permanent teeth, and 41 percent of children have had dental caries in primary teeth.[2] Dental caries is the leading factor in dentition loss, and Americans spend an average of $90 billion annually to address this disease.[3]

Although there has been much debate over the most causative factor related to dental caries, research shows that the presence of *Streptococcus mutans* has been proposed as the major etiological agent of cavity formation.[3] *S. mutans* produces lactic acid in the oral cavity, leading to prominent carious lesions on the teeth.[3] Lactic acids combined with fermentable carbohydrates create areas of demineralization that eventually require restoration or extraction.

Caries prevention centers on treating the symptoms of the disease, such as demineralization or addressing the bacteria that are the causative agent for the disease.[3] Currently, measures for fighting caries target all oral flora, both good and bad.[1] Current therapies for the prevention of caries include fluoride-containing products, chlorhexidine rinses, and phenolic compounds.[4]

Currently, measures for fighting caries target all oral flora, both good and bad.

Fluoride therapy is the delivery of fluoride to the teeth, topically or systemically, in order to prevent dental caries.[4] Most commonly, fluoride is applied topically to the teeth using gels, varnishes, toothpaste/dentifrices or mouth rinses.[5] The fluoride ions reduce the rate of tooth enamel demineralization and increase the rate of remineralization of cavities in their early stages.[5] Although fluoride has been successful in reducing the incidence and prevalence of caries, it has limited efficacy in treating the cariogenic bacteria that reside in the oral cavity.[6]

Controlling caries by reducing the bacterial load in saliva and plaque with broad-spectrum antibacterial agents may also be used to reduce caries incidence, even though few studies examine the impact of these therapies on caries reduction.[6] Chlorhexidine rinse has been approved to reduce gingivitis but not prevent caries.[7] Chlorhexidine's mechanism of action is membrane destruction.[5] It is a cationic bisbiguanide with broad antibacterial activity, and it targets both the cavity-causing bacteria such as *S. mutans* as well as the normal oral flora of the mouth.[5] Phenolics are available in mouth rinses and have shown little or no substantivity, but they do possess a good antibacterial spectrum.[5] Even with these therapies in place, caries remains the leading cause of tooth loss.

Since current therapies focus on eradicating all pathogens without regard for the importance of the balance between "good" and "bad" bacteria, this unwanted destruction can create imbalance and even secondary infections.[8,9] To combat this problem, a new class of pathogen-selective molecules is being developed.[9] These molecules are referred to as specifically targeted antimicrobial peptides or STAMPs.[8-10] STAMPs have the potential to selectively eliminate specific pathogens while preserving the normal healthy flora.[6,8]

The University of California Los Angeles (UCLA) began performing trials to isolate a peptide sequence specific to certain bacteria.[3] Peptide sequences are responsible for specific cell functions.[3] Disruption of a sequence at any point can lead to apoptosis (cell death). The STAMPs technology creates an artificial peptide almost identical to the original peptide. It then integrates this artificial replication into the bacteria, inhibiting natural functions and resulting in apoptosis. Theoretically, this means that this technology could be applied to numerous pathogens, which in turn would result in an antimicrobial effect of the specific pathogen targeted.[3,8]

A completed STAMP consists of two sides joined by a small flexible linker.[10] Each side is a functionally independent peptide component consisting of a targeting region and a killing region.[8,10] One side functions as the targeting region and can consist of a natural pheromone produced by

cariogenic bacteria, which helps to assure that the STAMP finds its target.[9,10] The pheromone provides a "fingerprint" of the targeted bacteria and helps the targeting region of the STAMP bind to the surface of the targeted pathogen, leading to its eventual destruction.[8,11] The other side is the killing region and can be thought of as the antimicrobial "bomb" that kills the selected bacteria upon delivery.[11] Depending on the bacteria targeted, the targeting, linker and killing regions can be combined in various ways, making STAMP technology useful in the design of therapeutics against oral pathogens.[10]

Using this technology, the researchers developed a STAMP specific to *S. mutans*, referred to as C16G2.[3,9] C16G2 denotes where the peptide chain is disrupted and, consequently, the bacteria is destroyed. With the *S. mutans* destroyed, the ability of colony-forming bacteria to form a biofilm and attach to the tooth surface is decreased, thereby reducing their cariogenic potential. Without *S. mutans*, the pH level of the plaque rises. As a result, the growth of non-pathogenic bacteria is encouraged, and the demineralization process is decreased.[3,8]

C16G2's ability to specifically target *S. mutans* while not harming other oral bacteria could provide the foundation for additional preventive therapies. Additionally, this selective approach could also result in protective colonization, by which noncariogenic oral flora overtake sites formerly occupied by *S. mutans* or antagonize the growth of the bacterium directly.[3] This technology could promote an oral environment where *S. mutans* could be eliminated, subsequent recolonization by *S. mutans* prevented, indigenous flora protected and caries progression halted.[9]

Researchers found that C16G2 was able to affect *S. mutans* in both biofilm and saliva.[9] Studies using an in vitro approach indicated that a short exposure to C16G2 was capable of selectively inhibiting the growth of *S. mutans* within a multispecies biofilm and in the presence of saliva for a minimum of two hours without harming bystander bacteria or affecting the overall health of the biofilm.[9] C16G2 has a rapid mechanism of action, working after less than one minute of exposure to the bacteria, and it is soluble in aqueous solutions, which is relevant if used to treat the oral cavity in the form of a mouth rinse.[6,9] Additionally, biofilm treated with C16G2 showed considerable protective effects against further *S. mutans* colonization.[8]

Research continues to try to determine if the in vitro observations of efficacy and safety can translate to the complex environment of the mouth.[6]

Sullivan et al. used a clinical study to investigate the following: 1) efficacy of a single application of a STAMP-containing mouth rinse in the selective elimination of *S. mutans* in plaque and saliva, 2) its effects on plaque pH and lactic acid production after a sucrose challenge and 3) whether the STAMP effect translates into a protective effect for enamel against bacteria-induced demineralization.[6]

In the study, C16G2 was evaluated for clinical utility in vitro, followed by a pilot efficacy to examine the impact of a 0.04 percent C16G2 rinse.[6] The clinical study was designed to explore the activity of a single application C16G2 rinse to selectively inhibit *S. mutans* growth, to measure effects on plaque pH (resting and sucrose-challenged), to analyze lactic acid production after a sucrose challenge and to determine if C16G2 could help prevent bacteria-induced mineral loss.[6] The clinical study design consisted of two five-day treatment phases involving 12 subjects. In the first phase, the subjects rinsed with a placebo rinse and in the second phase, with a 0.04 percent C16G2 rinse. Subjects were instructed to use no fluoride products and a minimal brushing routine. Assessments of plaque and saliva were made before and after the subjects rinsed with a 10 percent sucrose solution for two minutes to gauge changes in plaque pH, total bacteria and *S. mutans* counts, as well as lactic acid analysis. Additionally, subjects wore an upper palatal retainer containing bovine enamel specimens that were dipped in the sucrose solution four times per day to assess the extent of mineral loss.

A single treatment demonstrated the ability to selectively eliminate S. mutans *without disturbing other normal flora, create an environment with a higher resting plaque pH, lower lactic acid production and significantly reduce enamel demineralization.*

While C16G2 had demonstrated efficacy and specificity against *S. mutans* in mixed biofilm and planktonic cultures in studies done by Eckert et al.[9] and Li et al.,[8] it was unclear if C16G2 would remain active if incorporated as a mouth rinse.[6] When compared to the C16G2 group, the placebo group showed a significant increase in relative amounts of *S. mutans,* while the C16G2 group reduced the viability of *S. mutans* to below 10 percent of mock-treated controls.[6] This suggests that C16G2 is highly active against *S. mutans* at therapeutic concentrations and supports the potency of C16G2 killing.[6] C16G2 was also evaluated for stability and was found to remain active and capable of penetrating plaque to inhibit *S. mutans* for at least a day without excipients or stabilizers. This led researchers to conclude that a shelf-stable rinse could be formulated utilizing the C16G2

to complement the oral hygiene regimen.[6] The half-life of C16G2 was calculated as 18.8 minutes, suggesting that it is unlikely to be retained at meaningful quantities in the oral cavity after long durations.[6] This contributes to a favorable safety profile for use in professional and consumer oral care products.[6] C16G2 was also shown to significantly elevate the resting pH of dental plaque in comparison to the placebo rinse.[6] An elevated pH is beneficial because it promotes faster remineralization, decreases effects of subsequent sucrose challenges and creates conditions favorable for growth of healthy rather than cariogenic bacteria.[6] Use of C16G2 also demonstrated a significant benefit in protecting enamel against demineralization, as the enamel specimens in the C16G2 group did not experience any significant loss in mineral while the placebo group experienced significant loss in mineral over the test periods.[6]

Based on the results of the in vitro and placebo-controlled clinical data, Sullivan, et al., concluded that C16G2 has antimicrobial efficacy when utilized in a mouth rinse.[6] A single treatment demonstrated the ability to selectively eliminate *S. mutans* without disturbing other normal flora, create an environment with a higher resting plaque pH, lower lactic acid production and significantly reduce enamel demineralization.[6] According to Sullivan et al., this suggests that C16G2 could be an effective weapon against dental caries because of its scientific properties and because it could be conveniently processed in a mouth rinse and safely administered in small, effective amounts.[6]

What does this mean for our profession? After nearly a decade of experimental work, it is promising to say that a prescription for caries may be found utilizing the STAMP technology. STAMP C16G2 has been nicknamed a "smart bomb" by the CBS News.[12] Its selective antibacterial properties led one of its sponsors, C3-Jin Inc., to file a New Investigational Drug application with the U.S. Food and Drug Administration (FDA) for March 2012, where it will undergo further review.[13] A news release on the C3-Jin Inc. website stated that the FDA accepted the application, but no news of experimental progress was available to date.[14] If this product becomes successful, fluoride will continue to be used as an adjunct treatment rather than the first line of defense.[6] STAMP innovator Wenyuan Shi stated that this antimicrobial technology alone has capabilities of "wiping out tooth decay in our lifetime," which will lead to other novel research for "smart bombs" developed for other specific diseases.[13]

This novel approach to fighting caries is still experimental and may be years away from clinical use. However, new technologies such as STAMP might hold the key to the improvement of oral health for millions of people. It might also be the piece of the puzzle that will be used to treat a multitude of other diseases that require the elimination of specific pathogens without the damage to the existing normal healthy flora.

References

1. Vollmer WM, Papas AS, Bader JD et al. Design of the prevention of adult caries study (PACS): A randomized clinical trial assessing the effect of a chlorhexidine dental coating for the prevention of adult caries. BMC Oral Health. 2010; 10:23. Available at: www.biomedcentral.com/1472-6831/10/23.
2. National Institute of Dental and Craniofacial Research. Dental caries (tooth decay) in adults (age 20 to 64). Mar. 25, 2011. Available at: www.nidcr.nih.gov/DataStatistics/FindDataByTopic/DentalCaries/DentalCariesAdults20to64.
3. Kaplan CW, Sim JH, Shah KR et al. Selective membrane disruption: mode of action of C16G2, a specifically targeted antimicrobial peptide. Antimicrob Agents Chemother. 2011; 55(7): 3446-52..
4. Riley JL, Gordan VV, Rindal BD, et al. Preferences for caries prevention agents in adult patients: findings from the dental practice-based research network. Community Dent Oral Epidemiol. 2010; 38(4): 360-70.
5. Wilkins EM. Clinical practice of the dental hygienist (443-456). Baltimore: Lippincott Williams & Wilkins, 2009.
6. Sullivan R, Santarpia P, Lavender S et al. Clinical efficacy of a specifically targeted antimicrobial peptide mouth rinse: targeted elimination of streptococcus mutans and prevention of demineralization. Caries Res. 2011; 45(5): 415-28.
7. Lee V, Karthikeyan R, Rawls RH, Amaechi BT. (2010, September 1). Anticariogenic effect of a cetylpyridinium chloride-containing nanoemulsion. J Dent. 2010; 38(9):742-9.
8. Li LN, Guo LH, Lux R et al. Targeted antimicrobial therapy against streptococcus mutans establishes protective non-cariogenic oral biofilms and reduces subsequent infection. Int J Oral Sci. 2010; 2(2): 66-73.
9. Eckert R, He J, Yarbrough DK et al. Targeted killing of streptococcus mutans by a pheromone-guided 'smart' antimicrobial peptide. Antimicrob Agents Chemother. 2006; 50(11): 3651-7.
10. He J, Yarbrough DK, Kreth J, et al. Systematic approach to optimizing specifically targeted antimicrobial peptides against streptococcus mutans. Antimicrob Agents Chemother. 2010; 54(5): 2143-51.
11. National Institute of Dental and Craniofacial Research. Researchers report initial success in promising approach to prevent tooth decay. Oct. 23, 2006. Available at: www.nidcr.nih.gov/Research/ResearchResults/NewsReleases/ArchivedNewsReleases/NRY2006/PR10232006.htm.
12. Jaslow R. "Smart bomb" mouthwash aims to end tooth decay: Will it work? CBS News Online. Available at: www.cbsnews.com/8301-504763_162-57329010-10391704/smart-bomb-mouthwash-aims-to-end-tooth-decay-will-it-work/.
13. University of California - Los Angeles Health Sciences. New mouthwash targeting harmful bacteria may render tooth decay a thing of the past. ScienceDaily. Nov. 16, 2011. Available at: www.sciencedaily.com / releases/2011/11/111116045657.htm. Accessed Jan. 30, 2012.
14. http://www.c3-jian.com/2012-05-24-C3-Obtains-FDA-Acceptance-of-IND-Application.php

Terri M. Thomas West, RDH, graduated in May of 2012 from the University of Arkansas-Fort Smith with an Associate of Applied Science in Dental Hygiene. She is currently employed part-time at the offices of R. Mark Bailey, DDS, in Waldron, Ark. Terri and her husband Jerry have been married for 16 years and have two children: Steven, age 12 and Kayla, age 9. They reside in Greenwood, Ark., with their two Boston terriers and one English bulldog.

Leah Beckum, RDH, is a May 2012 graduate of UA Fort Smith A.A.S. Dental Hygiene program. She resides in the North West Arkansas region with her dog, Phoebe. She works part-time in Fayetteville and four days a week in Siloam.

Rebekah Hinkle, RDH, is a May 2012 graduate of UA Fort Smith A.A.S. Dental Hygiene program. Rebekah recently transitioned out of the family home to accept a full-time dental hygiene position in the Siloam Springs area where she works with Ms. Beckum.

The faculty mentor for this edition of Strive is Pamela Davidson, RDH, MEd, assistant professor, Dental Hygiene, College of Health Sciences, University of Arkansas-Fort Smith.

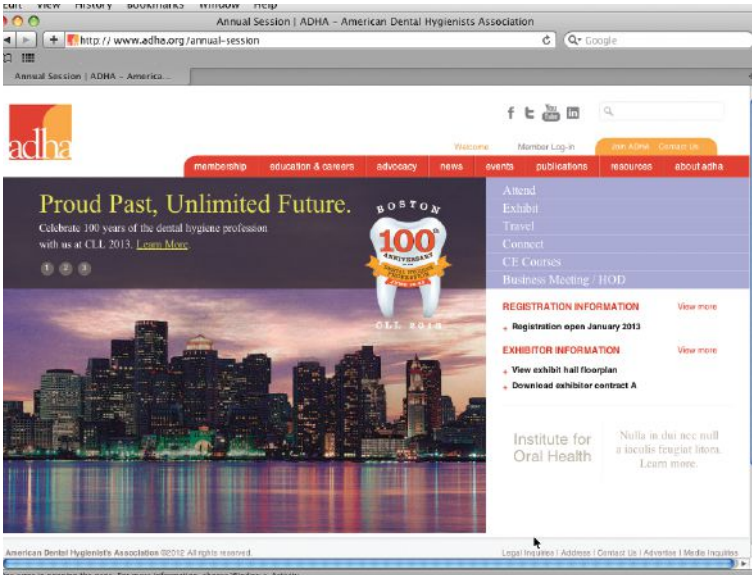
Improved ADHA.org

ADHA's website has undergone substantial revision and improvement. Since the mid-'90s, www.adha.org has provided relevant news and resources that you and your patients can trust. As of January 2013, visitors to ADHA can expect an enhanced user experience, easier navigation, streamlined information and a contemporary new look.

ADHA's infrastructure goal states, "ADHA will have the infrastructure to pursue current and future opportunities." Vital to achieving that goal is the objective of increasing communications/awareness of the value and importance of ADHA's infrastructure. Housing an enormous repository of current professional and consumer information, ADHA's website is a highly visible representation of the association's commitment to a strong infrastructure built with the future in mind.

Everyone throughout the dental hygiene community will have access to the same reliable, authoritative content you've come to value on ADHA's website. ADHA members will now enjoy easier access to membership benefits and forms. Easy-to-use features and reorganized content mean quicker, more efficient and more enjoyable user visits, whether you're seeking patient education materials, professional resources or a way to connect. You will now be able to find everything you're looking for in one place, including news, upcoming events and advocacy information.

The new website is the hub for the latest in dental hygiene information and issues. It has also been updated with a clean, contemporary look that reflects who dental hygienists are today. What a great way to ring in the anniversary year and celebrate our unlimited future!



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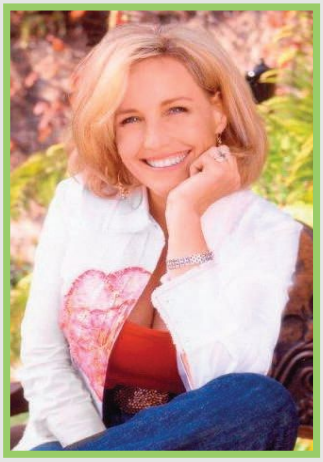

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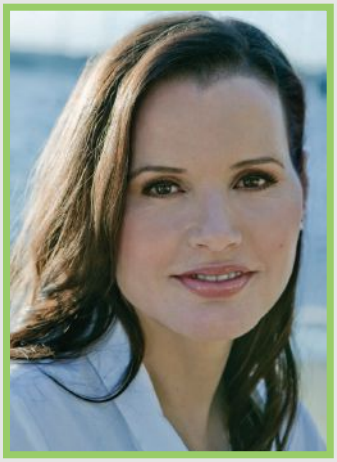

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First graduating class of dental hygienists, 1914. Fones is in the second row, fourth from right.

Dental Hygiene at 100:
Who Was Dr. Fones?

By ***Laurel Risom, RDH, BSDH, MPH***

This year marks the 100th anniversary of dental hygiene. It all started in Connecticut, where Dr. Alfred Civilion Fones, the Bridgeport dentist often referred to as "the father of dental hygiene," pioneered the dental hygiene profession in 1913.

Alfred C. Fones was born in 1869 and was a Bridgeport, Conn. native.[1] After attending dental school at New York College of Dentistry in 1890, he joined his father, the Hon. Civilion Fones, to practice dentistry together on Washington Street.[1] The most common reason people visited their office was extraction of decayed teeth. After practicing dentistry for about five years, the younger Fones became convinced of the importance of prevention of oral disease. He trained his cousin and chairside assistant, Irene Newman, to be the first dental "auxiliary."[2]

In 1907, Newman was performing the duties of what Fones would term a "dental hygienist" at their offices in Bridgeport. In 1913, Fones opened a school and, with Newman's help, instructed the first class of dental hygienists. These classes took place in a carriage house on Washington Avenue in Bridgeport, behind Fones' private practice.[2] It is reported that educators from Harvard, Yale, Columbia and as far away as Japan traveled to the carriage house school clinic to assist in educating the first class of dental hygienists.[2-4]

To understand the origins of the profession of dental hygiene, one must understand Fones, his philosophy and his vision of prevention. In 1916, Fones published a textbook for dental hygienists called *Mouth Hygiene*.[5] In his second (1921) edition, he describes the role of a dental hygienist.[6]

> The dental hygienist must regard herself as the channel through which the knowledge of prevention that the dental profession has acquired is to be disseminated. The greatest service she can perform is the slow and painstaking education of the public in mouth hygiene and allied branches of general hygiene. It must always be borne in mind that the aim of the dental hygienist is to secure extreme cleanliness of the mouth in an effort to starve bacteria and render them inert.

Fones further states that the dental hygienist's responsibilities are "to include the removal of the heavy tartar deposits, large accretions, and accumulations of stain and plaques," remarking that this is essential before the real science of prevention can be applied.[6]

> A true prophylactic treatment must be designed to aid in the prevention, not only of dental caries, but in any of the departures from the normal of the supporting tissues of the teeth. The cleaning of the teeth bears the same relationship to (a) dental prophylaxis as plowing does to agriculture. The plowing is essential before the science of agriculture can be applied.

In his textbook, Fones presents detailed instructions of hand instrumentation with scalers to remove "tartar" deposits from both above and below the periodontium of the surrounding teeth. In the text, he presents figures, 218 illustrations and eight plates in all, including manikin instrumentation for each instrument in each area of the mouth, demonstrating both rests and strokes.[6]

In his clinic, Fones mounted extracted teeth in modeling compound for his students to use when learning scaling, instrumentation and polishing.[2] In addition, he painted plaster of Paris around each tooth to simulate the calculus deposits to be removed.[2] This is similar to the education of hygienists today, where students use typodont models to learn and master scalers and curettes, grasp, fulcrum and strokes before being introduced to a live patient.

In his textbook, Fones further discusses his vision of dental hygiene and dental hygiene education, encouraging

that the role of the dental hygienist include "preventative education" for all patients, young and old, children and mothers, as well as nutritional counseling. He suggests that every mouth would benefit from a prophylactic treatment and recommends visits to the dental hygienist every two months.[6]

Today, the American Dental Hygienists' Association (ADHA) describes the professional responsibilities of the dental hygienist in terms of six interrelating roles: the dental hygiene clinician, educator, advocate, researcher and administrator/manager all surrounding a core of public health practice.[7] Fones' vision, too, included public health at the center. He envisioned the dental hygienist in schools, providing classroom education for schoolchildren. He believed that dental hygiene public service should be widespread, and stated in his book that dental hygienists should practice in settings such as dental offices, infirmaries, public clinics, sanatoriums, factories and other private corporations, "to care for the millions of mouths who need their service."[6]

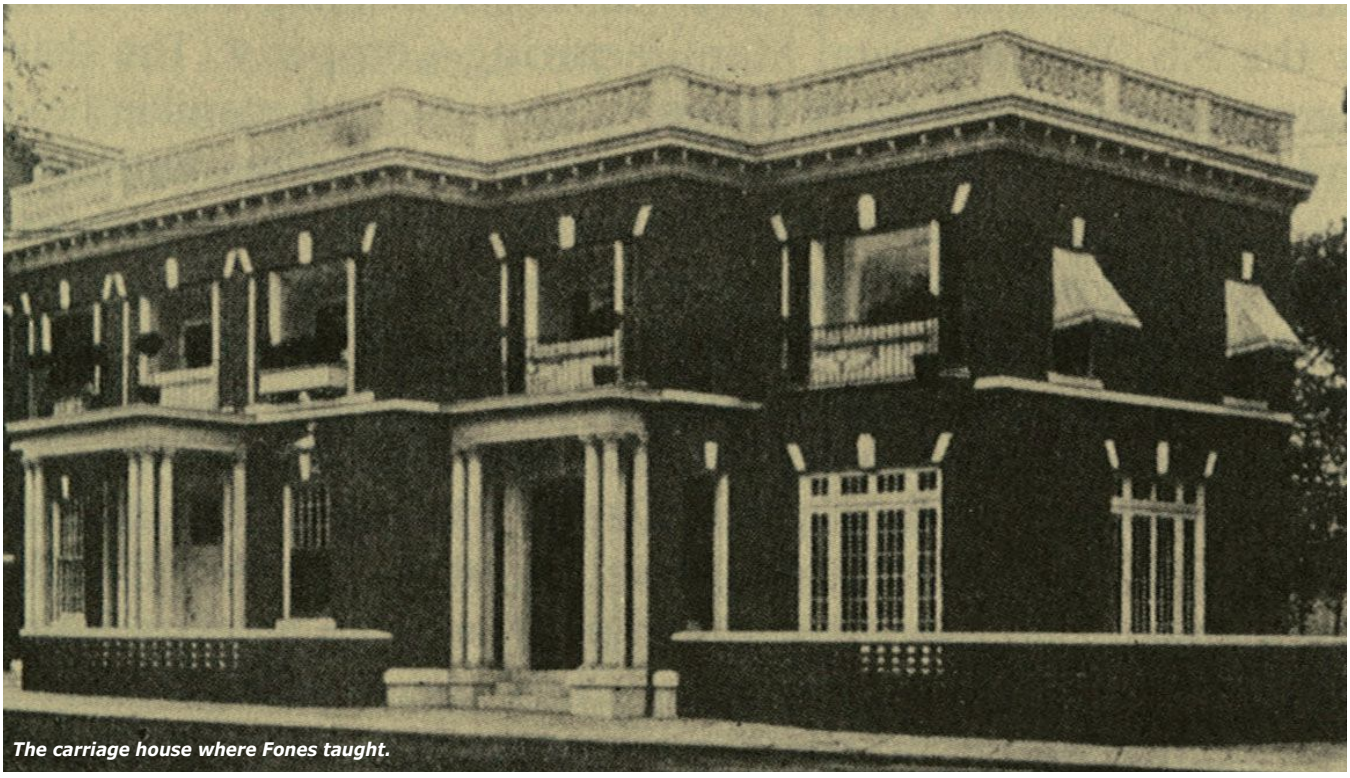
Dental hygiene was incorporated into Bridgeport's school system, and the program was studied for six years, with Fones presenting the excellent results in his publications.[8] His plan was that the dental hygienists would see first-grade school children once a month and provide education on the proper use of a toothbrush, classroom supervision of its use and lessons in hand and face hygiene, along with nutritional counseling. He hypothesized that with this program, "three-fourths of the diseases of children would be eliminated."[6,8]

Eight dental hygienists and two supervisors set out in September 1914 to work with the Bridgeport schoolchildren, each of whom received a prophylactic treatment regardless of the financial status of the parents. This dental prevention system was incorporated as a part of the school curriculum. The total number of children treated in the first year was 6,768. Fones reports in his findings, "On first examination, it was observed and reported that less than 10 percent of (the) children were brushing their teeth daily. Ten percent of the children examined were found to have fistulas, and averaged over seven decayed teeth per child." Fones further reports that he was "shocked at the finding to discover the mouth of the children in such deplorable condition."[6,8]

Alfred Civilion Fones

More dental hygienists were added to the Bridgeport School system, and by 1917, all the children in the first grade had been seen, totaling 15,000. Fones compared the fifth grade classes that had received the preventive treatments (dental hygiene prophylaxis from grades one through five) to a fifth grade class of years past, who had received no prevention or dental hygiene visits. Results demonstrated a reduction in dental caries in the permanent dentition of the fifth graders — as high as 67.5 percent

Fones' plan was that the dental hygienists would provide education on the proper use of a toothbrush, classroom supervision of its use and lessons in hand and face hygiene, along with nutritional counseling.



The carriage house where Fones taught.

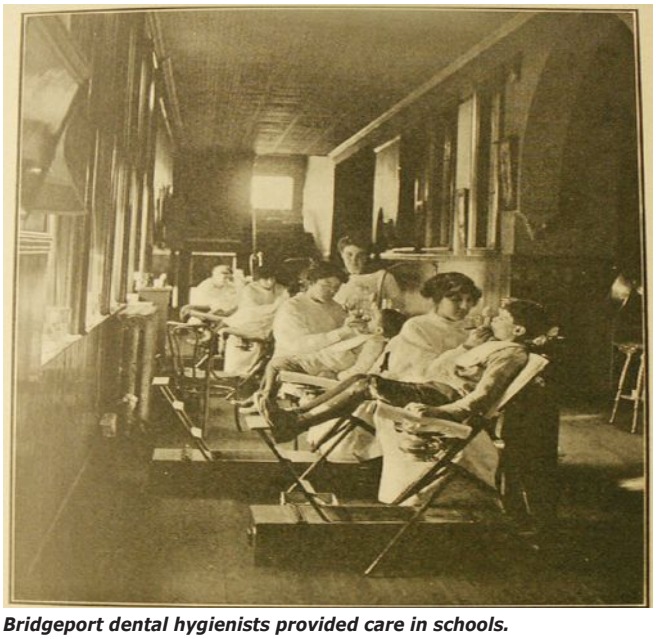
in the Barnum school, while only 15 percent in the Waltersville school. Fones reported that the total average reduction in caries, once hygienists had been introduced into all the Bridgeport elementary schools, was 33.9 percent. He attributed the difference in the reduction rates from school to school to the movement of children with the Bridgeport school system and loss of children in the schools.[6,8]

Irene Newman became the first president of Connecticut's state dental hygiene association, which was formed by 1914, having 19 charter members. The national dental hygiene organization, ADHA, would follow in 1923. Connecticut was the first state to license dental hygienists, and Irene Newman was the first licensee in 1917. In New England, other states began to license hygienists, too, including Massachusetts.[2]

Alfred C. Fones died in 1938. Connecticut dental hygienist, Mable C. McCarthy wrote a tribute to Fones and in his honor a $1,000 scholarship was established with ADHA to help a student dental hygienist in financial need.[2]

Fones' vision of prevention and his guiding force created the profession as we know it today. Community service and dental outreach remain important components of dental hygiene education. Students in their final year of dental hygiene visit numerous community sites, senior centers, nursing homes, day care centers, Head Start programs, public and hospital dental clinics and local schools, gaining experience with different populations, cultures, ages and serving the community just as Fones envisioned in 1913.

Irene Newman in the Bridgeport Schools, 1916



Bridgeport dental hygienists provided care in schools.

References

1. Waldo CSJ. The history of Bridgeport and vicinity, 2d ed. Clark Publishing, 1917. Available at: books.google.com/books/about/History_of_Bridgeport_and_Vicinity.html?id=DwkWAAAAYAAJ.
2. Motley WE. History of the American Dental Hygienists' Association 1923 – 1982. Chicago, American Dental Hygienists' Association, 1986.
3. University of Bridgepor t. The history of the Fones School. Available at: www.1bpt.bridgeport.edu/dental/history.html.
4. Zayan M. The history of dental hygiene. Available at: www.cdha-rdh.com/home/historyofdentalhygiene.html.
5. Fones AC. Mouth hygiene, a course of instruction for dental hygienists; a text-book containing the fundamentals for prophylactic operators, 1st ed. Philadelphia: Lea & Febiger, 1916.
6. Fones AC. Mouth hygiene, a course of instruction for dental hygienists; a text-book containing the fundamentals for prophylactic operators, 2d ed. Philadelphia: Lea & Febiger, 1921.
7. American Dental Hygienist Association. Standards for clinical dental hygiene practice. Available at: www.adha.org/downloads/adha_standards08.pdf.
8. Fones AC. A plan that solves the fundamental problem in school hygiene previous to the establishment of the dental hygiene clinic in 1914. Presentation to the 4th International Congress on School Hygiene, Buffalo, N.Y., Aug. 26, 1913.

Bridgeport photos are reprinted by permission of Meg Zayan, RDH, MPH, PhD, dean of the Fones School of Dental Hygiene, University of Bridgeport, Bridgeport, Conn.

Laurel Risom, RDH, BSDH, MPH, is a full-time clinical assistant professor at the University of Bridgeport, Fones School of Dental Hygiene and a graduate of Fones. She teaches both clinic and dental public health rotations. In addition, she practices dental hygiene in East Lyme, Conn. She is the immediate past president of the Connecticut Dental Hygienists' Association. ■

Clinical Dental Hygiene Then and Now:
The Dental Prophylaxis

By ***Heather Borso, BSDH, RDHAP***

clinical feature

In the first textbook for dental hygiene, *Mouth Hygiene, A Course of Instruction for Dental Hygienists*, published in 1916, compiled by Dr. Alfred C. Fones with 19 contributors, the dental prophylaxis is defined as "that scientific effort, either operative or therapeutic, which tends to prevent diseases of the teeth and their surrounding tissues."[1] In the chapter titled "The Dental Prophylaxis," the principles of the dental prophylaxis and the procedures to be performed during this procedure are outlined. While first published almost 100 year ago, this book addressed issues still very much at the heart of the dental prophylaxis such as a system for instrumentation, motions of instrumentation, polishing, proper brushing techniques and oral hygiene products. To reflect on how far the dental hygiene profession has progressed and evolved, let's highlight some major shifts that have occurred in the dental prophylaxis procedures.

Management of Dental Pain

The Dental Hygienist in 1916

The challenge of managing dental fear and pain while attempting to accomplish the goal of creating a healthy oral environment in not unique to current-day dental hygienists. Even in 1916, Dr. Fones was aware of these challenges:

- "It is absolutely essential for the health of the gums and the roots of the teeth that all such deposits be removed at frequent periods."[1]
- "It can be readily appreciated what a slow and painstaking piece of work it is to go over carefully each of these surfaces and remove all of the deposits or tartar."[1]
- "There is no better application of the golden rule than in dentistry, and the operator who masters a fine sense of touch and constantly keeps in mind a sympathetic consideration for his patient, has conquered much that is productive of success."[1]

Present-Day Dental Hygienists

While treating patients with kindness and dignity will remain at that heart of our profession, the evolving and growing profession of dental hygiene currently allows dental hygienists to employ additional pain management techniques. Of the many traditional and holistic options available to alleviate pain, the administration of local anesthetics has been a major advance in the profession. Starting in 1971, the state of Washington was the first to allow dental hygienists to administer local anesthetic. Currently, 45 jurisdictions (44 states and Washington, D.C.) allow this duty.[2] Depending on the state, hygienists may administer local anesthetic under direct supervision, general supervision and/or direct access supervision levels (the hygienist can provide services as he/she determines appropriate without specific authorization).[3] While certainly important to our everyday clinical practice, the legislative developments that now allow for the administration of local anesthetics (as well as other legislative developments such as financial reimbursement) provide a foundation for potential future levels of practitioners.[4] As our profession continues to evolve (for example, many states currently have some degree of restorative duties in current law), it will be interesting to see how our duties involving pain management — including the administration of local anesthetic — grow and change just as they have since 1916.[5]

While the dental prophylaxis has evolved since the first publication of Mouth Hygiene, A Course of Instruction for Dental Hygienists, *dental hygienists are still confronting many of the same issues.*

Acid's Harmful Effects

The Dental Hygienist in 1916

In the section advising dental hygienists which oral mouth rinses to recommend to help prevent decay, Fones shines light on one theory of preventing tooth decay thought to be advantageous by some members of the dental community at that time — the use of fruit acids to prevent tooth decay. Based on his comments, it seems this theory was controversial and that the harmful effects of acid on teeth were in fact recognized by some members of the dental community.

- "At the present time there is considerable agitation in dental circles regarding the use of fruit acids to prevent dental caries."[1]
- "Practically all of the acids of fruits, especially those of oranges and lemons, if used too freely will in time act as solvents for the cementing substances between the enamel rods."[1]

Present-Day Dental Hygienists

Today, the harmful effects of a low pH in the mouth are well documented and understood. Acid, which causes the pH of the mouth to drop, can be introduced to the oral cavity through intrinsic sources, such as gastric acids, or extrinsic sources, the consumption of foods and beverages that contain dietary acids.[6] Acid can cause dental erosion, which is defined as the "chemical dissolution of the surface of dental hard tissues by acids without the involvement of microorganisms."[6] In addition, the pH of the mouth is extremely important when trying to prevent tooth decay. When cariogenic (acidogenic) bacteria produce organic acids, the pH of the mouth drops and demineralization of the tooth occurs, which will eventually become a cavity if the process isn't reversed.[7] As caries management by risk assessment (CAMBRA) has shown, dental disease develops when an imbalance between the risk factors and protective factors occurs.[7] Dental hygien-

ists are positioned to be on the front lines of assessing this balance. We can discuss patients' fermentable carbohydrate intake, examine the mouth for salivary flow, and suggest preventive products that have been proven to prevent decay. Dental hygienists' knowledge of the caries balance, the importance of keeping the pH of the mouth from dropping to harmful acidic levels, and our ability to help patients modify their behavior have the potential to significantly contribute to the reduction of dental disease.

Preventive Products

The Dental Hygienist in 1916

In *Mouth Hygiene, A Course of Instruction for Dental Hygienists*, Fones educated the dental hygienist on oral hygiene aids and processes to be taught to the patient to assist them in maintaining a healthy mouth. In the section on dentifrices, he wrote:

> The most important ingredient in a dentifrice is soap. Next, a slightly abrasive, such as a fine grade of precipitated chalk. The rest of the formula is of but little value and is used chiefly to disguise the soap and impart a pleasant taste. The removal of grease is a chemical action and soap is essential of thoroughly cleaning the teeth.[1]

The Dental Hygienist in 1916

Fones' lesson to the dental hygienist to be involved in patient education still rings true today, though we've come a long way from recommending soap-based toothpaste!

The dental hygienist can utilize the American Dental Association (ADA) Seal of Acceptance program when recommending dental products. The ADA Seal of Acceptance program began in 1930 and is voluntary, not mandated.[8] An ADA seal is granted to products that meet the program's acceptance criteria with respect to safety, efficacy, composition, labeling, package inserts, advertising and other promotions material.[8] The ADA Seal of Acceptance is intended to help consumers make informed decision by indicating a dental product's safety and effectiveness.[8]

The ADA Seal of Acceptance products list isn't all-encompassing. Dental hygienists can make recommendations for other products and processes based on credible evidence-based research. In an age where the public has access to an abundant amount of health information and are becoming increasingly active participants in their health care, the dental hygienist can help educate patients about what constitutes credible research and can direct them to reputable websites. While significant changes have occurred in the last 100 years, our role as health educators remains one of our most important responsibilities.

Conclusion

While the dental prophylaxis has evolved since the first publication of *Mouth Hygiene, A Course of Instruction for Dental Hygienists*, dental hygienists are still confronting many of the same issues, such as pain management, and attempting to accomplish many of the same goals, such as preventing tooth decay and being a partner with the patient in their oral home care practices. It is an exciting time to be a dental hygienist — we are working with the dental community to overcome the oral health care access disparity, we are expanding into new workplace settings, and we are watching the landscape of the dental hygiene profession change as new duties are introduced and our roles are expanded. We should look back over the last 100 years and recognize that while changes have occurred and our profession will continue to evolve, we will remain an important contributor to the oral and overall health of the public we strive to serve and treat as we have since the beginning of our profession.

References

1. Fones AC et al. Mouth hygiene. a course of instruction for dental hygienists. Philadelphia and New York: Lea & Febiger, 1916.
2. American Dental Hygienists' Association. States where dental hygienists may administer local anesthesthia. Available at: www.adha.org/governmental_affairs/downloads/localanesthesiamap.pdf. Accessed Dec. 7, 2012.
3. American Dental Hygienists' Association. Local anesthesia administration by dental hygienist state chart. Available at: www.adha.org/governmental_affairs/downloads/localanesthesia.pdf. Accessed Dec. 7, 2012.
4. American Dental Hygienists' Association. Competencies for the advanced dental hygiene practitioner. Available at: www.adha.org/downloads/competencies.pdf. Accessed Dec. 7, 2012.
5. American Dental Hygienists' Association. Advanced dental hygiene practitioner frequently asked questions. Available at: www.adha.org/media/backgrounders/adhp.htm. Accessed Dec. 7, 2012.
6. Feltham EB. The power of sour candies: a dental hygienist's battle against dietary dental erosion. CDHA Journal. 2010; 25(1): 16-18.
7 Featherstone JDB. The caries balance: contributing balance and early detection. CDA Journal. 2003; 31(2): 129-33. Available at www.cda.org/Portals/0/journal/journal_022003.pdf. Accessed Dec. 7, 2012.
8 American Dental Association: The American Dental Association seal of acceptance and products. Available at: www.ada.org/adasealproducts.aspx. Accessed Dec. 7, 2012.

Heather Borso, RDHAP, is a clinical practitioner in a private office in San Diego, Calif. Prior to earning her bachelor's degree in dental hygiene from Loma Linda University, she received a bachelor's degree in sociology from the University of California, Los Angeles. ■

president's message *continued from page 8*

and no other has our *people*. Irene Newman was the first, but there are so many who came after her who just can't be called followers. And they're in every area we've touched over the past hundred years. Think of your own educators. Think of the researchers who forever changed our body of knowledge. Think of the innovators who've changed the way we practice, and the legislative trailblazers who changed the way we *can* practice. Think of the entrepreneurs who have found new meanings for "dental hygienist." Their stories are part of our collective story that we celebrate this year.

Celebration is a necessary break from hard work. Not only should this celebration be encouragement to keep moving forward, it should also give you one unique moment in time to stand still and *be* — the sum of all you have been and the carrier of what you will be, but most of all, what you are.

Celebration strengthens community. Many times this year, dental hygienists will gather in groups large and small. I imagine a few noisemakers will be blown, a balloon or two released, some glasses lifted in warm-hearted toasts. The Center for Lifelong Learning in Boston in June will be the biggest gathering, and I hope I will see you there. But whether or not I do, whether or not you're even a member of ADHA, if you are a dental hygienist, you are part of the community of which I am a part too. Congratulations, and happy 100th anniversary!

Before I close, I want to remind everyone that *Dental Hygiene in a Changing World* is happening in Chicago on January 12. What better way to reinvest in your dental hygiene career than by joining your peers for a day of assessment and planning for your professional future? I hope to see you there. ■

Investing in Yourself

In the business world, the term ROI — return on investment — is used daily. That same term can be applied to membership in the various dental hygiene associations. These associations exist to not only advance the profession of dental hygiene, but they are here to develop, empower and support you, the dental hygienist. In business terms, this equates to a 100 percent return on your investment; especially when that investment is more than your money. When you actually share your voice and your talents, your investment in membership is returned to you 10 times over. Just ask any member who has been an active participant in their local component or on the state or national level. They will share with you the rewards of mentorship and encouragement they received.

The 100th anniversary of the profession of dental hygiene is being celebrated this June in Boston at the ADHA meeting. Wow, the profession I love is 100 years old and still pushing forward to grow and expand access to care. We do indeed have a proud past and an unlimited future! However, to build on the achievements of those forward-thinking hygienists of the past, the new hygienists of today need to pick up that torch and keep it burning. For those new to the family of dental hygiene, welcome! You have the power in your hearts, hands and heads to take our profession to the next level.

I am proud to be a "baby boomer," but I am looking to Generations X and Y to use their unique styles and perspectives to build upon the foundations of the past and rocket us into that unlimited future. Please be the "outside the box" thinkers who are also movers and shakers.

Allow me to share a bit of my 30-plus years in the dental world with you. I babysat for my family dentist back in the '70s. Upon graduation from high school, I got a job as an in-office trained dental assistant. It scares me now to think back to the days before gloves and universal precautions … anyway, after two or so years in general dentistry, I moved on to orthodontics, and after being an ortho assistant, I became a mom and an orthodontic assistant/office manager. Several years and a second baby later, I knew I needed to expand my dental career. I enrolled in a local community college and began taking classes necessary to apply to dental hygiene school.

Picture this: fall 1990 — 24 wide-eyed ladies enter the hallowed halls of the Shoreline Community College Dental Hygiene Department. Two years later, after much personal growth and hardships, 23 empowered women donned green caps and gowns to walk the all-college graduation. Afterward, dressed in our whites with purple t-shirts, we were welcomed into the family of "Shoreline Dental Hygiene Alumni" via the pinning ceremony.

Twenty-plus years later, some are still working while others have retired. We do not all keep in touch, but we are sisters. We have each followed a different career path, yet we share the same passion that took us into this great profession.

I have often wondered why some of us have stayed members of our professional association and others have not. Is it the cost? Is it the misconception of radical political activity? Is it apathy? Or do they just not share the feeling of belonging?

For 20-plus years, I have actively participated in my professional association. I became involved in my local component, held office and chaired committees. I was encouraged by those who mentored me to take on more positions of leadership. I never questioned my commitment, I just did what felt right. It was like being a member of a very special group that would help direct the future of the profession I love. I felt empowered by those that walked the path before me: the trailblazers of the '70s who changed the face of dental hygiene.

Over the years, I have worn many hats within ADHA and the Washington State Dental Hygienists' Association (WSDHA), and several at the same time, often putting the needs of the association ahead of my personal needs. Today, as I sit here sipping my morning mug of tea reflecting on those 20-plus years, I feel a deep abiding love for ADHA/WSDHA and the opportunities that have enriched my life.

In the beginning, attending ADHA Annual Session was like a mini vacation for me, a single mom; time to recharge my batteries and network with my colleagues. I was mentored by many and encouraged to step up and take on more. I was no longer only a committee member, but now the committee chair; not only an alternate delegate, but a delegate and then chair of the delegation. The voice that had previously only been heard in my head was now being heard in reference committee meetings, in the Rotunda of the State Capitol building during a fluoride rally and on the floor at ADHA House of Delegates. The feeling of belonging has enveloped me and kept me warm during times of personal and professional detours in my journey through life. I have been president of WSDHA, selected to attend leadership conferences, spoken in front of hundreds and humbled by the greatness of others. I have felt the elation of winning an election on the national level and the deep disappointment of not being chosen. Yet through all the ups and downs, that deep sense of belonging remains. I know that wherever my dental hygiene journey takes me, I will have brothers and sisters who share the same empowerment that membership in ADHA gives. That is the beauty of membership in ADHA.

Wow, the profession I love is 100 years old and still pushing forward to grow and expand access to care. We do indeed have a proud past and an unlimited future!

It does not matter which professional dental hygiene association you belong to — just belong. The return on your investment will be amazing. You will not only be investing in the association, your professional future, but in yourself, and there is no better investment you can make.

Proud Past Unlimited Future — See you in Boston June 2013 as we celebrate 100 years of dental hygiene!

Vicki L. Munday, RDH
Past President, WSDHA
President, LVS2SMILE Dental Hygiene Services
By email

Send letters to Access Mail, 444 N. Michigan Ave., Ste. 3400, Chicago, IL 60611. Send email to JeanM@adha.net and identify your message as a letter to the editor. Your name may be withheld if requested, but unsigned letters will not be printed. Letters may be edited for clarity and length.

special feature

Irene Woodall, RDH, PhD:
A True and Beloved Iconoclast for Dental Hygiene

By ***Carol A. Jahn, RDH, MS***

Before Facebook, before blogging, before tweeting, there was a woman who held tremendous influence over practicing dental hygienists the old-fashioned way, via a monthly magazine column. Her name was Irene Woodall. What made Irene unique and inspirational was her keen understanding that for the profession to grow, dental hygienists had to grow too. Whatever the subject of her column, there was also that concurrent message of inspiration and empowerment.

In January 1993, at age 46, Irene's life was irrevocably changed and her career cut short by a brain aneurysm and disabling stroke that severely affected her cognitive and physical abilities. For many dental hygienists of that era, learning that this life force of dental hygiene would no longer be able to "talk" to us each month felt like the loss of a dear friend. It didn't matter whether you had actually met or personally knew Irene; through her words, she had become teacher, mentor and friend to many.

The Essence of Irene

Carla Williams, a former student and friend of Irene, said one of the things that made Irene compelling was that she was fearless and visionary. "She was not afraid to change things for the right reason. She was willing to shed tradition or practices that were considered sacred if they didn't make sense anymore." Friend and colleague JoAnn Gurenlian, RDH, PhD, agreed, "Irene had all of us 'thinking outside the box' before that expression was created. She challenged us to think beyond today and to make practice better for tomorrow."

Irene's decision to become the editor of *RDH* magazine is a perfect example of her willingness to break tradition. In 1981, the main, if not only, publication for dental hygienists was the *Journal of Dental Hygiene*. Deb Astroth, RDH, BS, friend and colleague of Irene, relates a conversation they had about her decision. "She felt there was a need for a publication with quick-read articles on clinical and other issues. It was very important to her that she would have the ability in her editorials to freely challenge the status quo. She wanted to encourage us to be self-confident and self-reliant individuals and to be willing to stand up and be vocal about what we believe."

> *Learning that this life force of dental hygiene would no longer be able to "talk" to us each month felt like the loss of a dear friend.*

Williams said she believes that Irene did not want us to be afraid of challenges; that she felt we should respect them, but never fear them. Gurenlian concurred, and admired the way Irene had both the presence and courage to say what others thought but could not articulate or dare to say aloud. Astroth observed the impact Irene made on dental hygienists. "She was able to articulate in such a way that dental hygienists from around the country could relate to her. Often I would meet someone who would say, 'I just read Irene's recent editorial. You know I never thought about that from her perspective, but now I get it!'"

Looking Back on Her Words of Wisdom

Irene was *RDH* magazine's senior consulting editor from January 1981 until January 1993, with her editorials appearing in the front of each issue. Her last original work was published in February 1993. Electronic access to this body of work is not available. In 2010, *Dentistry IQ* published some of her more popular quotes.

"The role of the dental hygienist can be a lonely one unless there is an opportunity for collegial exchange and a feeling of unity and purpose."

—*RDH*, January 1981

This statement, which likely appeared in her first *RDH* column, is telling in that she not only understood the need, but she also knew the solution. Her unique ability to generate "I thought the same thing" played a huge role in simply helping dental hygienists feel understood. In 1981, there were fewer dental hygienists and fewer opportunities for interaction. Today, social media has decreased the likelihood of feeling isolated. Gurenlian is sure Irene would have capitalized on every available means of communication. "She would be tweeting, blogging, and posting on Facebook."

Astroth adds that Irene wouldn't just be using social media to further her own opinion. Rather, Irene always believed in the "informed opinion." "Her style was to identify the issue, provide the evidence, present perspectives from both sides and encourage us to make our own decision," Astroth said.

Irene was a "coach" before the concept of coaching came in vogue. She never told us what to think. Rather, she seemed to have wisdom about what was already deep inside of us, and she found a way to bring it out.

"Dental hygiene's lack of preparedness for the economic costs we currently endure, partly as a direct result of our growth in size, does not speak well of our foresight and initiative. … We have grown in size but we have not been able to pull together to shape our future."

—*RDH*, March 1981

This statement, penned during the 1981 recession, is still relevant today. More dental hygiene programs, people staying in the workforce longer and an unprecedented recession have made the job market tighter than at any other time. What would Irene say about today's employment challenges? It's easy to imagine her encouraging us to think beyond clinical practice and capitalize on the emerging outcry of the public for better access to oral

health. It's also more than likely she would tell us that we hold the key to our own destiny. Gurenlian agreed. "Irene believed that many of our issues will never change unless we institute the change. She wanted us to stop waiting for others to make our lives/profession better and for us to take the reins and create the change that will make the lives of others better." As an entrepreneur herself, she would have encouraged us to creatively define and develop what a 21st century dental hygienist looks like.

Irene Woodall, RDH, PhD

"How can we specify our research goals or our proper place in the continuum of patient care, or upgrade our educational programs, or tell the public about ourselves, if we see ourselves as appendages to dentistry?"

—*RDH*, January 1988

Irene firmly believed in the clinician. More than anything, she wanted us to believe in ourselves. Her thinking about dental hygiene, including clinical roles, was very expansive. Williams remembers that, even as a student, "She wanted us to see dental hygiene through a lens that went beyond 'cleaning teeth.' She encouraged us to think for ourselves and own our role in the delivery of care." Mid-level providers, collaborative practice, direct access — Astroth said, "Irene would celebrate these successes with unleashed enthusiasm. She would also be thrilled that so many states have enacted legislation that opens the door for providing care in schools and charitable and public settings and institutions."

Irene would have seen this as an opportunity for dentistry as well. Again, well ahead of her time, she embodied the new "collaborative leadership" style. One of Irene's first public speaking appearances was in 1968 before the American Dental Association. In a February 1991 column, she wrote, "Some of the dentists were shocked, some were thrilled and delighted that the obvious had been said." Her message made the front page of the *ADA News*.

"Organized dentistry rarely supports dental hygiene self-regulation, largely because dentists interpret self-regulation as synonymous with unsupervised or independent practice."

—*Comprehensive Dental Hygiene Care*, 4th Ed, 1993

Irene was not naïve about the challenges. Nearly 20 years after she wrote this, organized dentistry still uses independent practice as a way to inflame and incite fear among dentists and even some dental hygienists. Irene would likely be both amused at organized dentistry's continued fixation with independent practice and pleased that dental hygiene grows despite the rhetoric. In the early '90s, independent practice was used to motivate dentists and hygienists to fight self-regulation, general supervision and local anesthesia. Today, 44 states permit general supervision within a dental practice, 45 states allow local anesthesia and 18 have some form of self-regulation. The number of states with independent practice: one. This has not changed since 1986.

As a change agent, Irene was an early proponent of using evidence to support change and fight these falsehoods. When Astroth was involved in pursuing statutory changes to expand the scope of practice in Colorado, she found Irene to be a great sounding board. "She would want to know what went well and where we needed to improve. She was an early supporter of evidence-based decision making, so her mantra of 'Why?' or 'What does the research say?' or 'Do we have any data on that?' contributed to better strategies and rationale for expanding our scope of practice and our subsequent successes."

"There is one roadblock to major change for dental hygiene. We have the resources, the people, the intelligence, the commitment, the energy and even the possible paths to follow. But we are lacking a crucial element if we are to succeed with our respective dreams. This missing link is a clear image of how dental hygiene is unique as a profession."

—*RDH*, October 1987

Astroth remembers that Irene would often say, "Dream the future, make the future the reality." To me, that meant we need to face the challenges, use the evidence, be prepared, and move forward with confidence. We have moved forward since this statement, and Astroth knows Irene would be proud of where we have come in the last 20 years.

"She was passionate about dental hygiene issues such as professional and personal advancement, leadership development, research, building the dental hygiene body of knowledge, moving dental hygiene to BS degree entry level, and acknowledging dental hygiene diagnosis as a part of our practice," Astroth said.

Astroth and Gurenlian have shared some of ADHA's recent achievements with Irene. "Dental hygiene still resonates for her," they said. "When we told her that ADHA had hired a dental hygienist as its executive director, and that Colorado added the dental hygiene diagnosis to the scope of practice, her eyes lit up."

Would Irene think these advances helped create a clear image of our profession? "Undoubtedly," said Gurenlian. "I can imagine Irene shaking her head and saying being a profession is not about having a debate that we are a profession, but rather, as dental hygiene continues to grow in knowledge, research, autonomy and accountability, that defines the profession."

"I would love to see us channel our vitality and commitment into a unified, grassroots involvement that focuses on the evolution of our profession. I would love to see a renewed focus on productivity and quality, but with these terms having a much different meaning from their traditional connotation."

—*RDH*, February 1993

Irene understood the power of the grassroots movement. She would have been in awe of the power of dental hygienists and their ability to mobilize using social media to take on *The View* this past summer. And she wouldn't have wanted it to end there. It's easy to imagine her writing a column urging us to use that energy and passion to open new doors, create work settings, and improve access to care. Or telling us that productivity and quality are not about

special feature—Woodall *continued on page 30*

special feature

Attendees at the 50th reunion with masks from the 1962 yearbook.

Dental Hygiene — The Career of a Lifetime:

A 50-Year Study of Career Commitment

By ***Kassie Funston Chapman, RDH, BS; Claudine Paula Jeter Drew, RDH, EdD;*** *and* ***Mary Swartz Yohe, RDH, BS***

It was the year of the Twist, a new dance craze, and the song by Chubby Checker played at the fraternity parties all night long. It was the year Marilyn Monroe died, President Kennedy placed an embargo on the island of Cuba, and astronaut John Glenn orbited the earth. It was the year Johnny Carson first sat in the permanent host chair of NBC's Tonight Show. It was 1962!

There were fewer than 40 dental hygiene programs in the U.S., usually found within a dental school or a four-year university. The community college movement in higher education was just getting started. By 1962, the Temple University (T.U.) School of Oral Hygiene, Philadelphia, Penn., had been in existence for 40 years, having graduated its first dental hygienist in 1922.

On June 14, 1962, 52 graduates from the T.U. School of Oral Hygiene were awarded their diploma/certificate. Although the majority were from Pennsylvania and New Jersey, some of the class members had come from Oklahoma, California, Florida, New York and Connecticut. Their average age on entering the program was between 17 and 19 years. After graduation, they would travel back home to secure jobs, mostly in private dental offices. Fifty years later, some of them are still working in the field.

Anecdotal information suggests that dental hygiene is subject to a high drop-out or turnover rate, with practitioners "burning out" and leaving the profession in as little

"Little sisters" from the class of '62 were required to plead with "big sisters" from the class of '61 to accept them. The big sisters had to decide if the little sisters were truly worthy of becoming dental hygienists!

Table I. Professional Profile of Surveyed Class Members (N=30)

	N	(Percent)
Gender		
Female	30	(100)
Male	0	(0)
Racial/Ethnic background		
White	29	(97)
Black/African American	0	(0)
Hispanic	1	(3)
Asian	0	(0)
Years practicing in the dental hygiene profession (private dental practice)		
05-09	4	(14)
10-19	3	(10)
20-29	4	(14)
30-39	6	(20)
40-45	7	(22)
46-50	6	(20)

Table II. Advanced Degrees, Nonclinical Roles and Alternative Careers

	N	(Percent)
Highest degree obtained		
Certificate in dental hygiene	20	(68)
Associate degree	1	(3)
Bachelor's degree	5	(15)
Master's degree	2	(7)
Doctorate (PhD or EdD)	2	(7)
Years worked in nonclinical dental hygiene*		
Dental Hygiene Educator/Administrator 25 years or more	2	(7)
Public School Dental Hygienist, all in PA One to five years	5	(15)
Dental Industry One to five years	1	(3)
Left Dental Hygiene for alternative career**		
Insurance agent/real estate broker	2	(7)
Psychotherapist	1	(3)
Business	2	(7)
Case Worker for Visually Impaired	1	(3)
Artist	1	(3)

*Some individuals practiced at the same time in private dental offices while working in academia or as a public school system dental hygienist. Others pursued these alternative dental hygiene career paths for a few years but then returned to clinical practice.

**All 30 surveyed members practiced clinical dental hygiene full-time for a minimum of five years before changing career paths.

as five years. These statements are unsupported by the career data obtained from the class members of 1962. Today, this tight-knit class has seven members still employed either in the education or the practice of dental hygiene.

Fast-forward to the 2012 Annual Meeting of the Temple University Dental Hygiene Alumni Club (TUDHAC). Every April, TUDHAC presents a continuing education course for dental and dental hygiene practitioners and a luncheon for all T.U. dental hygiene alumni. At the luncheon, milestone graduation anniversaries are celebrated. This was a big anniversary year to honor the 1962 graduates — the golden 50th. The class of '62 had had outstanding 25th, 30th and 40th reunions, so it was certain that the half-century mark would not go unnoticed.

At the beginning of 2012, invitations to the 50th reunion were sent along with a one-page survey and return envelope to the 47 living alumni. Thirty surveys were returned for data assessment. The remaining 17 'lost' members were contacted again; notes were written and phone calls made. While in some cases, updated information was secured, this summary reflects data from the 30 surveys returned.

Most respondents said they have worked continually for many years. The total number years spent in dental hygiene by the class is 972, or an average 32.4 years per class member (see Table I). The median for the class is 30 years and the range 45 (five to 50 years). Four dental hygienists reported practicing less than 10 years, while the remaining 26 worked from 15 to 50 years. Seven reported that they still work in dental hygiene. Two are educators, and five are actively working practitioners. One of these practitioners has been in the same office for the past 50 years, counting her time there as an assistant between high school and college. Another practitioner took a break from dental hygiene while her children were young but returned to practice and is currently working, for a total of 33 years so far. The remaining class members have hung up the Columbia

T.U. Class of 1962. Top: 30th reunion; center: 40th reunion; bottom: 50th reunion.

and Gracey curets along with their old-fashioned porte polishers to pursue retired living or an alternative vocation.

Ten (33 percent) of the class have earned higher degrees (see Table II). This is noteworthy because there was little to no encouragement or incentive within the curriculum or from the faculty for students to pursue higher degrees in the early 1960s. Among this group, two received master's degrees and two more went on to achieve doctorates. Out of the remaining six, one earned an associate degree while five earned bachelor's degrees. One of them taught Hebrew full-time and then worked in a pharmaceutical company, retiring only recently. Another obtained a real estate license and

special feature *continued on page 32*

Wednesday, June 19

3:00 – 6:00
Student Table Clinics & Posters
ADHA/DENTSPLY Graduate Posters
3:00pm – Judges Calibration
3:30pm-4:00pm – Poster set up
4:00pm-6:00pm – Judging

Alumni Receptions/Affiliate Group Meetings
5:30pm-8:00pm
View website for complete listing of alumni and affiliate group receptions & times

View Course Descriptions & Speaker Bios Online!
adha.org/annualsession

Thursday, June 20

8:00 – 8:30
Plenary Session – Featuring Erin Brockovich
8:00am-9:30am

9:30 – 12:00
Infection Control in Mobile Settings: Different than Private Practice?
Kathy Eklund
Fee: $45

A Better Perio Maintenance Protocol
Tim Donley
Fee: $45

Implant Maintenance Therapy: An Evidence-Based Approach
Edie Shuman-Gibson
Fee: $45

Minnesota Breaks Ground: A Dental Hygiene Career Ladder is Born
Colleen Brickle, Clare Larkin & Panelists
Fee: $45

Career Mapping: How to Design YOUR Career Path
Debra Bachman-Zabloudil
Fee: $45

That's Not What the Other Faculty Said
Mary Jacks
Fee: $60
HANDS-ON

Open Viewing of Research Table Clinic & Poster Sessions

Student Table Clinic/ Poster Awards Ceremony

Open Viewing of Student, RDHs & Graduate Posters & Table Clinics

Access Editorial Board Meeting
10am-11:45am

Access Industry Board Meeting
12pm-1pm

12:30 – 2:00
Lunch & Learn *(limited seating)*
Fee: $60

1st Timers/Mentors/International Luncheon
Fee: $25

International Luncheon

2:30 – 5:00
Common & Uncommon Oral Diseases: the Hygienist's Role in Detection – Part I
Craig Miller
Fee: $95
FREE BOOK

A Better Perio Maintenance Protocol
Tim Donley
Fee: $45

Methods and Strategies for Improved Local Anesthesia Outcomes
Debra November- Rider
Fee: $75
HANDS-ON

Bisphosphonate Related Osteonecrosis: Are Your Patients at Risk?
Louis Korompolis
Fee: $45

Dental Hygiene: Reflecting on Our Past, Preparing for Our Future
Rhoda Gladstone
Fee: $45

That's Not What the Other Faculty Said
Mary Jacks
Fee: $60
HANDS-ON

Preparing a Successful Manuscript: What You Need to Know
Rebecca Wilder & Jacquelyn Fried
Fee: $30

Are You Smarter than Dr. Wilkins? Esther Wilkins National Board Review Challenge

Pre-Board Meeting

5:30 – 8:30
DENTSPLY/ADHA Graduate Student Research Poster Sessions Awards Banquet
By Invitation
5:30pm-8:30pm

Alumni Receptions
5:45pm-8:30pm
View website for complete listing of receptions & times

Philips/RDH Mentor of the Year Reception
By Invitation
5:45pm-7:15pm

Sunstar Student Bash
King Pin Bowling Alley
6:00pm-8:30pm

Friday, June 21

7:00 / 8:30 — **Procter & Gamble/Crest Oral-B Breakfast**
7:00am-8:30am Limited Seating

9:00 / 9:30 — **EXHIBITS XXXII Ribbon Cutting** *8:45am*
EXHIBITS XXXII *9:00am-4:00pm*

JDH Board Meeting

10:30 / 11:30
- **Common & Uncommon Oral Diseases: the Hygienist's Role in Detection – Part 2** — Craig Miller — Fee: $95 — FREE BOOK
- **Product Presentation** — Fee: $30
- **Do You Consistently Look for the Silent Killer?** — Barbara Dawidjan — Fee: $60 — HANDS-ON
- **The CSI Effect: High Profile Forensic Dental ID Cases** — Michael Tabor — Fee: $45
- **Integrating Clinical Simulation into the DH Curriculum** — Harold Henson & Darla McKitrick — Fee: $45
- **Stats, Facts, Myths and Downright Lies** — JoAnn Gurenlian & Ann Eshenaur Spolarich — Fee: $45
- **International Exhibit Floor Experience**
- **Career Mapping for Students: Invest in Yourself** — Debra Bachman-Zabloudil

IOH Liaison Luncheon *12pm-2pm*

1:30 / 2:00 — **EXHIBITS XXXII** *(continued through 4:00pm)*
DENTSPLY/ADHA Graduate Student Research Poster Sessions *1:00pm-3:00pm*

2:30 / 4:30
- **Could a Public Health Position Be Right for YOU?** — Gisille Thelemaque — Fee: $45
- **Finding Good Evidence for Making Informed Treatment Decisions** — Cynthia Gadbury-Amyot — Fee: $45
- **Developing Skill & Expertise in the Use of Panograph Radiography** — Amy Coplan & Sandra Curren — Fee: $45
- **Building Optimum Oral Healthcare Teams** — Lisa Shaw, James Rozanski, Suzanne Newkirk & Robert Gottlieb — Fee: $45
- **Create the Art of Clinical Teaching: An Intentional Approach** — Rebecca Wright & Mary Jacks — Fee: $60 — HANDS-ON
- **International Forsyth School Tour**
- **Boston Tea Party – Student Event** — *Hosted by District I*

Student Advisor Workshop

5:45 / 6:45
- ***Dimensions* Esther Wilkins Lifetime Achievement Award Reception** – *By Invitation 5:45pm-7:00pm*
- **Alumni Receptions** *5:45pm-7:00pm* — *View website for complete listing of receptions*

7:00 / 11:00 — **IOH Benefit/Presidential Gala – Featuring Debbie Reynolds**
Cocktail Reception 7:00pm; Dinner and Program 8:00pm-9:30pm; Reception and Dancing 9:30pm-11:00pm (Black Tie Optional) *SILENT & LIVE Auction Fundraiser for ADHA's Institute for Oral Health Foundation*

Saturday, June 22

8:00 / 9:00 — **Saturday Plenary Session and Awards Presentations – Featuring Geena Davis**
8:00am-10:15am

10:30 — **EXHIBITS XXXII** *10:30am-3:30pm*

10:30 / 12:30
- **Protect that Winning Smile: Sports Dentistry for the Dental Hygienist Part 1** — Stephen Mills — Fee: $30
- **Troubling Tobacco Trends: From Hookah to Snus** — Victoria Patrounova — Fee: $30
- **Have You Ever Considered Working in a Government Setting?** — Sheila Weagle & Karen Sicard — Fee: $30
- **Translate Active Learning Activities in Oral Radiology to Any Discipline** — Amy Coplan & Sandra Curren — Fee: $30
- **International Exhibit Floor Experience**
- **Student Discussion: Dental Hygiene in the next 100 years**

Media Round Table

EXHIBITS XXXII *(continued through 3:30pm)*
Marketplace *12:30pm-3:30pm*

Student Experience on Exhibit Floor

2:00 / 3:30
- **Protect that Winning Smile: Sports Dentistry for the Dental Hygienist Part 2** — Stephen Mills — Fee: $75 — HANDS-ON
- **Modified Diets: Do You Know the Oral and Nutritional Implications** — Tammy Sweaker — Fee: $30
- **Electronic Health Records: Will You Be Ready?** — Kelly Tanner Williams — Fee: $30
- **Critical Elements of a Health History: The Right Questions Matter** — M. Anjum Shah — Fee: $30

Student Delegate/ Alternate Orientation *1:00pm-2:00pm*
Minutes Review Committee *2:00pm-2:30pm*
Tellers Orientation *2:30pm-3:00pm*
Reference Committee Personnel Orientation *3:00pm-4:00pm*

Download the ADHA Event Mobile App! Coming January 2013!

Association Update *4:30pm-5:30pm*

District Discussions *5:30pm-7:30pm*

7:30 / 9:00 — **Alumni Receptions** *7:30pm-9:00pm*
View complete listing of alumni and related group receptions online

working

Hygienists in Uniform

By ***MSgt Sarah Drinkard, USAF, RDH***

I embrace my career, for I am part of two elite professional organizations at once, the United States Air Force and the American Dental Hygienists' Association. I am part of two distinct subcultures, both grounded by core values and lauded for high standards.

—MSgt Sarah Drinkard, USAF, RDH

Have you ever thought of seeing the world and serving your country as a dental hygienist? If you answered yes, then let me share with you a perspective from a registered dental hygienist who also happens to be an active duty Dental Corps Airman in the United States Air Force.

Many may think of their career as simply an occupation, I would call my career a way of life, for I am a part of something greater than myself. I am an Airman first, but also a dental hygienist, a technical expert at my craft. When the two merge every day, I provide world-class oral health care to America's heroes who, just like me, volunteered to serve the country they so dearly love. My Air Force career began in 1995, but my journey as an active duty dental hygienist did not start for another 10 years.

In 2004, the Air Force instituted the Dental Hygiene Training Scholarship Program allowing Air Force dental assistants to attend an accredited dental hygiene school. These Airmen receive full pay and benefits while attending school full-time. Once they have completed dental hygiene school and successfully passed the national board, then they are required to fulfill a three-year service commitment upon graduating.

The two institutions the Air Force utilizes to train future hygienists are Trident Technical College in South Carolina and St. Petersburg College in Florida. After successful program completion and licensing, newly registered dental hygienists reenter the operational Air Force. They are assigned and occasionally deployed all over the globe to deliver state-of-the-art oral care. With a large number of registered dental hygienists leaving their mark, the Air Force provides a consistent level of quality care identical to civilian care stateside. Since obtaining my license, I have had the opportunity to live, work and play at locations such as Charleston, South Carolina; Misawa Air Base Japan and Cheyenne, Wyoming. My very first assignment as a registered dental hygienist was Misawa Air Base, Japan.

"Konnichi Wa" is how one says hello in Japanese. I learned this after graduating and moving to Misawa Air Base, Japan, where I had my very first assignment as a registered dental hygienist. At Misawa, I led and managed the Preventive Dentistry Department. During my three and half years there, I trained and supervised other Air Force staff. The 35th Dental Squadron at Misawa Air Base provides dental care to 14 thousand active duty military, family members, retirees and Department of Defense civilians. It was through that patient population I achieved ultimate job satisfaction. In my dental chair, on any given day, there was an Airman preparing for deployment. My job was to guarantee his/her dental readiness so he or she could carry out the mission without distraction or limitations. The very next day, I could provide dental care for that Airman's spouse, who is now charged with holding down the fort as he or she waits for the Airman's safe return.

One day, I had the privilege of providing dental care for a retired Army patient. He had served in WWII in the Pacific. Here I was serving a man who had served our country when it needed him most. It was then I felt the most pressure to be the very best hygienist I could be: I owed that to him. That day, I got to know a member of the "greatest generation," and I did it while also serving my country as a registered dental hygienist.

I embrace my career, for I am part of two elite professional organizations at once, the United States Air Force and the American Dental Hygienists' Association. I am part of two distinct subcultures, both grounded by core values and lauded for high standards. The Air Force Dental Service's mission is to achieve oral health to ensure readiness, achieve best value and achieve excellence in all we do. I am a proud registered dental hygienist, thankful for her opportunities. General George S. Patton was once quoted as saying, "If I do my full duty, *the rest will take care of itself*." That is how I feel about my profession and my field. If I continue to sharpen my skills and never become complacent, I will always provide world-class oral health care to others who "*take care of the rest*."

If anyone is interested in learning more about me or my career, please contact sarah.drinkard@us.af.mil.

Career Development throughout the Life Span

By ***Linda Meeuwenberg, RDH, MA, MA, FADIA***

Each of us guards a gate of change that can only be unlocked from the inside.

—Marilyn Ferguson

I have a long history as a registered dental hygienist, having graduated in 1968 with an AAS degree. There were few career options for women at that time, and I didn't want to be a teacher, nurse or librarian. In my senior year of high school, I participated in a cooperative education experience at our community's only dentist's office. That's where my passion was ignited for dentistry. The dentist and his wife suggested a career as a dental hygienist, and that's when my journey began. I had no idea what a dental hygienist was, and neither did my high school counselor. The dentist took me to a local dental society meeting and to visit a new dental hygiene program at Ferris State College in Big Rapids, Mich. I continued to work for them on college vacations, learning all that I could, and I am forever grateful to them for their guidance.

Dental hygiene jobs were prevalent in the 1960s, and dentists rarely asked for any credentials like a license or resume/references. On my first interview, the dentist asked, "Can you start yesterday?" There were only two RDHs in my county, and one was a dentist's wife who didn't work outside the home. Many young women chose to study dental hygiene as secondary to getting married and worked only part-time. Fast-forward to 2013, and times have really changed! Most hygienists now select dental hygiene as a career and are in it for the long term. They juggle families and career while they continue their education and face life transitions that include marriage, divorce, widowhood, re-marriage, parenting, caring for aging parents, health issues and relocating.

It was following a whim on my day off that changed the course of my career. I have talked with many hygienists who have similar stories.

I've seen several changes in dental hygiene over nearly three decades of teaching. As professor emeritus at Ferris State, I had 60 dental hygiene students in each class. I made lifelong friends with former students and have watched them grow into seasoned professionals. They often share their current dilemmas with me. Hygienists attending my seminars stay after the program to discuss their stories and seek advice in a changing world. Some suffer from musculoskeletal issues that make it difficult to work full-time or have forced them to leave clinical hygiene altogether. Others are concerned with the economy and unable to retain full-time employment and/or benefits. Yet others express concerns of burnout or boredom: after looking at the thousandth mouth at the end of day, they ask, "Is this all there is?"

Based on these questions and concerns, I developed an interactive CE course, "Surviving and THRIVING in Your Profession," that I have delivered in four states. I started taking a look at hygienists at all stages of career development and studying what made them successful, passionate and motivated in their careers. I studied business books and career development articles. I developed introspective questionnaires for my participants. Every attendee left with a plan of action to address their new goals, and each one was inspired by others and by new insights. Although the feedback for my course was excellent, I think I learned more from the participants than they learned from me!

I came to the realization that we go through transitions throughout our life span. Sometimes, unexpected circumstances change the course of our lives. One thing we can always expect is change. In fact, a career counselor told my students that they can expect to change careers five times.

When I began my career in the 1960s, I never intended to be anything other than a traditional dental hygienist. But even though I was already working six days a week, I also enrolled in college courses. I lived in a university town, and knew I wanted more education. As a graduate of a two-year curriculum, I had had only one elective, and I wanted more. Extra course work in psychology, sociology, anthropology, art, philosophy and ethics improved me as a hygienist and was a nice break from the sciences. I gained a better understanding of human beings!

I became active in my local dental hygiene society and enjoyed learning more about my profession from other professionals. Little did I know I would become a lifelong learner and pursue three more degrees as I encountered transitions. Continuing education was not mandatory in those days. That was not my motivation. I enjoyed interacting with my colleagues at local component meetings, participating in community service projects and listening to engaging speakers.

The first transition in my life involved a divorce — a major life change for many of us. Shortly before, I had received a letter from my alma mater, Ferris State, asking if I would be interested in clinical teaching. That letter changed the course of my life. I didn't respond right away, but I kept the letter — and the idea.

Relocation brought me closer to Ferris State, and one day, when I had time off from work, I followed a whim and drove there. I produced the letter and announced that I was interested in learning more about becoming an adjunct instructor. I was met with enthusiasm, as they had a desperate need for adjunct clinical instructors and a new program – Allied Health Teacher Education. I transferred all my courses to apply toward the BS degree I would need to pursue as a

transitions *continued on page 30*

transitions *continued from page 29*

condition of being hired. I divided my time among teaching, practicing hygiene and taking classes to finish my BS degree. Never in a million years would I have seen myself teaching! I found working with students in clinic to be exhilarating. The following year, I was appointed as a full-time tenure-track faculty member. Terrified of lecturing in front of 60 students, I was encouraged by my program director and other faculty that I could do it. Little did I know that, in my later years, I would make a full-time career as a public speaker. We can change!

It was following a whim on my day off that changed the course of my career. I have talked with many hygienists who have similar stories. My teaching career was cut short due to the musculoskeletal issues. Once again, I faced another transition. I am happy to report that now, in my 60s, I love dental hygiene as much as I did when I was a new graduate — and I enjoy being self-employed. I have experienced life as a clinical practitioner, educator, author, volunteer, change agent, advocate, entrepreneur and now writing this column. In addition, I enjoy a little acting/modeling, participate in volunteer projects, and serve as a corporate trainer for clients like Disney. "So much to do — so little time" is my mantra!

You can expect to hear more stories of transition, tips on career development, interviews and inspirational words in this column. As you can see from my story, continuing education, mentors and belonging to ADHA have been central guideposts throughout my transitions. Please feel free to submit suggestions and/or questions to me as we collaborate on transitions in our careers. Let's begin this new year with the same passion we had as new graduates eager to pursue new beginnings!

Linda Meeuwenberg, RDH, MA, MA, FADIA is president of Professional Development Association, Inc. She is an award-winning speaker, author and educator with degrees in dental hygiene, education, counseling and communication. A professor emeritus from Ferris State University and member of Sigma Phi Alpha, she earned a first place award from the American Association of Dental Schools for her innovative teaching techniques. She has numerous publications and awards; participates in several volunteer projects, and can be reached through www.lindapda.com or at linda@lindapda.com.

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how well we scale teeth or how much revenue we generate for the practice, but rather about how many people can get access to our services and how that can improve the quality of their lives.

Lessons for Us All

No one ever imagines the type of life-altering health crisis that beset Irene. Yet it could happen to any one of us at any time. What would Irene want us to take away from what has happened to her? Find your voice and use it now. Tomorrow is no guarantee.

Today, Irene resides in a long-term care facility in Chicago. She is cared for and supported by her daughters, Charlotte and Amanda, and her three grandsons. She is beloved by staff and all that meet her. Part two of this series on Irene will chronicle her life today and the physical and oral health challenges that she faces.

Carol A. Jahn, RDH, MS, is a lifelong ADHA member who has had many roles and elected positions including ADHA treasurer. Currently, she is ADHA's representative to the International Federation of Dental Hygiene and serves on its Leadership Development Committee. She is employed by Water Pik, Inc. as senior professional relations manager. She can be reached at cjahn@waterpik.com.

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dent spoke about the toll-free number, he said that it would appear on billboards, in PSAs, on milk cartons, and "even on toothbrushes!" ADHA had partnered with corporations to provide toothbrushes imprinted with "A.D.H.A. 1-877-Kids Now" to schoolchildren in targeted areas of need throughout the country identified through the Centers for Disease Control and ADHA's Council on Public Health Chair Dolores Malvitz, RDH, DrPH. The toll-free number directly connected the caller with someone who would provide information on access to medical/dental care for children in his/her locality. ADHA was the only dental-related association present. I was honored to represent the association at this prestigious event and doubly proud that ADHA was acknowledged nationally for its efforts to increase access to oral health care for children … definitely the highlight of my presidency!

The dental hygiene profession has changed drastically over the past 100 years. In the beginning, only women were involved. According to Wilma E. Motley, RDH, BS, "Although males had been licensed as dental hygienists in some states, Jack Orio, graduating from the University of New Mexico in 1965, became the first male graduate dental hygienist."[1] Initially dental hygienists were concerned only with teeth and the mouth. Advances in research have shifted today's emphasis to oral health's connection to total body health. Collaborating with other health care professionals to help patients/clients achieve optimal overall health has become increasingly important. In 1913, antibiotics were yet to be discovered and/or developed. Today, a myriad of both prescription drugs and over-the-counter medicaments are available for treatment of oral health maladies. What a difference fluoride and sealants have made in preventing dental caries.

For more than half the century, dental hygienists practiced standing. Now we sit in ergonomically designed chairs, wear gloves and protective eyewear including loupes and lighting to enhance our vision, and we wear masks. Cold "sterilizing" solution and boiling water sterilizers have been replaced by steam, dry heat and chemical units. Changes in armamentarium include ultrasonic and electromagnetic scalers, ergonomic manual instruments designed for specific areas of the dentition, air polishers, irrigation devices, lasers and cordless handpieces.

The pioneers of our profession wore long, white cotton dresses that needed to be laundered, hung outside to dry, starched and ironed. White cotton stockings were held in place by garter belts or girdles with uncomfortable metal attachments. Synthetic fabrics and pantyhose were yet to be invented. White leather shoes required daily polishing. Cotton caps required constant care. I remember unfolding my cap, scrubbing it clean with a brush and laundry soap, dipping it into a concentrated starch solution and pressing it against the flat smooth surface of the refrigerator to dry.

Dental hygienists first practiced in the Bridgeport, Conn. schools. In my opinion, one change we need to consider is returning to our roots. Along with other public health settings, that's where advanced dental hygiene practitioners belong today: in the schools where children in need are accessible. This would greatly increase access to care to one segment of the underserved population.

Although dental hygienists may now wear comfortable colorful scrubs instead of stiff white dress uniforms, one important aspect of the profession has not changed. Dental hygienists continue to be dedicated, caring professionals who provide clinical services and education and also advocate for the oral health needs of all people.

Reference

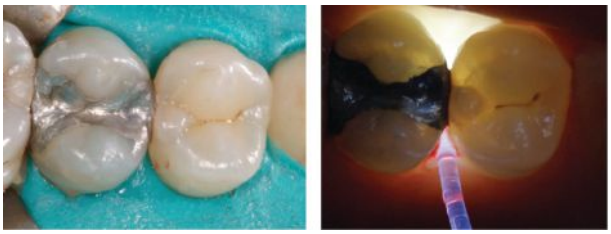
1. Motley, WE. The history of The American Dental Hygienists' Association 1923 – 1882. Chicago: ADHA, 1986; p. 232.

Beverly P. Whitford, RDH, BS, ADHA president, 1998–99, has practiced clinical dental hygiene for half a century and was a corporate professional representative/consultant for 14 years. Currently she is employed part-time in two general dentistry practices and is co-owner/business manager of Whitford Marine LLC. Bev and husband, Bob, reside in Old Mystic, Conn., where she volunteers at a local elementary school and holds many church leadership positions along with her continued commitment to her component, constituent and ADHA. Bev and Bob's greatest joy is spending time and traveling with their two granddaughters.

Hager Worldwide, Inc. introduces three new xylitol products. **Hager Xyli-Spray** is a fresh breath spray that is 100 percent sweetened with natural xylitol. It helps with bad breath relief while also providing a convenient and easy way to enjoy the dental benefits of xylitol. Xyli-Spray is alcohol-free and safe to swallow. Also new from Hager are **Hager Dry Mouth Drops**. These round, hard candies also are sweetened with 100 percent natural xylitol. Since xylitol aids in saliva production, Hager Dry Mouth Drops provide an ideal xylitol delivery system for helping reduce oral dryness and providing other dental health benefits. Available flavors include mint, cherry and melon. In addition, Hager now offers xylitol in its pure granular form as **Hager Xylitol Powder**. This natural, low-calorie sweetener has a great taste and dental health benefits that make it a great sugar substitute. Hager Xylitol Powder can be used to sweeten cold and hot drinks, cereal and fruit as well as for baking. It is available in both individual packets and one-pound bags. For more information on any of the new Hager products, call 800-328-2335 or email info@hagerworldwide.com.

Patterson Dental Supply, Inc. announces new updates to CAESY Cloud, its online patient education portal. **CAESY Cloud version 1.3** offers improved functionality and presentation updates. New features include Smile Channel content, multiple new and updated videos, and improved search functionality — all available via fast, convenient Cloud delivery. For the first time, Smile Channel content has been added to CAESY Cloud, and most Smile Channel presentations are available in high definition for optimal patient viewing. Smile Channel presentations provide engaging programming for the reception area that entertains and educates patients while subtly promoting discretionary services unique to each practice. Other features have been added to make CAESY Cloud even easier to navigate and run on PC and Mac desktop computers and smartphones, as well as the iPad, iPhone and iPod. The interface has been completely redesigned to support mobile, tablet and desktop browsers. Additionally, videos now include more descriptive titles and explanations, making it simple to confirm that the proper content is being shown during an appointment. A tag-filtering feature and new search functionality make it easier to quickly find appropriate content, and dental professionals will now be able to create playlists that play a number of videos sequentially. New content includes a TMD section in high definition, which features the presentations "Orofacial Myofunctional Therapy," and "What is a T-Scan?" Updated presentations include information on diagnosing neuromuscular problems and treatment, the equilibration procedure, diagnosing bruxism and more. For more information, visit www.pattersondental.com/AppStore.

AdDent introduces the **Proximal Caries Light Guide**, a new and improved plug-in accessory for its Microlux Diagnostic System. This attachment uses a 0.75mm diameter disposable fiber light guide that allows the practitioner to easily slide the fiber through the posterior interproximal space. This technique permits visualization of proximal caries as a shadow on the occlusal surface with the use of transillumination. It can often show incipient proximal caries not visible on a standard x-ray. Other accessory guides available for the Microlux System are 2 mm and 3 mm glass light guides, DL oral cancer screener, autoclavable lighted mirror, 1 mm Endo Fiber and a .75 mm Perio Probe. For more information, call 203-778-0200 ext. 104 or visit www.addent.com.



Photos by Dr. Howard E. Strassler

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position opening

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Qualifications: Graduated from an accredited dental hygiene program required. Bachelor's degree in dental hygiene or related field from an accredited college or university preferred. One year of dental hygiene work experience required. Five years of experience working in a dental clinic preferred. State of Alaska Dental Hygiene license. State of Alaska local anesthetic license. BLS certified.

Desired knowledge, skills and abilities: Familiar with all phases of dentistry and dental hygiene to include working with children, adults and periodontal patients. Knowledge of dental and periodontal charting, local anesthetics, different fluorides available for dentistry, aseptic techniques, sharpening techniques for hygiene instruments and dental x-rays. Demonstrated efficacy in verbal and written communication skills. Ability to read and interpret pertinent policy and regulations. Ability to establish and maintain good relationship with supervisor, co-workers and outside agencies. Ability to maintain strict confidentiality. Work ethically and professionally; treat people courteously and respectfully. Proficient skills in the use of computers.

Contact: Human Resources Department, Arctic Slope Native Association, Ltd., PO Box 29, Barrow, AK 99723, 907-852-9350; fax 866-890-9093.

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special feature *continued from page 25*

eventually became a hotel proprietor in Rehoboth Beach, Del., while a third classmate became a popular local artist and art teacher. A fourth class member switched careers after 15 years of clinical dental hygiene to enter the insurance field. She rose to become part of the Million-Dollar Round Table and a fellow of Life Underwriters' Training Council. Five of the class (15 percent) practiced as Pennsylvania public school dental hygienists. Lastly, the class secretary became an educator and then a political activist and leader. She is trying to make changes within the political system, having been recently elected to a New Hampshire political party post.

In their personal lives the class fared well, most having husbands and children, and 46.6 percent sharing their lives with pets. One classmate has lived in 10 U.S. states and another in seven. Another graduate practiced and/or taught in the Middle East on three separate occasions; twice in Riyadh, Saudi Arabia and once teaching in a health care college in the Manama, Kingdom of Bahrain.

To the classmates, it seems impossible that 50 years passed between graduation day June 14, 1962, and reunion day in April 2012. As one classmate stated, "Life has been a most interesting adventure, and we certainly would not have wanted to do it without the mantle of dental hygiene wrapped around us. It has afforded us independence both financially and emotionally, and of course, it has given us wonderful collegiality with fellow professionals. We have been able to spread our wings and soar to the heights. Dental Hygiene has made a difference!"

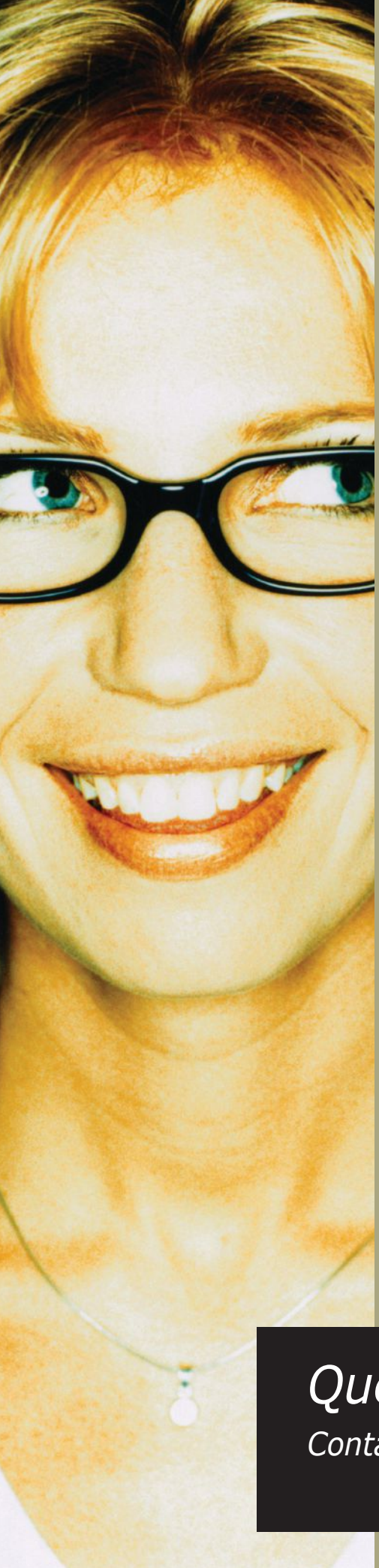
Dedication

The class of 1962 remembers and thanks 'our dear Miss Bailey,' the dental hygiene director. Miss Bailey was our defender within the Dental School and wanted only the best for her 'girls!'

To Miss Heck, a very special thank-you for always demonstrating elegant manners, ever-present kindness to others and true professionalism in dental hygiene.

And our thanks to the faculty: Mrs. Marshman, Miss Hickey, Miss Henne and Mrs. Franz, who all contributed to our professionalism. We were, indeed, lucky to have them all as role models.

Kassie Funston Chapman, RDH, BS; Claudine Paula Jeter Drew, RDH, EdD; and Mary Swartz Yohe, RDH, BS are the Class of 1962 Reunion Committee, Temple University School of Dental Hygiene.



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