

Vista House
Columbia Gorge, Oregon

Message from the Director

Another school year is over and another group of freshly graduated students are launching their dental careers. One of the myriads of things dental students learn about during their four years at the School of Dentistry is practice-based research. We hope that this exposure early in their professional education will encourage them to join PROH when they graduate.

A good way for new dentists, as well as our current members, to get great exposure to PROH is to attend the annual conference. Our theme of myths and controversies has been very well received, so we are continuing that format again this year. We will have six presentations based on topics that PROH members indicated they were interested in for evidence-based clinical decision making.

Dental faculty from OHSU will make five of the six presentations. One of the areas that we have tried to emphasize more in the dental school is integrating evidence into the curriculum, and so we are continuing a new twist on the conference that last year's attendees really seemed to like: a student presentation. This year, an OHSU pediatric dentistry resident will be selected to present at the conference.

The speakers and their topics, along with registration information, are described in more detail in this newsletter. The meeting is on Oct. 29, from 8 a.m. to noon. The PROH member annual meeting and luncheon will immediately follow. We will once again be at the World Trade Center in Portland, a downtown venue the majority of you indicated was preferred for the most efficient commute. This is always a fast-paced continuing education course, with the best, most compact, evidence-based review of clinically relevant topics to be found anywhere. Plan on coming, and bring a colleague!

We continue to work on obtaining funding that will allow us to pursue studies on the topic that you have indicated as being your highest priority: cracked teeth. We recently submitted

two separate grant applications to the National Institute for Craniofacial and Dental Research (NIDCR) for studies on cracked teeth that would involve the PROH network. Unfortunately, neither was funded. This is not unusual, since typically only about one out of every five or six submitted applications receive funding. But, we're not giving up, and will submit another grant application by the end of the year.

Another area of research for PROH pertains to evidence dissemination and implementation: How do practicing dentists obtain evidence-based information and what stimulates them to incorporate it into their everyday practice? And does this information ultimately result in improved patient care? In other words, what are the incentives and barriers to practicing evidence-based dentistry?

PROH is the perfect venue for investigating the many questions associated with this subject. Our initial efforts will be in the form of electronic surveys (likely using mostly short, multiple-choice questions on SurveyMonkey). Everyone is welcome and encouraged to participate (see story, page 5). We want to expand our participants beyond current PROH members, so please let us know of any colleagues who may be interested in participating in the survey. Perhaps you belong to a study club, and you can recruit your fellow study-clubbers to get involved. Increased participation will help us gather more accurate information and will give your colleagues some exposure to PROH, hopefully stimulating them to become members themselves.

Have a great summer, and see you at the conference in October.

Thomas J. Hilton, D.M.D., M.S.
PROH Director, hiltont@ohsu.edu



Tom Hilton, D.M.D., M.S.

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**PROH Conference
registration materials inside!**
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“Dental Myths & Controversies III” Continuing Education Course

The Sixth Annual PROH Conference was held in Newberg at A-dec's spacious and comfortable Education Center on November 13, 2009. The continuing education course focused once again on “Dental Myths and Controversies,” in keeping with PROH's mission of contributing to the advancement of evidence-based dental practice.

The fast-paced morning had a power-packed lineup of five OHSU dental faculty and one OHSU dental student who addressed some of the most contentious myths and controversies facing us in dentistry. Each speaker had approximately 30 minutes to introduce their topic, identify the opposing viewpoints, review the relevant research, present his/her position on the topic based on the evidence, and then answer questions from the audience. Below is a summary of the course.



“What are the long term effects of teeth whitening?” by Juliana da Costa, D.D.S., M.S., assistant professor in the department of restorative dentistry and a practitioner in the OHSU Faculty Dental Practice

There is strong evidence of effectiveness for the three tooth whitening methods: at-home, in-office, and over-the-counter. The use of a light source to increase the whitening effect is still debatable. Some tooth color relapse occurs with all whitening systems; however, the whitening effect is still evident. Tooth sensitivity and/or gingival irritation are experienced in 15 to 78 percent of patients; however, it is usually mild to moderate and transient; and is considerably less when potassium nitrate, fluoride, or amorphous calcium phosphate is in the formula. Tooth whitening is a safe procedure and clinical studies have not shown the development of pre-neoplastic or neoplastic oral lesions.



“Amorphous Calcium Phosphate (ACP): Is it effective in remineralization therapy?” by John Mitchell, Ph.D., associate professor in the department of restorative dentistry

Of the more than 4,000 articles found in Dr. Mitchell's literature review, his inclusion/exclusion criteria narrowed the examination to 13 articles. One ACP study showed root remineralization with 42 radiation patients. Nine of ten randomized clinical trials of casein phosphopeptide (CPP)-ACP resulted in subsurface remineralization. One in-vivo study resulted in a reduction of white spot lesions that was visually significant but DIAGNOdent showed no difference. A large two-year chewing gum study showed an 18 percent

(Continued on page 5)

Steering Committee Members

Private practitioners:

Sean Benson, D.D.S., Baker City
Mark Driver, D.M.D., Roseburg
Mark Jensen, D.M.D., Bend
Walt Manning, D.M.D., Albany
George McCully, D.M.D., Eugene
John Shurtz, D.D.S., Salem
Office manager – open position

OHSU faculty/staff:

Cindy Barnes, R.D.H., M.B.A., PROH Network Manager
Jack Ferracane, Ph.D., PROH Investigator
Tom Hilton, D.M.D., M.S., PROH Director

Meet Your Steering Committee



Sean Benson, D.D.S.

PROH's only steering committee representative from east of the Cascades is Sean Benson, D.D.S., located in Baker City, Ore. Sean attended Ball State University in Muncie, Ind., for his undergraduate studies and Ohio State University for his doctor of dental surgery degree. He completed a general practice residency in 1999. Sean practiced in La Grande for three years and then purchased his current practice in Baker City in 2002 from OHSU alumnus, Randy Morgan, D.M.D. Sean said he was drawn to eastern Oregon by the mountains, rivers, and lifestyle.

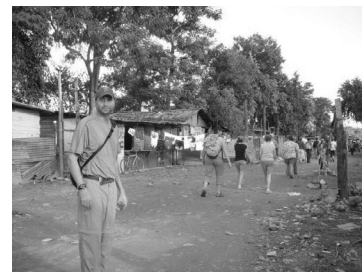
Sean wasted no time in becoming actively involved in organized dentistry, ultimately becoming president of the Oregon Dental Association from 2006 to 2007. His professional memberships include the American Dental Association, the American Academy of General Dentistry, and the Pierre Fauchard Academy and the American College of Dentists where he is a fellow. Sean received the ADA Golden Apple Award for New Dentist Leadership in 2006. Among his various

community/volunteer activities are Medical Teams International, Baker Dental Team Leader to Honduras, and Give Kids a Smile.

PROH appeals to Sean because “it is a very practical and necessary evolution of research. It is critical for the practical applications of evidence-based dentistry. Tom Hilton makes participation easy, and his enthusiasm is contagious. I also have a good friend, who is a physician, Jon Schott, M.D., who participates in the Oregon Rural Practice-based Research Network.”

In 2007, Drs. Benson and Hilton trained Dr. Schott and a group of primary health care providers to conduct oral examinations in medical offices on 1600 Baker City residents to determine the prevalence of unmet dental needs in the community. Outside of dentistry, Sean enjoys mountain biking, golf, white water rafting, fishing, brewing beer, snorkeling, rock climbing, and reading. Sean's wife, Amy, is a dental hygienist who focuses on periodontal therapy one day a week in Sean's practice and teaches at the ODS College of Dental Science in La Grande.

Thanks, Sean, for taking an active role in guidance of the PROH Network!



Sean Benson in Brieses, Honduras

7th Annual PROH Conference

“Dental Myths and Controversies IV”

Friday, October 29, 2010

Join us for an exciting, fast-paced morning with six speakers addressing some of those confusing and contentious myths and controversies that face us in dentistry today. OHSU faculty will each introduce their topic, identify the opposing viewpoints, review the relevant research, present their position on the topic based on their understanding of the evidence, and answer your questions. Topics and speakers are as follows:

“Non-carious cervical lesions: Does occlusion affect their formation and treatment?” by **Scott Dyer**, D.M.D., M.S., Ph.D., assistant professor in the department of restorative dentistry and a private practitioner.

“Alternative caries diagnostic techniques: Time to throw away the explorer?” by **Rose McPharlin**, D.D.S., assistant professor in the department of restorative dentistry, a group leader in the pre-doctoral clinic, and a practitioner in the OHSU Faculty Dental Practice.

“Antimicrobial agents: Are they necessary for successful endodontics?” by **Christine Sedgley**, B.D.S., M.D.Sc., M.D.S., F.R.A.C.D.S., M.R.A.C.D.S. (ENDO), Ph.D., associate professor and chair of the department of endodontology

“Over-the-counter dental products: Do they work?” by **Erinne Lubisich**, D.M.D., assistant professor in the department of restorative dentistry and a private practitioner.

“Evidence –based dentistry: Does it work in the real world?” by **Kevin Kwiecien**, D.M.D., assistant professor in the department of restorative dentistry and a private practitioner.

“Sealants: Under used or over-hyped?” by a team of residents from OHSU’s pediatric dentistry residency.

You won’t want to miss this important and timely information of vital importance to all practitioners.

When:
Friday morning
October 29, 2010

Course #:
DNCSEL1010

Time:
8:00 a.m. to noon

Early Tuition:
Through 10/11/10
\$140 dentist
\$120 staff

Tuition:
After 10/11/10
\$150 dentist
\$130 staff

Credit:
4 hours

Location:
World Trade Center
121 SW Salmon
Portland, OR 97204

Turn page for registration form

PROH Conference Registration Form

You will receive acknowledgement of your enrollment by mail.
One registration form for each person

Last name: _____ First name: _____ M.I.: _____

Address: _____ City, State, Zip: _____

Office phone: _____ Home phone: _____

Fax number: _____ E-mail address: _____

License/ADA/GD/EFDA #: _____ (for CE credit recording only)

Title (please circle): DDS DMD RDH* CDA/EFDA* CDT* Retired Other

*Include employer name: _____

Please register me for the following:

Friday, October 29, 2010 World Trade Center 121 SW Salmon Portland, OR 97204	PROH Participant		Non-PROH Participant	
	Before 10/11/2010	10/11/2019 & After	Before 10/11/2010	10/11/2010 & After
<input type="checkbox"/> Dental Myths and Controversies IV 8:00-12:00	\$70** dentist \$80 staff	\$75** dentist \$85 staff	\$140 dentist \$120 staff	\$150 dentist \$130 staff
<input type="checkbox"/> PROH Business Meeting and Luncheon 12:15-1:45	Dentists only Free	Dentists only Free	Dentists only Come learn about practice- based research! \$20	Dentists only Come learn about practice- based research! \$20
Total Amount Enclosed	\$ _____	\$ _____	\$ _____	\$ _____

** This rate is only available to those attending the PROH Business Meeting and Luncheon.

____ Check/Money Order payable to OHSU
 ____ MasterCard ____ Visa

Card number: _____ Exp. Date: _____

Signature of card holder: _____

Return to: OHSU – CDE Department, 611 SW Campus Drive, Portland, OR 97239-3097
 Phone: 503-494-8857 or 800-232-6478 Fax: 503-494-2973 E-mail: kingg@ohsu.edu

“Dental Myths & Controversies III” Continuing Education Course *Continued*

(Continued from page 2)

reduction in caries progression. It was pointed out that nine of the ten articles favorable to ACP were written by a research group that holds the patent for CPP-ACP. Dr. Mitchell concludes that there is insufficient clinical trial evidence (both qualitative and quantitative) to make any recommendations.



“Are local chemotherapeutic agents effective in treating periodontal disease?” by Steven Hokett, D.D.S., M.C.R., assistant professor in the department of periodontics and a private practitioner

Conclusions regarding local delivery of chemotherapeutic agents are as follows: they do not replace the necessity for thorough scaling and root planing (SRP); there is no best device for controlled release of agents; SRP is only a monotherapy; there is no universal drug for use on all patients; use of these agents does not justify extending the time interval of maintenance visits; and there is no data to support a reduction in the need for periodontal surgery. Systemic drugs used in conjunction with SRP are as effective as local delivery. Local delivery is recommended in cases with refractory/recurrent periodontitis or with medically compromised patients. There is limited research to also support usage with ailing/failing implants. Dr. Hokett uses these agents when localized recurrent and/or residual probing depth of 5mm and inflammation are still present following conventional therapies.



“Does occlusion affect the health and stability of the stomatognathic system?” by Scott Dyer, D.M.D., M.S., Ph.D., assistant professor in the department of restorative dentistry and a private practitioner

Of 57 epidemiologic studies reviewed, 22 found no relationship between occlusal factors and TMD signs/symptoms while 37 did find a relationship. There is not a simple cause-effect relationship. No consistent occlusal condition led to TMD; occlusal conditions that did lead to TMD did not always -- or even a majority of the time -- lead to TMD. There is no single cause that leads to signs/symptoms. The major factors associated with TMD are occlusal condition, trauma, emotional stress, deep pain input and parafunctional activity. TMD signs/symptoms develop when normal function is impacted by an event (high crown, deep pain input, emotional stress, etc.) that exceeds the physiologic tolerance of the joint. Local changes (high crown, tissue trauma, deep pain, etc.) may be resolved by dental treatment but systemic changes (stress, CNS stimulation, etc.) are not likely to respond to dental therapies.



“Does a link exist between human papillomavirus and oral/oropharyngeal cancer?” by Jeff Stewart, D.D.S., M.S., associate professor in the department of pathology & radiology

A systematic review and meta-analysis included 17 studies that found the following associations between human papillomavirus (HPV) and head and neck cancer: 1) the association is strongest with tonsillar and oropharyngeal cancer; 2) the magnitude of the association is consistent with an infectious etiology by HPV; and 3) the method of viral detection may be an important source of variation of association in different studies. Multiple studies demonstrate that patients with HPV positive oropharyngeal cancer are more responsive to treatment and have a better prognosis than patients with HPV negative oropharyngeal cancer. Current evidence supports that there is a strong association between HPV and oropharyngeal cancer with a weak association between HPV and oral cancer.



“How do smoking, periodontitis, and diabetes affect implant success and survival? How can scientific evidence be found to answer a clinical question?” by Jason Walker, a fourth year dental student who graduated in June 2010

A team of dental students reviewed the literature as part of the treatment planning process for their 61-year-old male patient. The tools they utilized were PubMed and the ADA Center for Evidence-Based Dentistry. The literature indicated that periodontitis decreases implant success by 11 percent, any level of smoking decreases implant success and survival by 8 to 17 percent, and diabetes decreases implant survival by 2.2 to 10 percent. Some of the limitations they noted in the literature were that: 1) there is no research on the effect of the combination of periodontitis, diabetes and smoking on implant success/survival, 2) the definitions of “success” and “survival” of implants are not standardized; and 3) more analysis of the combination of risk factors is needed as only one meta-analysis was found.

Upcoming Evidence Dissemination Survey

The OHSU Practice-based Research in Oral Health (PROH) network is getting ready to launch an exciting new area of research pertaining to evidence dissemination and implementation in dental practice. It is a challenge to determine which new developments in materials, equipment and techniques are supported by evidence. This study -- which will only take 30 minutes or less of your time -- will assess dentists' preference for receiving summaries of articles from the peer-reviewed literature.

The project: Two articles will be selected that pertain to a common topic. Each article will be summarized in two different ways. One abstract will be developed entirely in writing, and the other abstract will be an audio/video recording. The participants will receive an email that will contain either a written abstract, or a direct link to the audio/video recording. The email will also contain a direct link to a short electronic survey as well as a copy of the full-length article for them to read, if they so desire. The participants will be asked to first review the abstract then go to the link for the survey. The survey will question them on the ease, convenience, time, understanding, content and effectiveness of the abstract. After they complete the survey, we will send participants the second article, done in the other format, and a short (seven to 10 questions) second survey.

The entire study will be conducted electronically. Send your email address to barnesc@ohsu.edu to be certain you are included. Also, check with your study club and other colleagues, and send us the names and email addresses of any dentists who are willing to participate. We hope to launch the study later this year.

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SAVE THE DATE

October 29, 2010

Seventh Annual PROH Conference

Details inside



OREGON
HEALTH & SCIENCE
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Newsletter of the Practice-based Research in Oral Health network

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