

ALUMNI NEWS

pediatric dentistry

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Videoconferencing: new era for residents and Yakima–UW pediatric dentistry connection

THE YAKIMA-BASED expansion of the UW Pediatric Dentistry residency program is underway. The first two residents, Geoff Ping and Kimiko Kika, live and work in the Yakima area while “attending” seminars in Seattle.

The new residency program required the creation of a new curriculum for the residents, based at Yakima Valley Farm Workers Clinic, resulting in a “re-tooling” of the existing curriculum to ensure equivalency between the Yakima and Seattle sites. This new curriculum has specific technical requirements to enable distance learning and teaching.

The technical infrastructure requires:

- access by residents to the internet;
- classroom equivalency with videoconferencing equipment available to link the UW Pediatric Dentistry department with the new Lincoln Avenue Yakima Valley Farm Workers Clinic;
- a clinical hookup that enables live consults.

Computers have been set up in the Yakima clinic’s resident room for self-directed online learning. Each site also has a videoconference room with a modular Polycom videoconferencing system which allows participants at each site to view a PowerPoint presentation and simultaneously participate in two-way audio communication. For example, the Yakima-based residents can “attend” the regularly scheduled resident seminars with the Seattle-based residents. They are able to see and ask questions of the Seattle-based faculty person giving the lecture. In turn,



Dr. Wendy Mouradian makes a presentation in the conference room of Pediatric Dentistry in Seattle. See the Yakima audience on page 2.

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Box office hit?

New ABCD video highlights program benefits

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Amid cheers and tears

Our graduates demonstrate the other “L”

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Reducing the caries epidemic

Biotech research conference looks for solutions



Each site has a videoconference room with a modular Polycom videoconferencing system, allowing participants in Yakima (left photo) and Seattle (above) to view a presentation and participate in two-way audio communication. Yakima-based residents, Drs. Kimiko Kika and Geoff Ping (left), are shown “attending” a regularly scheduled seminar as seen on the Seattle monitor. A small view of the Seattle room is inset in the lower right corner of the screen. The camera is directly below the monitor in Seattle (left photo) while the projector showing the presentation in Seattle is suspended from the ceiling (photo above).

Videoconferencing allows improved access to rural areas

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the lecturer can see the Yakima conference room audience and speak “directly” to the residents.

The clinical connection between the programs will allow live consultations chairside as well. An intra-oral camera in Yakima is linked to the videoconferencing system via the internet. Images of clinical cases can be uploaded so that faculty in Seattle can provide immediate observation and assistance.

The UW-based videoconferencing system in the Pediatric Dentistry department is the only functional system dedicated solely to teaching within the School of Dentistry and was made possible by a grant from the Health Resources and Services Administration (HRSA).

Videoconferencing allows access to rural areas where other educational solutions may not be practical or cost-effective. It is much more engaging than distributing a videotape of a lecture and will allow our residents in Seattle and Yakima to develop personal and professional connections.

Our partnership with the Yakima Valley Farm Workers Clinic will enable residents in this new program to complete the majority of their training within the newly constructed Lincoln Avenue facility in Yakima. Residents will treat patients of the Farm Workers Clinic and will interact with us in Seattle to receive the bulk of their didactic training toward the certificate in pediatric dentistry.

The clinical connection between the programs will allow live consultations chairside as well.

Dr. Berg assists with \$22 million research grant, largest ever awarded UW School of Dentistry

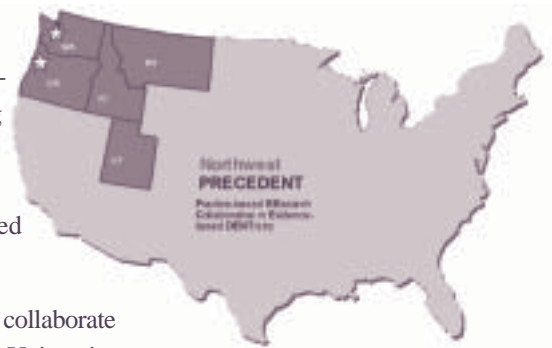
The UW School of Dentistry has been awarded two research grants totaling \$22 million to organize a seven-year research project. Dr. Joel Berg will lead the UW clinical sections to create and conduct studies through a network of 150 dentists in Washington, Oregon, Idaho, Montana and Utah.

The grants from the National Institute of Dental and Craniofacial Research (NIDCR), part of the National Institutes of Health (NIH), are the largest ever received by the Dental School. The goal is to develop research infrastructure to generate practical, timely information for dental practitioners in a diversity of practice settings.

Program participants in “PRECEDENT” (Practice-based Research Collaborative for Evidence-based Dentistry), will conduct clinical oral health research using a network of 150 practitioners from throughout the five states operating within their own practices, in their own communities, and on their own

patient pools. Participating providers will receive benefits including 12 hours of training/CDE credit, a faculty appointment, and decreased CDE costs for other offered courses.

The UW School of Dentistry will collaborate with Oregon Health and Sciences University and use the Washington Dental Service database. One grant, \$14.7 million (Dr. Tim DeRouen, UW PI), will be used to develop the research network and pay for 15 to 20 studies over the course of seven years. The second grant, worth \$7.5 million (Dr. Brian Leroux, UW PI), will establish a data-coordinating center for the network to enroll patients in clinical trials through local dental offices. Dr. Joel Berg, as grant co-investigator, will manage the clinical activities of the grant in Washington, Idaho and Montana, with his colleague at OHSU, Dr. Tom Hilton, managing similar activities in Oregon and Utah.



A network of 150 practitioners from the five states will conduct clinical oral health research within their own practices.

Biotech and Biomaterials research aims to reduce the caries epidemic in nation’s neediest children

The Pediatric Dentistry department hosted *Biotech and Biomaterials Research to Reduce the Caries Epidemic* conference in Seattle, June 13 – 15. Coordinated by Dr. Rebecca Slayton, the conference developed a research agenda to leverage new discoveries and lead to innovative approaches to preventing dental caries.

National and international speakers made this conference outstanding. *Public-Private Partnerships to Advance Technologies for Neglected Diseases* was presented by guest speaker Christopher J. Elias, MD, MPH, president of the Program for Appropriate Technology in Health (PATH). Speakers from the University of Washington were Drs. James Bryers, Peter Milgrom, Buddy Ratner, David Stahl, Joel Berg, Phil Weinstein, Beverly Dale-Crunk, Donald Patrick, Asuman Kiyak and Pierre Mourad. From the rest of the country speakers included Drs. John Featherstone, Domenick Zero, Clemencia Vargas, Burt Edelstein, Vince Fischetti, Phil Messersmith, John Cisar, Howard Kuramitsu, Danielle Reed and Eleni Kousvelari. Dr. Philip Marsh joined the conference from the U.K. and Dr. Per Axelsson from Sweden.

Plenary sessions focused on Disparities in Children’s Oral Health; Marketplace Opportunities for Dental Caries-Related Technologies; Current Evidence for the Use of Fluoride,

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Amid tears and cheers, our graduates become new leaders



Dr. Kristin Johannsen (left) and Dr. Victoria Vu wearing the hand-made leis presented at the ceremony. The leis, a tradition, are sent each year by Dr. Wes Odani of Hawaii. They were hand-made by Mrs. Odani.

IT'S NOT LUCK—it's leadership, the other "L" word, that our graduates demonstrate and inspire us.

That was Dr. Joel Berg's message to graduates, their families and friends attending the 2005 Pediatric Dentistry graduate celebration June 24 at the Seattle Yacht Club.

Drs. Kristin Johannsen and Victoria Vu successfully completed the two-year MSD program. Dr. Rama Oskouian, already a pediatric dentist, completed her fellowship to receive an MPH. Dr. Berg pointed out how all three trainees being honored demonstrated the best qualities of three kinds of leadership.

None of these people accomplished their goals based upon luck, Dr. Berg noted. It was "the other 'L'—leadership" which they used. "It starts with the individual," he said. "We've created three wonderful leaders."

Referring to current writing about leadership, he noted several different types of leaders. Among the leadership characteristics he mentioned were a quiet demeanor, careful assessments, determination to create a better environment, and empathic listening. These qualities represented by the honorees inspire us to make change, Dr. Berg said.



Dr. Rama Oskouian (above left) and Dr. Wendy Mouradian, faculty celebrate Dr. Oskouian's new MPH.



OLD AND NEW RESIDENTS gather at the graduation celebration. (Left photo) Pictured (left to right) are Drs. Troy Hull¹, Yoo-Lee Yea³, Mai Le¹, Kimiko Kika¹, Rama Oskouian^F, Kristin Johannsen^G, Joseph Kelly³, Leena Bitar², Kristi Linsenmayer², Roopa Purushothaman¹, Amy Luedemann¹, Geoff Ping¹, and Victoria Vu^G. Not pictured is Dr. Mark Stapleton². He and his wife welcomed the arrival of their first child that evening. Superscript following names indicate graduate^G, fellow^F, or year in program¹.

UW resident Dr. Yoo-Lee Yea awarded OMNII research fellowship at AAPD annual meeting

DR. YOO-LEE YEA, a second-year resident in our three-year MSD/MPH program, earned a 2005-2006 OMNII postdoctoral research fellowship presented at the American Academy of Pediatric Dentistry annual meeting in June. This is the second year in a row the fellowship was awarded to a University of Washington pediatric dentistry resident.

Dr. Yea was awarded the fellowship to conduct a year-long study comparing four different brief caries risk assessment tools. For this study, Dr. Yea plans to recruit 200 patients, aged 12 to 36 months, who present for well-child visits at the Harborview Medical Center. Dr. Yea will administer four caries risk assessment tests to each of the 200 participants and then conduct a follow-up dental exam on each patient six to eight months following the initial assessment. The four tests Dr. Yea will evaluate include an oral questionnaire given to the parent or guardian, the Cariostat plaque acid test, the Clinpro Cario L-Pop lactic acid test, as well as plating of saliva on agar and monitoring growth of *Streptococcus mutans* and *Lactobacillus*. The results of Dr. Yea's study will be presented at next year's annual meeting of the American Academy of Pediatric Dentistry.

"We in Pediatric Dentistry are very proud of our graduate students' participation in this year's annual meeting," said Dr. Joel Berg, Chair.

Dr. Kristin Johannsen presents DIFOTI research

Dr. Kristin Johannsen, last year awarded a 2004-2005 OMNII postdoctoral research fellowship, presented her findings for a year-long study of agreement between DIFOTI (Digital Imaging Fiber-optic Transillumination) and bitewing radiographs for diagnosing interproximal caries.

The study showed moderate agreement between diagnoses using the two types of images, with 70 percent agreement for diagnosing caries in enamel and 80 percent for diagnosing caries in dentin. Dr. Johannsen found that the observers more frequently diagnosed caries in enamel using bite-wing radiographs, but more frequently diagnosed caries in dentin using DIFOTI. While Dr. Johannsen's findings indicate that DIFOTI shows promise for diagnosing interproximal caries, she suggested that further work with the device is warranted. Further work would include studies to determine if video clips captured using DIFOTI might prove to be more useful than the still images evaluated in her OMNII-award winning work.

Dr. Victoria Vu presents findings on sealant comparison

In addition to our two OMNII award winners, Dr. Victoria Vu made a poster presentation showing the results of her definitive study comparing sealant retention following the use of a self-etching adhesive system versus a conventional phosphoric acid etch sealant system. For her study, Dr. Vu recruited 110 patients from the University of Washington Pediatric Dentistry Clinic. Sealants were applied to four first permanent molars in each of these patients. For 55 of the patients, 35 percent phosphoric acid etch was applied to the left side of the mouth and self-etching adhesive was applied to the right side of the mouth. For the other 55 patients, self-etching



Ken Awamura (7), Vinnie (8) and Ben (6) Lombardi, and Clara (4) and Tara (2) Liu accompanied their parents attending the meeting.

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Pediatric Dentistry helps conduct ‘Smile Survey 2005’

SMILE SURVEY 2005 screening is done. Members of the Department of Pediatric Dentistry helped screen children in Snohomish County—now they await the results.



Dr. Rebecca Slayton examines a child for “Smile Survey 2005.”

Every five years since 1994, the Washington State Department of Health conducts an evaluation of the oral health of children in the state. Grade schools, Head Start, Early Head Start and Early Childhood Education and Assistance Programs (ECEAP) throughout the state were invited to participate.

Examiners were calibrated at a training session last October and then went to each site to perform the examinations, using standardized forms. “I was pleased to be able to participate in this year’s survey,” said Dr. Rebecca Slayton, faculty member. She worked with LeeAnn Cooper, RDH, Snohomish Health District Oral Health Consultant, to examine children in Head Start and Early Head Start classrooms in Everett, Monroe and Sultan.

Dr. Slayton was assisted on a number of these screenings by Dr. Leena Bitar, pediatric dentistry resident, and Ben Jones, research scientist. We look forward to seeing the compiled results of this year’s Smile Survey.

UW residents present research at AAPD meeting

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ing adhesive was applied to the left side of the mouth and 35 percent phosphoric acid etch was applied to the right side. Delton sealing material was used on both sides of the mouth. Sealant retention was evaluated upon placement and six months later for 92 patients.

Dr. Vu observed that the retention rate for conventional phosphoric acid was 2.5 times

greater than for the self-etching adhesive system at six months. The marked difference between the two methods in six-month retention rates is unlikely due to technical error during application, since the necessity for initial re-etch or repair at placement was similar for the two methods. Dr. Vu’s poster presentation generated considerable interest from clinicians, academics, and officials in industry alike.

— Dr. Sue Coldwell

Biotech conference focuses on caries epidemic

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Chlorhexidine and Xylitol; Remineralization/Caries Arrestment Strategies; DNA Microarray Technology for Monitoring Microbial Biomarkers in Oral Biofilms; Recognition Molecules for Oral Biofilm Formation; Dental Plaque as a Biofilm and a Microbial Community; Controlling Pathogenic Bacteria With Phage Lytic Enzymes; and Inhibiting Bacterial Attachment and Proliferation. In eight different break-out sessions speakers and participants brainstormed improvements for current technologies and strategies for new methods to manage dental disease.

The conference was partially funded by a grant from NIDCR with additional support from the Northwest/Alaska Center to Reduce Oral Health Disparities, University of Washington Engineered Biomaterials (UWEB), the UW Salivary Diagnostics Program, The Whitaker Foundation, Colgate-Palmolive Co., Danisco, Inc., and Kerr Corp.

What every physician should know about oral health: Elective offered medical students for first time

“**WHAT EVERY** Physician Should Know About Oral Health” was offered spring quarter for the first time in the School of Medicine. Designed for medical students, it was open to all health science students.

The primary goal of this elective is to teach medical students basic concepts of oral health and disease. It also modeled and encouraged medical-dental interactions for future healthcare collaboration. It was developed after a survey of medical students given two years ago showed low scores on knowledge of oral health across all four years of medical school, although students showed positive attitudes towards an oral health curriculum. As a result, the School of Medicine created an Oral-Systemic Health Theme Committee and approved this oral health elective.

Based in Pediatrics, the course was co-sponsored by the Department of Pediatric Dentistry and Family Medicine with assistance from the Department of Medical Education and Bioinformatics. A dentist-physician team taught, and most classes offered a patient in-

terview or a “hands-on” portion taught by dental students. Weekly seminars included didactic information on oral health topics including Oral health status and access to care; Caries 1: caries process in children, biofilms and risk assessment; systemic impact of oral disease; and oral impact of systemic disease and of medical therapies.

Course Directors were Wendy Mouradian, MD, MS, Departments of Pediatrics and Pediatric Dentistry; Charlotte Lewis, MD, MPH, Department of Pediatrics; Rebecca L. Slayton, DDS, PhD, Department of Pediatric Dentistry; Amanda Keerbs, MD, Department of Family Medicine; Deepti Gupta, Medical Student Representative; and Rachel Evans, Dental Student Representative.

Dental faculty and affiliates were Drs. Joel Berg, Rebecca Slayton, Marty Lieberman, Mae Chinn, Ricardo Schwedhelm, Bart Johnson, Philippe Hujeol, Bob Johnson, Bea Gandara, and Rama Oskouian. SPHCM Maternal and Child Health trainee Anne Reeves Foster was the teaching assistant.

New video shows importance of ABCD program

A NEW VIDEO will promote the Access to Baby and Child Dentistry (ABCD) program to multiple audiences including dental providers, Washington State and regional health officials, and oral health policymakers in other states. The video is designed to explain the program and encourage support of it, especially by recruiting additional dentists to participate as ABCD providers.

“This video does an excellent job of explaining the purpose and importance of the ABCD program. I urge all interested parties to view it,” said Dr. Joel Berg, Chair. “Anyone who wants to know more about ABCD and the need for such programs will find this video interesting and relevant.” Representatives from all organizations that fund and run ABCD participated in the project. These included representatives from the UW, Medical Assistance Administration (MAA), Washington Dental Service Foundation (WSDF), as well as a health department and a dental society supporting an ABCD program in their region.

The video/DVD is funded by a grant from the Medical Assistance Administration (MAA) and is available at no charge to those groups using it for training or as an adjunct to the current ABCD PowerPoint presentation. For more information, contact Jessica Mortensen, ABCD coordinator, UW Department of Pediatric Dentistry, 206-543-4885.



Dr. Joel Berg
*Professor,
Lloyd and Kay Chapman
Chair for Oral Health*

What a difference videoconferencing makes: WOW!

WE ARE EXCITED TO LAUNCH the extension of our residency program into the Yakima Valley (please see the article on page 1) made possible by our partnership with the Yakima Valley Farm Workers Clinic in its beautiful new facility. The new state-of-the-art video conferencing facility in our conference room in Seattle as well as in the newly constructed facility in Yakima allows both teaching and consultation. We can actually video conference anywhere in the world, simulcasting lectures, including PowerPoint slides, and have discussions with individuals at distant sites or vice versa. If you are in Seattle, I invite you to come see this wonderful new technology.

Dr. Ki-Taeg Jang, DDS, MSD, PhD, associate professor, Department of Pediatric Dentistry, College of Dentistry, Seoul National University, is visiting us this summer, observing in the clinic and seeking opportunities to develop collaborative research connections between himself, his university, and us. Having visited Seoul last year, I can see how the strengths of our two universities could bear fruit in collaboration. The research labs I saw at Seoul National University College of Dentistry are exceeded in their size and quality by none I have seen in any other dental school. They are engaged in significant work in biomaterials, bioengineering, and basic biological research.

Recently I attended a conference coordinated by our faculty member, Dr. Rebecca Slayton, assisted by others, on biotechnology approaches to help prevent caries in children. Sponsored by the Center for Disparities and Caries here at the University of Washington and the National Institute for Dental and Craniofacial Research, the conference drew experts from all over the world in disciplines primarily outside of dentistry including microbiology and bioengineering. We can incorporate these technologies and methods with our expertise in our Early Childhood Oral Health (ECOH) program to solve this devastating problem.

We have started strategic discussions with various partners on the University of Washington campus toward the creation of a new Pediatric Dentistry Clinical Facility. Because of rapid growth in our department and the tremendous needs we have in patient care, education and research, we have determined that a new facility incorporating various aspects of our program in a much broader capacity is needed. Therefore, we have embarked upon an ambitious plan requiring us to move our entire clinical operation off site where we can maintain predoctoral teaching, postgraduate education, and faculty practice to allow us to retain the brightest and best in the country in our program. As plans evolve, I look forward to telling you more.

A handwritten signature in cursive script that reads "Joel Berg".

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Department of Pediatric Dentistry
University of Washington
Heather Marks, Editor
Box 357136
Seattle, WA 98195
Phone: 206-543-4885
Email: hmarks@u.washington.edu

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UNIVERSITY OF WASHINGTON
School of Dentistry
Department of Pediatric Dentistry
1959 NE Pacific St.
Box 357136
Seattle, WA 98195-7136

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