

MARK YOUR CALENDARS!

WINTER - SPRING 2013

Managing a Successful Dental Practice— Developing a Business Worth Smiling About

Designed for dentists who own their practice, this nine-day program delivered over three months will develop the strategic and operational skills and abilities to ensure an efficient, patient-centred business.

Each topic addressed has built-in exercises that help you focus on your own practice, from identifying your key performance issues, to developing a sound assessment of the current health and future prospects for your practice. There is also peer discussion to identify shared problems and a range of solutions. Guest speakers will deliver seminars on topics such as managing wealth and investment strategies, among others.

Developed and presented in partnership with the Sauder School of Business, the Faculty of Dentistry and the British Columbia Dental Association, this innovative new program is delivered by recognized industry leaders and leading business researchers.

Open to dentists and their staff.

For spring dates and more details, visit www.dentistry.ubc.ca/cde

WINTER - SPRING 2013

EVENTS FOR STUDENTS AND ALUMNI

**5th Annual Battle of the Bands:
Faculty/Alumni vs. Students
January 18, 2012 (Friday)**

**Young Alumni & Student Reception
Pacific Dental Conference 2013
March 7, 2013 (Thursday)**

MORE EVENTS FOR ALUMNI

**Annual Alumni Reception
Pacific Dental Conference 2013
March 8, 2013 (Friday)**

**Volunteer Community Clinics—Upcoming
January 5, 2013 (Saturday)
January 19, 2013 (Saturday)
January 26, 2013 (Saturday)
February 9, 2013 (Saturday)
February 16, 2013 (Saturday)
February 23, 2013 (Saturday)
April 6, 2013 (Saturday)**

**Alumni Reception
Ontario Dental Conference
May 3, 2013 (Friday)**

More information about these events can be found on pages 36 – 37 in this issue of *Impressions* or at www.dentistry.ubc.ca/alumni

IMPRESSIONS

204 - 2199 Wesbrook Mall
Vancouver BC Canada
V6T 1Z3

T 604 827 3335
E terrysw@dentistry.ubc.ca
dentistry.ubc.ca

Update your address at www.dentistry.ubc.ca/alumni or email alumni@dentistry.ubc.ca

Publisher Charles Shuler
Editor-in-chief Terry Wintonyk
Writers Lorraine Chan, Heather Conn, Mari-Lou Rowley (Pro-Textual Communications), Terry Wintonyk

Contributors Jane Merling, Jenn Parsons
Stylistic/copy editor Vicki McCullough
Photography Heather Conn, Tiffany Cooper, Martin Dee, Don Erhardt, Terry Wintonyk
Design Letterbox Design Group

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Return undeliverable Canadian addresses to:
UBC Dentistry (Impressions)
204 - 2199 Wesbrook Mall
Vancouver BC Canada V6T 1Z3



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FALL 12

IMPRESSIONS

2	Dean's Message	12	UBC Dentistry in Haida Gwaii	22	Curriculum Renewal Earlier Clinical Skills	27	Off the Campus Dental Students	32	Class Notes and Events
3	News	18	In Vivo Imaging Voyage of Discovery	26	Off the Campus Dental Hygiene Students	28	Donor Impact Stories Donor Honour Roll	39	CDE Calendar

Advancing Oral Health Through Outstanding Education, Research and Community Service



a place of mind

THE UNIVERSITY OF BRITISH COLUMBIA

Dean's Message



*Dear Colleagues,
Welcome to the fall 2012 edition of UBC Dentistry's Impressions. Once again, I am delighted to present the Faculty's undertakings and successes in the areas of teaching, learning, research and community involvement.*

This year has been noteworthy for several significant accomplishments. The Centre for High-Throughput Phenogenomics moved to the new Pharmaceutical Sciences Building, and by mid-October all the equipment was ready for use by UBC scientists. We also completed the Graduate Student Commons on the first floor of the John B. Macdonald Building (JBM), so now our graduate students have a "home" where they can study, plan patient cases and evaluate the data from their research. With the completion of both these projects, which were in the planning and construction phase for one to two years, student learning opportunities have been much improved and research productivity increased.

We are not yet done with renovations in JBM—architects are completing plans for additional dental clinic space for the graduate programs and for renovated research laboratories on the third floor. If you haven't been in the old building for a while, please plan a visit to see how the renovations have helped advance the goals of our Strategic Plan.

The major articles in this *Impressions* focus on significant accomplishments in research and

community service. You can read about Dr. Nancy Ford, who was recruited to be the director for our Centre for High-Throughput Phenogenomics. I believe you will find Ford's career path and plans for the centre to be very interesting. She has already established productive collaborations with several departments and faculties at UBC, and the coming research results should be very important. We also feature Dr. Christopher Zed, who has led the development of the oral health clinical services on Haida Gwaii, which have now expanded into oral health education in the public schools on the islands. These programs have become a model for the delivery of oral health services in Aboriginal communities. And, Dr. Leandra Best is leading a curriculum revitalization that has allowed us to move pre-clinical learning in restorative dentistry to the beginning of the second year. These changes provide our students with enhanced clinical learning opportunities and the ability to participate in patient care earlier, starting between second and third year.

It is clear that the research accomplishments of our faculty members are leading to changes in the diagnosis and treatment of patients. In

this issue, we report on research that shows genetic mutations can have predictive value in determining which premalignant oral lesions have the greatest potential to become squamous cell carcinoma. Additionally, you will learn about new people, places and programs in the Faculty that further demonstrate our progress towards achieving our Strategic Goals.

I hope you share my excitement about the current accomplishments in the Faculty of Dentistry. We have outstanding students, staff and faculty members, who are leading our profession into the future.

All the best,

Charles Shuler, DMD, PhD
Dean and Professor, Faculty of Dentistry

PHOTO BY MARTIN DEE | COVER PHOTO BY HEATHER CONN

NEWS

Bioimaging Centre Moves to New Location and New Capability

Soon after the new Faculty of Pharmaceutical Sciences building opened on September 18 of this year, it was populated with its new occupants—including UBC Dentistry's state-of-the-art tissue and material imaging facility, the Centre for High-Throughput Phenogenomics. The spacious 380-square-metre (4,100 sq. ft.) purpose-built facility was developed with an overall project cost of \$9.6 million. It is located in the basement of the new building, which won a 2012 Canadian Architect Award of Excellence and is built to LEED gold certification.

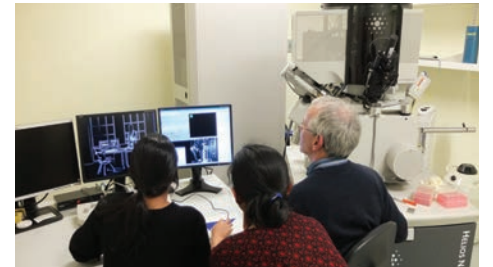
The broad goal of the imaging centre is to provide qualitative and quantitative information about the structure of specimens, both in vivo and ex vivo. New imaging equipment installed in the new space supports high-volume acquisition, analysis and storage of data, for the purpose of enhancing scientific discovery. In addition to the microscopy equipment that was present in the original facility, the new centre includes a focused ion beam scanning electron microscope, a white light laser confocal microscope, optical projection tomography, a MALDI LTQ Orbitrap tandem mass spectrometer and a variety of in vivo and in vitro micro-CT scanners, one of which is the fastest in Western Canada.

As a core facility, the centre integrates imaging and molecular information across the spectrum, from the molecular level (DNA,

RNA and protein) through the microscopic level (electron, laser and light) to the macroscopic level (computed tomography and morphological scanning), and allows quantitative analysis of form. The secure centre also includes a leading-edge animal facility, ample specimen preparation areas and a multi-station computer lab for researchers to analyze data on-site.

The centre's central campus location is just steps away from UBC Dentistry's John B. Macdonald Building. Its location also plays an important role in the development of core research, with personnel drawn from multiple disciplines. In addition to the UBC faculties of Dentistry, Medicine and Pharmaceutical Sciences, the centre already has new on-campus users from Engineering and Science, as well as the private research community.

"There is an enormous advantage to sharing equipment and resources in one specialized campus facility," says Dr. Nancy Ford, assistant professor in Dentistry and director of the centre. "It allows for people to be trained to use the equipment correctly, and if they need assistance to maximize its use, we're here to help—experts are on-site to assist researchers." Moreover, Ford anticipates that propinquity among researchers will lead to new, unexpected collaborations, and exposure to novel or different methods of imaging will accelerate the advancement of researchers' work.



The Helios 605, a focused ion beam scanning electron microscope, is one of many pieces of imaging equipment in the Centre for High-Throughput Phenogenomics, UBC Dentistry's tissue and material imaging facility located in the new Faculty of Pharmaceutical Sciences building.

Ford is an expert in micro-computed tomography, X-ray imaging, physiological gating, image quality metrics and pre-clinical imaging. Recently recruited as the centre's director, she has a scientific research focus and the technical expertise required to ensure that the centre develops as initially envisioned. (Read more about Nancy Ford's work on page 18 in this issue of *Impressions*.)

The Centre for High-Throughput Phenogenomics is funded by contributions from the Canada Foundation for Innovation, the BC Knowledge Development Fund and the UBC Faculty of Dentistry. For more information about the imaging centre, including equipment descriptions, equipment bookings and the development of protocols for specific needs, visit www.phenogenomics.dentistry.ubc.ca.

The Centre for High-Throughput Phenogenomics plays an important role in bringing together some of the university's best and brightest researchers to study the development, diseases and regeneration of bone—an undertaking not presently occurring anywhere else in Canada. Read more about this in the fall 2009 *Impressions* article, "Moving to the Forefront of Bioimaging—A New High-Throughput Centre at UBC Dentistry," online at www.dentistry.ubc.ca/go/moving

PHOTOS BY TERRY WINTONYK



The John B. Macdonald Building

JBM Revitalization

Recent renovations to the John B. Macdonald Building (JBM) include eight conference rooms, a student learning centre with 80 computer work stations, a modern plaster lab, men's and women's locker rooms with showers, a student lounge with a kitchen and an atrium, plenty of informal learning space, and the Graduate Student Commons.

Future plans for the building include converting the remaining half of the decommissioned clinic into new operatories for the graduate clinical specialty programs, and on the third floor, creating new laboratory space. Looking further ahead, initial planning for the addition of two more storeys to JBM has begun—the building's original 1968 plan allowed for this kind of expansion.

Support for some of these projects has come from generous donors who recognize the importance of not only keeping ahead of the rapid advancements in knowledge and technology, but also in optimizing the learning experience for students. Dentistry has received no support from either UBC or the province to convert unused space in JBM into modern teaching, learning and research facilities.

Read more about JBM renovations and the generous supporters online at www.dentistry.ubc.ca/jbmreno.

To learn more about opportunities to support the revitalization of the JBM, contact the UBC Dentistry Development Office at 604-822-6808.

The Graduate Student Commons—Enhancing the Student Experience

In record speed—less than two years of planning and construction—a new study space in the John B. Macdonald Building (JBM) was ready to greet graduate students as this fall semester began.

The Graduate Student Commons is a 242-square-metre (2,605 sq. ft.) facility with study carrels, meeting rooms, a kitchen, and washrooms with showers and lockers. All are finished with the modern architectural touches like glass walls and calming wood tones that have characterized other recent renovations to JBM.

A decommissioned graduate periodontics clinic, an oral surgery and several small offices on the first floor were gutted and renovated for the project.

“We built it intentionally as one space for all the clinical specialties—in fact, for all graduate students across the programs—to help foster a sense of collaboration, of working together, of integration,” says Dr. Charles Shuler, dean of the Faculty. “And by first accounts I think we’ve succeeded.”

UBC Dentistry is currently the only dental school in Western Canada that supports five graduate education programs: Periodontics, Prosthodontics, Endodontics, Orthodontics and Pediatrics. There are 66 students enrolled in these programs.

With the huge growth of the graduate programs, one of the biggest issues has been where to put students, notes Dr. Ed Putnins, associate dean of Research, Graduate & Postgraduate Studies. “We had grad students sprawled around the building. There was no space to relax, no secure space for belongings, no place to change after a day in clinic, and most importantly,” he says, “we lacked a dedicated space where all graduate students

can discuss and develop complex treatment plans in a multi-faceted learning structure.”

With a full suite of clinical specialty graduate programs, the dental school is able to serve more patients with complex case needs. The case management of these patients—most of whom have limited means—often involves consultation with graduate students and faculty in other specialty disciplines. Not only do patients receive comprehensive attention, but graduate education at UBC is enhanced by cross-discipline consultation in a dynamic and engaging group-learning environment. Three seminar rooms outfitted with high-definition plasma monitors for multidisciplinary treatment planning complement the individual carrels where students can study and conduct their research quietly.

“We consulted students for design input,” Putnins recalls, “and determined that the architectural principal to guide the space design was to first bring all grad students together by their shared common experience, rather than by discipline.”

Dr. Les Campbell, a graduate student in Endodontics, says the enhanced learning created by mixing disciplines in a single space and by having vigorous discussion in enclosed seminar rooms is one more step in UBC's progress to become the grad school of choice. “It's a place to call our own,” he says, “and the impact on students of having an environment where we can share the highs and lows of grad student experience will be immeasurable. It creates morale and camaraderie and friendships that will last well beyond our years at UBC.”

The Graduate Student Commons opened on September 13, 2012. The apt facility name was first coined by professor and oral biologist Donald Brunette.



Graduate students and faculty in the Graduate Student Commons on opening day, September 13, 2012. The space is now fully furnished with study carrels that are also computer work stations.

PHOTO BY TIFFANY COOPER

Student Summer Program a Huge Success in 2012

For more information about the Summer Student Practitioner Program, including typical procedures performed by students, how to facilitate student matches to your practice next summer, and other pertinent details, visit www.dentistry.ubc.ca/sspp

The Summer Student Practitioner Program (SSPP) assembled an impressive number of students and practitioners this year. The program pairs incoming fourth-year dental students with practising dentists for two to six weeks during the summer. Thirty-two fourth-year students were paired with 41 dentists across BC and Northwest Territories communities, most of them rural locations. Twenty-one of the dentists were UBC alumni.

The SSPP gives students an opportunity to be part of the day-to-day operation and management of a dental practice. Not only does it provide students with additional clinical experience, but it also provides the opportunity to gain valuable insight into the practice of dentistry beyond the university campus. Additionally, the program helps students at UBC recognize the opportunities that exist throughout the province for establishing their oral health care career.

Twenty-five communities welcomed this past summer's SSPP placements: Abbotsford, Agassiz, Burnaby, Chilliwack, Comox, Dawson Creek, Elkford, Fort St. James, Hazelton, Kamloops, Mission, North Vancouver, Parksville, Penticton, Port Alberni, Port Coquitlam, Prince George, Smithers, Sooke, Surrey, Vancouver, West Vancouver, White Rock and Williams Lake in BC, and Yellowknife, NWT. To find out who sponsored dental students in 2012, see the “Thank You” page in this issue of *Impressions*.

The program is supported by both the College of Dental Surgeons of British Columbia and the British Columbia Dental Association.

A Ten-Year Longitudinal Study by UBC Dentistry Faculty Could Boost Oral Cancer Detection

UBC Dentistry professors Drs. Lewei Zhang, Catherine Poh and Michele Williams have taken a giant step closer to understanding the complex stages involved in malignant transformation, giving clinicians and their patients better information for treatment options.

In a study* recently published in *Cancer Prevention Research*, Zhang and colleagues identified a group of molecular markers that can help clinicians determine which patients with low-grade oral precancers are at high risk for cancer development.

This study, which spanned 10 years and built on a previous risk model that showed loss of heterozygosity may predict the progression of cancer, involved analyzing lesion samples submitted to the BC Oral Biopsy Service by dentists and surgeons from across the province.

“By analyzing patients with mild or moderate oral dysplasia through the years,

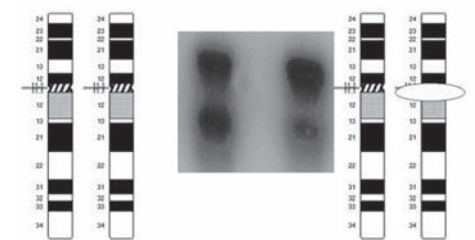
and including two additional markers to better differentiate patients’ risk, we were able to categorize patients into low-, intermediate- and high-risk groups,”

says Zhang, who is one of two oral pathologists running the provincial oral biopsy service.

Using the loss of heterozygosity model to reliably differentiate progression risk for oral precancers has tremendous implications for treatment management. Poh explains: “Patients with oral lesions can be grouped according to risk level. We can increase surveillance for patients with elevated risk, improve target intervention for high-risk patients, and spare a large number of low-risk patients needless screening and treatment.” In terms of possible guidelines, Williams suggests that follow-up and treatment could be tailored to a patient's risk level.

*Zhang L, Poh C, Williams M, Laronde D, Berean K, Gardner P, Jiang H, Wu L, Lee J, Rosin M. (2012). Loss of heterozygosity (LOH) profiles—Validated risk predictors for progression to oral cancer. *Cancer Prevention Research*, 5(9): 1081-1089.

Chromosome 9p21



Loss of heterozygosity

Normally an individual has two alleles—one from the mother and one from the father. Because these have different origins of inheritance, the genotype is called heterozygous (left). The new test for oral cancer risk detects change in the gene of interest within an allele. If a mutation occurs and one of the alleles is lost, this is loss of heterozygosity (right).

UBC Dentistry Partners with Vietnamese Hospital to Create \$8M Oral Health Research Centre



A long-term partnership between the UBC Faculty of Dentistry and the National Hospital of Odonto-Stomatology in Ho Chi Minh City, Vietnam, has been established. This collaboration will advance oral health research to study oral cancer, dental caries and craniofacial birth defects. Research centre space in the national hospital—an in-kind gift to the Faculty—is valued at \$8 million.

The UBC Dentistry & National Hospital of Odonto-Stomatology Oral Health Research Centre will provide a dynamic hub for education, research and knowledge transfer. The 1,200-square-metre (12,916 sq. ft.) facility is on the fourth floor of the national hospital.

“Through collaborative research, we aim to advance oral-facial health and scientific knowledge across international boundaries,”

says Dr. Charles Shuler, dean of the Faculty of Dentistry. An expanded presence of UBC Dentistry in Vietnam increases the quality and impact of its research and scholarship, and underscores the Faculty as a world leader in knowledge exchange and mobilization, he adds.

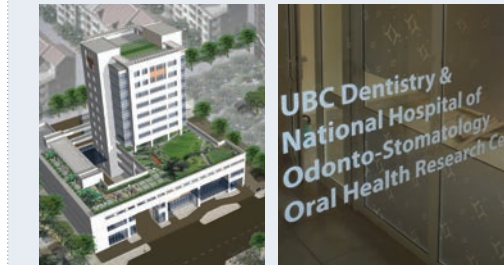
The centre will facilitate the transfer of knowledge to local and international researchers, to raise the baseline of oral health care in Vietnam and Southeast Asia, increasing the local capacity to treat their most pressing oral health issues (see sidebar).

“This partnership is a game changer for global health research and education,” says Dr. Christopher Zed, associate dean of Strategic and External Affairs. “The oral health research centre will increase the quality and impact of new discoveries and scholarship.” Zed points to the goals of the oral health research centre (see sidebar).

The Faculty of Dentistry has a long-standing history and commitment to Vietnam. Over the past decade, faculty members, general practice residents and dental students have rotated to Ho Chi Minh City to provide patient treatment and oral health education. They have treated a broad spectrum of diseases not typically seen in British Columbia—the experience subsequently benefits Canada’s multicultural dental health population.

“Our hospital is proud of co-operating with UBC,” says Dr. Lam Hoai Phuong, director of the National Hospital of Odonto-Stomatology. “It is a valuable opportunity to exchange knowledge between visiting dentistry residents, UBC faculty, Vietnamese scholars, dental students and general dentists.”

The centre officially opened on December 13, 2012. After an inaugural celebration, several UBC Dentistry scholars presented a series of seminars and lectures to their Vietnamese counterparts.



To discuss the mandate and direction of the oral health research centre, contact Dr. Christopher Zed, associate dean, Strategic and External Affairs, at czed@dentistry.ubc.ca.

Support for the centre currently includes the principal in-kind donation of space from the Vietnamese national hospital and the naming of a research lab by Septodont. Further contributions for naming space in the centre, and for travel fellowships for researchers and students, are encouraged. For more information, contact Jane Merling at 604-822-5886 or merling@dentistry.ubc.ca.

The UBC Dentistry & National Hospital of Odonto-Stomatology Oral Health Research Centre is located on the fourth floor of the national hospital in Ho Chi Minh City, Vietnam.

Research Areas of Oral Health Issues

ORAL/FACIAL ONCOLOGY

Oral cancer ranks as the fifth most common cancer in the world. In Vietnam, oral malignancies of all kinds are often not detected until individuals experience debilitating compromise of normal oral functioning.

Worldwide, Vietnam has the highest rate of smoking among males (63.4 percent).

CARIOLOGY

Over 80 percent of Vietnamese children suffer tooth decay. In the general population, the prevalence of caries is 67 percent; periodontal disease is 72 percent.

DEVELOPMENTAL BIOLOGY

Approximately one in every 500 babies in Vietnam is born with a cleft lip and/or cleft palate.

Goals of the Oral Health Research Centre

Expand familiarity with various disease processes and traumatic injuries involving the head and neck, especially with respect to pathologies of high prevalence in Asian populations.

Reciprocate education and research development that is beneficial to both Vietnam and Canada.

Gain competence in alternative modalities for the provision of oral health care in a less-resourced country, which can also be applied in Canada.

Faculty of Dentistry External Awards and Recognition in 2011 - 2012

RECIPIENT	AWARD/RECOGNITION
Dr. Marcia Boyd, Dean Emeritus	Honorary Degree, Dalhousie University
Dr. Mario Brondani, Assistant Professor	CADR-Quintessence-ACFD Visiting Professorship to visit McGill University, May 15 to 21, 2012, Montreal, Quebec, Canadian Association for Dental Research Awarded to attend the International Association of Dental Research 90th General Session, June 2012, Iguazu Falls, Brazil, Canadian Institutes of Health Research – Institute of Musculoskeletal Health and Arthritis, Institute Community Support Awarded to attend the Young Investigators Forum, June 2012, King City, Ontario, Canadian Institutes of Health Research – Institute of Musculoskeletal Health and Arthritis
Dr. Hui Chen, Clinical Assistant Professor	Clinical Research Award and Clinical Excellence Award, American Academy of Dental Sleep Medicine
Dr. Wa Sham Cheung, Clinical Part-Time Faculty	Distinguished Service Award, British Columbia Dental Association
Dr. Chris Clark, Professor Emeritus	Merit Award, British Columbia Dental Association
Dr. Karen Gardner, Clinical Associate Professor	U21 Award for Internationalisation, Universitas 21
Dr. Caroline Tram Nguyen, Assistant Professor	Awarded to attend the Innovation Competition Panel I5: Prevention and Cancer Outcomes, June 2012, Toronto, Ontario, Canadian Cancer Society Research Institute
Dr. Christopher M. Overall, Professor; Canada Research Chair in Metalloproteinase Proteomics and Systems Biology	Lifetime Achievement Award, International Proteolysis Society
Dr. Benjamin T. Pliska, Assistant Professor	2012 Robert E. Gaylord Teaching Fellowship Award, American Association of Orthodontists Foundation
Dr. Ravindra Shah, Director, International Relations	Honorary Doctorate of Philosophy, Chung Shan Medical University, Taichung, Taiwan
Dr. David Sweet OC, Professor; Associate Dean of Students	Honoured Member Award, College of Dental Surgeons of British Columbia Reidar F. Sognaes Award of Excellence in Forensic Odontology, American Academy of Forensic Sciences Queen Elizabeth II Diamond Jubilee Medal, Her Majesty Queen Elizabeth II

Keep up-to-date on all awards and achievements—including the annual Dean’s Night, graduation and teaching awards—at www.dentistry.ubc.ca/awards



Dr. Hui Chen at the American Academy of Dental Sleep Medicine 21st Annual Meeting in Boston, Massachusetts, on June 9, 2012. Chen received the Clinical Research Award for outstanding research efforts and the Clinical Excellence Award for having the most outstanding research project. Chen was also invited to present her recent clinical research titled “How Can Oral Appliances Designed for OSA Benefit Developing Children with Retrognathic Mandibles?” at the AADSM annual meeting.



Dr. Karen Gardner (C) receives the U21 Award for Internationalisation in Lund, Sweden, on May 10, 2012. Prof. Glyn Davis, Vice-Chancellor, University of Melbourne, Australia, is on the left; Prof. Per Eriksson, Vice-Chancellor, Lund University, is on the right.

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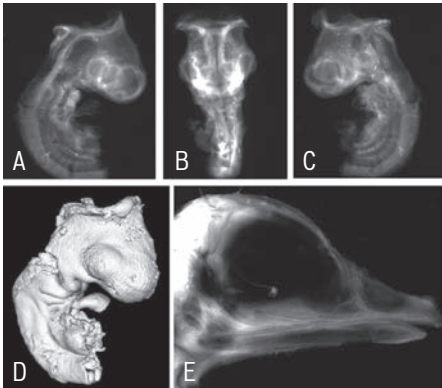
CIHR Grant to Unlock the Mysteries of Clefting Using New Tools

One of the most common birth defects in Canada is cleft lip, with or without cleft palate. Clefts arise during the embryonic period and lead to significant social and physical burdens for affected individuals. There are thought to be multiple genes that together contribute to increased risk of clefting. Environment also plays a role.

The Canadian Institutes of Health Research have awarded developmental biologist Dr. Joy Richman and imaging physicist Dr. Nancy Ford five-year funding, totalling just over \$639,000, to use new tools to study the biological mechanisms that contribute to an increased risk of facial clefting.

To study clefting, Richman uses the avian embryo because it is one of the few animals in which it is possible to directly work on the face while it is developing. Furthermore, it is possible to induce cleft lip reliably. (See *Impressions* fall 2010 “Chicken Embryos Shed Light on Facial Abnormalities” online at www.dentistry.ubc.ca/go/embryos.)

“Our goal in this grant is to increase or decrease the levels of growth factors specifically in the areas of the face that form the lip and to study their effect on lip fusion. We will be exploring the effects of one type of signal, Wingless-related (WNT) proteins, on facial shape, cell behaviour and gene expression,” Richman explains. “We will make surprising and significant discoveries about genes that coordinate cell movements in the face and thus contribute to increased risk of clefting. In addition to the normal genes, we are going to transfer, abnormal or mutated WNT genes into the embryo and study the effects on facial shape and lip fusion. The mutations will be identical copies of those known to cause a human genetic syndrome.” Richman’s goal is to explain the effect of the mutations on the way the protein works within the face.



Chicken embryo images collected with the OPT scanner using ultraviolet light. A-C: Rotational views of a three-day chicken embryo. D: An external surface view recreated from the same embryo as in A-C. E: Skull of a 12-day chicken embryo in which bone was stained with alizarin red and made transparent. The bones stained in this manner are naturally fluorescent.

Richman uses novel techniques, which she developed in her lab, to tag facial cells with fluorescent markers so their movements can be mapped within the growing face. This is the first time that the movements of facial cells will be observed in real time using time-lapse microscopy. The whole embryonic face will also be scanned, using an optical projection tomography (OPT) scanner, and reconstructed in 3D. Richman will team up with Dr. Nancy Ford, a 3D imaging specialist, to employ several cutting-edge analysis tools on scans of the embryos. Says Ford, “Using these tools, Dr. Richman will understand much more precisely how changes in gene function can increase susceptibility to clefting in 3D.” Results of the research will lead to better understanding of the causes of clefting, as well as other facial birth defects.

New Appointments: Full-Time Faculty



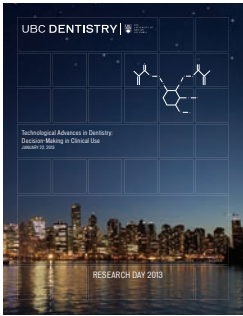
Dr. Leeann Donnelly

Leeann Donnelly, Dip DH, BDSc, MSc (Dental Science), PhD (Craniofacial Science), has joined the Faculty as assistant professor. Dr. Donnelly received her diploma in dental hygiene from Vancouver Community College in 1996. At the University of British Columbia, she received her Bachelor of Dental Science (Dental Hygiene) in 2002, Master of Science in 2005, and doctoral degree in 2012 for the dissertation “The Relationship Between Perceived Oral Health, Body Image, and Social Interactions Among Institutionalized Elders.” Donnelly has taught in both the Dental Hygiene Degree Program and the DMD program since 2002, and currently teaches in, and is the fourth-year coordinator for, DHDP. She also oversees the community service learning component for DHDP in the area of special care populations. Donnelly’s primary research interest is in the biopsychosocial effects of oral malodor. She also continues to investigate, develop and evaluate community outreach programs designed to further understand and improve the oral health of older adults; specifically, those who are institutionalized and other special care populations.



Dr. Ya Shen

Ya Shen, DDS, PhD, has been appointed assistant professor in the Department of Oral Biological & Medical Sciences. Dr. Shen received her Doctor of Dental Surgery degree in 1993, and a Doctor of Philosophy (Dental Science) in 2004, both from Wuhan University, Wuhan, Hubei, China. She also completed her endodontic specialty training in 2004 at Wuhan University, and from then until 2007, was an associate professor and in charge of clinical training in the endodontics postgraduate program. During 2006, Shen also worked as a senior research assistant at the University of Hong Kong Faculty of Dentistry. Shen was a clinical assistant professor at UBC’s Faculty of Dentistry from 2008 to 2011. She has published more than 50 papers in peer-reviewed journals and is a reviewer for several international journals, including *Journal of Dentistry* and *Endodontic Topics*. Shen’s main research interests are nickel-titanium instrument fracture mechanics, biofilms, dental materials and three-dimensional imaging in endodontics.



UBC Dentistry Research Day 2013 TECHNOLOGICAL ADVANCES IN DENTISTRY: DECISION-MAKING IN CLINICAL USE

Tuesday, January 22, 2013
UBC Student Union Building Ballroom

Technological advances in clinical practice continue to develop at an increasing rate. In-office cone beam computed tomography (CBCT) imaging and ultrasound machines allow unprecedented examination of patients. New computer-aided design and computer-aided manufacturing (CAD/CAM) systems and next-generation dental materials continue to transform patient care.

Research Day 2013 will highlight research in the areas of CBCT quality control, dosimetry and imaging of the pediatric patient. Participants will also discuss the paradigm shift to CAD/CAM systems, review material selection and examine the marginal fit in final restorations.

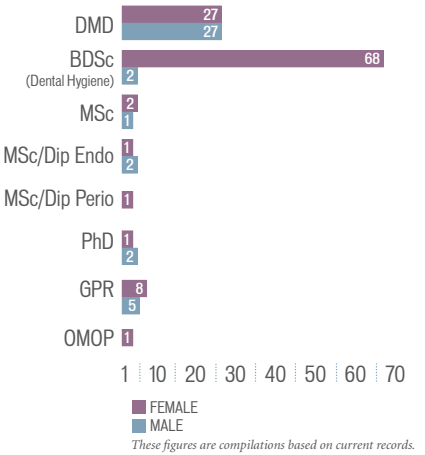
The Faculty of Dentistry is pleased to announce that the keynote address will be delivered by Dr. Jack Ferracane from the Oregon Health & Science University in Portland. A world-renowned speaker on dental resin composites, Dr. Ferracane will discuss research in the area of resin properties and performance enhancement.

Keep up-to-date at www.dentistry.ubc.ca/researchday

PHOTOS BY MARTIN DEE

Graduates and Residents of 2012

May 29, 2012, marked the 44th class of graduates from UBC Dentistry. This year, 134 people graduated from undergraduate and graduate programs. June 12 marked the ceremony for 14 residents who completed a postgraduate residency program. Here are the numbers:



Congratulations to everyone. To find out who the grads and residents are, visit www.dentistry.ubc.ca/grads

Education for the Educators—Dentistry Faculty Sharpen Their Teaching Acumen in Campus-Wide Program

When Dr. Komkham Pattanaporn received her Certificate on Teaching and Learning in Higher Education this past May, she, like many Dentistry faculty before her, joined an already long list of educators at UBC and around the world that have completed the intensive UBC Faculty Scholarship of Teaching and Learning Leadership Program.

Offered by UBC's Institute for the Scholarship of Teaching and Learning (ISoTL) in collaboration with the Faculty of Education, the program is an ideal resource for Dentistry's faculty development, the long-term goal of which ultimately is to enhance the student experience—a central theme of Dentistry's strategic plan.

Information on teaching and learning is not a component of dental curricula; consequently, when an individual joins a dental faculty, their



Dr. Komkham Pattanaporn with Dr. Charles Shuler, dean of UBC Dentistry, at the graduation ceremony for recipients of the UBC Faculty Certificate on Teaching and Learning in Higher Education, May 18, 2012.

level of teaching skill does not generally match the level of their patient care skills, says Dr. Charles Shuler, dean of UBC Dentistry. “UBC is fortunate to have a program that provides a way for dental clinicians to build their expertise in the areas of teaching and learning. Completing this certificate allows the faculty members to become even more effective facilitators of learning for our dental students.”

Pattanaporn, a clinical assistant professor, sees the program as essential for instructors in higher education. Skills such as critical thinking and reflecting, researching, and devising evidence-based assessments are high on the list of the program's learning objectives.

Other UBC Dentistry faculty graduates of the program include: Drs. Jolanta Aleksejūnienė, Nancy Black, William Brymer, Lamia El-Adwar,

Ingrid Emanuels, Mark Fogelman, Karen Gardner, David MacDonald, Anthony McCullagh, James Richardson, Clive Roberts, Eli Whitney and Tracy Wong. Drs. Nancy Scott and Mel Schneider, both clinical assistant professors, are currently enrolled in the program.

Additional Teaching Faculty Getting Educated in Education

Graduate-level work in the area of education also figures prominently among Dentistry faculty members. Dr. Tracy Wong, clinical assistant professor, completed a Master of Arts in Education/Curriculum Studies this year, and clinical assistant professor Susan Schmitz completed a Master of Education in Curriculum and Instruction. Clinical instructor Neala Welburn is currently undertaking a Master of Education in Curriculum and Instruction, and Nadine Bunting, also a clinical instructor, is studying adult education.

Understanding the foundations of education and the principals of evidence-based instruction, and delivering curriculum using insightful design and effective facilitation, strengthens Dentistry's strategic goal that all undergraduate, graduate and postgraduate programs meet the highest standards of excellence.



Dr. Chris Wyatt (L) and Dr. Angela Wong (C) consult with patient Lai Ling Chan at the Simon K. Y. Lee Seniors Care Home.

UBC Dentists Keep Seniors Smiling

BY LORRAINE CHAN

In Vancouver's Chinatown, there are more than 250 seniors who never have to leave home to see the dentist. Thanks to a unique UBC Dentistry program, oral health care professionals come to them.

In 2011, the Faculty of Dentistry launched the “adopt a long-term-care facility” initiative, which provides high-quality care at no cost to residents at the Simon K.Y. Lee Seniors Care Home and Villa Cathay Care Home.

The creator of the program, UBC dental geriatrics expert Dr. Chris Wyatt, says the main goals are to treat at-risk seniors while providing a dynamic learning environment for students. With seniors as the fastest-growing population, says Wyatt, there's a need for dentists, dental hygienists and dental specialists such as prosthodontists, who focus on restoring or replacing teeth, to treat elderly patients—not only at their offices, but also in hospitals and care facilities.

Meeting the gaps in oral health care for seniors has been a longstanding goal for Wyatt and faculty colleague Dr. Michael MacEntee. In the late 1990s, they established the ELDERS (Elders Link with Dental Education, Research and Service) group to deal with this unmet need, earning the Faculty international acclaim for its innovations. “Our studies show that seniors lack access to dental care, especially in long-term-care facilities,”

says Wyatt, professor and head of the prosthodontics and dental geriatrics division.

A major barrier to oral health care is cost. A 2009 Statistics Canada report showed that more than one Canadian in 10 avoids full dental treatment over the course of a year because they can't afford it. If left unattended, dental problems in a vulnerable elder can lead to unnecessary infections, disease or premature death.

But seniors who can afford care may still face hurdles, says Wyatt. “We have also found that dentists may hesitate to treat elderly patients who are very frail or face complex health challenges.

UBC Dentistry, however, aims to reverse this trend, he says. “To increase access and address oral disease, we decided to develop the first program of its kind in Canada where seniors receive free care provided by our students under close clinical supervision.” Wyatt adds, “We want to give our dental and dental hygiene students the experience of treating vulnerable populations so they can include these patients in their practice.”

UBC students complete rotations under the supervision of practising dentists and UBC professors. They treat elders with dementia and painful physical disabilities such as rheumatoid arthritis, which make dental care challenging. Students have an opportunity to work with other health care professionals to better understand how to care for patients with complex medical, physical and psychological conditions.

UBC graduate student Dr. Angela Wong completed a general practice residency where she treated residents at Simon K.Y. Lee Seniors Care Home during 2009-2010.

“I learned the importance of tailoring the treatment according to the patient's medical history,”

says Wong, currently in her third and final year of the graduate prosthodontics program.

Wong recalls treating a 76-year-old patient, a woman “on heart medication that thins the blood, so we had to ask her physician to change the dosage before doing a tooth extraction.” Paying attention to the elder's stamina was critical, says Wong. “We would opt to observe and maintain a tooth for as long as possible rather than extract or place a crown if the patient could not tolerate long, complex treatment.”

Wyatt says many older adults are keeping their natural teeth longer. At the Villa Cathay Care Home, for example, close to 70 percent of the senior residents have some natural teeth compared to 60 percent in 2002. Oral care now goes beyond keeping the residents' dentures clean. “What we're going to see are baby boomers who have been receiving excellent dental care throughout their life. They will expect that to continue whether it's at their dentist's office or at a long-term-care facility.”

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For more information about the geriatric dentistry program at UBC, read the spring 2010 *Impressions* article “Elders Wisdom Improves Seniors' Quality of Life” online at www.dentistry.ubc.ca/go/elders

Conquering Cancer: Better Outcomes!! Beats Goal



Left: Dr. Michele Williams (R) and Dr. Catherine Poh, team captains for Better Outcomes!!, at the finish line of the Enbridge Ride to Conquer Cancer, June 17, 2012.

Right: Better Outcomes!! team members: Chris Brown, Pam Burns, Darcy Daubaras, Brad Forster, Joel Fransen, Wendy Lam, Calum MacAulay, Hilary Pada, Jay Park, Peter Pessinis, Paul Pocock, Catherine Poh, Isaac Tam, Samuel Tam, Shunhau To, Michele Williams, Lesley Williams and Maria Zerjav.

Beautiful weather, idyllic scenery and high spirits—all perfect ingredients for a superb Enbridge Ride to Conquer Cancer weekend on June 16 to 17, 2012. For team Better Outcomes!!, add one more ingredient: they topped in at \$76,903, exceeding their fundraising expectations by more than \$3,300.

The 18-member team, many of whom have a UBC Dentistry connection, rode to raise money for cancer research. The annual two-day event to raise funds for the BC Cancer Foundation draws hundreds of participants who cycle through the scenic Pacific Northwest from Vancouver to Seattle, Washington—a challenging 262-kilometre journey.

Team captains Dr. Michele Williams and Dr. Catherine Poh—both UBC Dentistry faculty members—understand what it takes to beat cancer: Williams, an oral medicine specialist, and Poh, an oral pathologist, are part of a large group of experts involved in the BC Oral Cancer Prevention Program and the BC Cancer Agency Research Centre.

The funds raised by Better Outcomes!! are being dedicated to oral cancer research through the BC Cancer Foundation. Many team members have signed up for the 2013 ride, already putting their next fundraising goals in motion.

UBC DENTISTRY IN HAIDA GWAI

BY HEATHER CONN

Painted war canoes, hand-carved from red cedar. Cedar baskets and hats, intricately woven from long strips of bark. Tall, cedar totem poles: visual tales of family lore, mythic figures and beasts of power. For many centuries, the Haida people on the BC islands of Haida Gwaii have lived amidst stunning, mossy rain forests of cedar and fir, surrounded by salmon-rich seas.

Across time, they have lived as warriors, hunters and gatherers, living in balance with the land and water. Through compelling stories, songs, art, feasts and ceremonies, they have shared the cultural traditions of their Raven and Eagle heritage. “Our culture is born of respect and intimacy with the land and sea and the air around us,” says the Council of the Haida Nation website. “We owe our existence to Haida Gwaii.”

On these rugged islands of mist and mountains in British Columbia’s coastal north, the Haida have survived and thrived despite record-setting gales and fierce storms; they continue to face Canada’s strongest winds and brutal weather fronts off the Pacific Ocean.

Today’s communities of Old Massett in the north and Skidegate at the south end of Graham Island form the main First Nations centres on this 9,940-square-kilometre archipelago, formerly called the Queen Charlotte Islands. And for more than a decade, UBC Dentistry has sustained a significant presence in these two Haida Gwaii towns, providing round-the-clock service 365 days a year.

The university provides top-quality generalist and specialist care at Skidegate Dental Clinic—a collaborative effort between the UBC Faculty of Dentistry, Health Canada and the Haida Nation—which opened in February 2002. A dental clinic at the

Haida Health Centre in Old Massett offers leading care to residents who range from children and retirees to commercial fishermen, loggers, small business operators and tourism entrepreneurs. About 20 percent of UBC Dentistry’s Haida Gwaii patients are non-First Nations people.

Through a series of rotations that also involve visiting health care professionals, UBC’s dentistry residents, graduate students in specialty programs and dental students receive invaluable hands-on learning and gain quick access to more complex and diverse dental issues than they would otherwise see at the university’s controlled clinical setting at the Point Grey campus. UBC Dentistry’s stellar model in Haida Gwaii combines service learning with comprehensive community education and research. (See sidebars on pages 15 – 16 for program model details.)

This community-based program, which emerged directly from the needs and requests of the Haida, provides cost-effective dental work to a population that previously had poor access to oral health care and disease management. The Canadian Dental Association likens the oral health condition of the country’s Aboriginal people, in general, to that of those in developing countries.



Dr. Christopher Zed has been instrumental in creating and maintaining the Haida Gwaii program.

PHOTO BY MARTIN DEE



Haida Gwaii Model Has Global Cross-Cultural Relevance

Beyond Haida Gwaii's fishing boats, wind-swept beaches and shrieks of bald eagles lies a nondescript, one-storey building known as *Xaaynangaa Naay* or "House of Life": the Skidegate Health Centre. Within its walls, the dental clinic offers state-of-the-art equipment as well as a generator to restore power when a severe storm causes a blackout.

Few tourists who come to Haida Gwaii to kayak, fish, see the humble grave of famed Haida carver Bill Reid, or photograph the grey, aging totem poles of Ninstints, the UNESCO World Heritage Site, would realize the global impact that work within this clinic has had. UBC Dentistry's highly successful cross-cultural model has prompted interest from dentistry faculties in Brazil, in London, England, and in Melbourne, Australia.

"Our core program of service, education and research is transportable to Vietnam, Myanmar, Laos, Brazil, China, any First Nations community or Vancouver's Downtown Eastside, geriatric or pediatric," says Dr. Christopher Zed, UBC Dentistry's associate dean of Strategic and External Affairs, who has been instrumental in creating and maintaining the Haida Gwaii program. "There's one common thing: it serves a unique, distinct group that has issues, either related to access to care or the delivery of their care and the attitude towards that care."

UBC Addresses Poor Service History

Before UBC began its work in Haida Gwaii, local First Nations people who needed emergency or specialist dental work had to be airlifted to the mainland, at a cost to Health Canada of \$3,000 to \$4,000 per trip, says Zed. Back then, an off-island dentist flew in

temporarily, unavailable to provide ongoing, consistent care. When UBC was approached to provide a dental outreach program, Haida Gwaii had only one resident dentist, a non-native part-timer who charged about 30 percent above the insurance fee guide that covers First Nations dental care, Zed adds. This dental office maintained a waitlist of six months to a year.

Through a needs assessment, UBC Dentistry discovered that First Nations patients in Haida Gwaii had a higher level of caries, decay and periodontal disease than the general population in Vancouver. Some adults had never been to a dentist. Others were too afraid to get surgery or never showed up for appointments.

With these obstacles, how could UBC Dentistry faculty, as non-Aboriginal outsiders, enter the local Haida community and win members' trust and respect while remaining true to their own vision of student training and community dental care? After all, this was a First Nation culture with a long history of colonialist exploitation, from the decimation of their ancestors through smallpox to residential schools and the intrusive removal of totem poles and sacred artifacts, without Haida permission, to international museums.

Program Success Has Proven Results

Ongoing dialogue and openness, excellent listening skills and heartfelt socializing have been decisive factors in the UBC program's success in Haida Gwaii, says Zed. (See sidebar on page 16.) Community consultation and resulting program adjustments remain an integral part of UBC's model in Haida Gwaii.

This model is an excellent example of UBC Dentistry's strong commitment, as stated in its Strategic Plan,[†] to maximize student learning opportunities in clinical environments to better serve disadvantaged population groups and

under-accessed communities. In particular, the plan stresses the need for an increased presence in First Nations communities to help address their health care needs. (One in four Aboriginal children in Canada lives in poverty, for example, compared to one in 10 in the general population, based on a 2010 report card on poverty released by Campaign 2000, a multi-partner advocacy network.)

Both dental clinics on Haida Gwaii now see less serious gum disease and less need for urgent treatment, Zed says. Children are coming for dental visits at an earlier age. Patients, as a whole, show less fear about seeing a dentist or receiving complex care. Significant cost savings for Health Canada have resulted: patients who previously would have had to fly off-island now receive treatment from a visiting specialist. The community-wide education program has resulted in greater awareness regarding oral health among patients, their relatives, Haida students of all ages and their school principals and teachers.

"The program's been a great success," says Dr. Jay Wortman, a Métis physician and UBC assistant clinical medical professor. Now senior medical advisor for Health Canada's First Nations and Inuit Health Branch, he attended the opening ceremonies of the Skidegate Dental Clinic. "Everything I've heard about it [the program] is positive. The community has been very grateful for this. They're getting a very high quality of care."

† For more information about the Strategic Plan, read the fall 2009 *Impressions* article "Planning for Success: UBC Dentistry's Strategic Plan" online at www.dentistry.ubc.ca/go/planning, or download the entire plan at www.dentistry.ubc.ca/strategicplan



Strategic Vision for First Nations Program a Plus in Paradise

This community-based dentistry model is an important part of the mandate of both UBC and its dentistry faculty within an overall global strategy, Zed says. The university as a whole, through its strategic plan, seeks to create "an exceptional learning environment that fosters global citizenship, advances a civil society and supports outstanding research to serve the people of British Columbia, Canada and the world."

More specifically, the university's plan states that UBC is striving to widen opportunities for students to learn about Aboriginal issues and perspectives, while also expanding educational opportunities for Aboriginal people. It also strives, through community engagement, to stimulate action for positive change and greater understanding of societal issues.

UBC students on rotation in Haida Gwaii gain exposure to Haida culture and spiritual traditions. An invitation to kayak or attend a salmon barbecue provides a chance to experience the kindness of the Haida people and explore the region's spectacular setting. While beachcombing, a student might discover a fossil, moon shell or eagle feather.

"Paradise is our experience," says the website of the Haida Health Hub, a collaboration between First Nations health care providers in Old Massett and Skidegate. Zed says: "Haida Gwaii is a special place. You see whales and porpoises. There are a lot more eagles [than in Vancouver]. When you drive home from UBC, you're stuck in traffic. When you leave the clinic there, you're staring at the ocean the whole time."

When UBC Dentistry first began its program model in Haida Gwaii, a local First Nation person asked: "My aunt died; can my sister use her dentures?" This reflects the local First Nations customs of sharing and mutual caring, says Dr. Christopher Zed of UBC Dentistry. "That's the belief system. It's saying: 'I value that these are expensive. Should I throw these out?'"

Cultural sensitivity or competency—respecting and understanding Haida values, beliefs and lifestyles—is an integral part of the success of UBC's Haida Gwaii program model, Zed says.

Before dashing off to perform a local anaesthetic, Zed shared, with obvious passion, these three primary components of the Haida Gwaii community dentistry model:

Top-quality service and experiential learning

Each year, UBC Dentistry has 30 to 35 people visit Haida Gwaii, including residents, students in both its dental and dental hygiene programs, and alumni. The service learning offers these key features:

- Continuity of care: Two clinics provide 24-hour oral health care, all year, including general practice and specialty services, emergency services and after-hours care.
- Rotations (resident): An all-year core program of resident rotations, driven through the General Practice Residency Training Program, includes two residents at a time for up to 12 weeks. One goes to Old Massett, one to Skidegate.
- Rotations (undergraduate and graduate): Undergraduate students participate in an elective rotation for Doctor of Dental Medicine (DMD) training, or in a summer mentorship program between third and fourth year for two to six weeks. Graduate students do six-week rotations. Mixed rotations are offered to dental hygienists.

- Excellent hands-on learning: Students gain highly useful clinical exposure to a great variety and complexity of patient issues. While learning directly from residents and specialists, they also experience First Nations culture in a beautiful non-urban setting.

- Engaged specialists: UBC Dentistry alumni, committed to community service, provide dental services at the clinics' peak or vacation times. This provides a high level of care for patients and expertise for students.

- Responsive, flexible and structured care: The Haida Gwaii program model remains flexible enough to respond to community requests and needs, yet provides the same level of care, with the proper structures, protocols and infection control, as any other residency program. This ably fulfills UBC Dentistry's Strategic Goal that "All undergraduate, graduate and postgraduate programs meet the highest standards of excellence and reflect community needs and expectations."

The program model meets the university's structured reporting requirements and those outlined by WorkSafeBC, Health Canada and the College of Dental Surgeons of BC.

Grassroots community education

- Strong preventive focus: The public teaching program addresses oral care as part of overall health, explaining how dental disease relates to obesity, diabetes and other diseases. Instructors include residents, undergraduate dental students and dental hygienists.

Oral care information is also provided to patients in the dental chair, their relatives and local health care professionals. The UBC program adds dental care education to existing community programs such as the Healthy Moms, Healthy Kids initiative for nursing mothers. Seminars on healthy food choices target new and experienced parents.

- Age-appropriate school curriculum: UBC Dentistry has created and integrated educational materials into year-long core curriculum for grades one through 12. Content ranges from brushing techniques to food choices and the impact of smoking.

- A rewards system: Students at local Haida Gwaii schools collect points on a card for healthy activities and practices and have the chance to enter a raffle to win a bicycle, reinforcing a healthy lifestyle.

- An after-school mentorship program: Career-minded Haida students in grades 10 through 12 watch dentistry in action and learn about general and chair-side dentistry, infection control procedures, surgical procedures and front-desk reception.

Structured conversations address dentistry within a health-and-sciences context, enabling First Nations students to consider a dentistry career (a faculty strategic goal) or one in medicine, nursing or other health-related fields.

- Training of auxiliary staff: A training program in Haida Gwaii, started by UBC Dentistry, enables local First Nations people to become dental receptionists and dental assistants. Two current dental receptionists went through this program.

- Effective medical model of triage management: Education of community members enables health care professionals to better triage dental patients to the right treatment areas or triage themselves earlier, because they recognize that they have dental disease, says Zed. “They don’t think it’s going to heal all by itself. Therefore, their dental IQ has gone up.”

Cutting-edge research

- Oral health and fitness: A current study of the local population examines how mouth disease relates to obesity and other diseases.

- Fish oils and oral health: UBC is investigating the links between the Haida’s fish-laden diet and dental health. This will help determine how their health and diet compare to that of people in the BC Lower Mainland.

Zed has two measurements of ultimate success for the Haida Gwaii model. With a program more focused on health promotion and disease prevention, he envisions “less disease coming through the door,” reinforcing the positive impact of preventive education. He’d like to see the model inspire Haida locals to come to UBC for dental training, then return to their community to practise dentistry.

Zed would like to add a student rotation under UBC Dentistry’s Professionalism and Community Service (PACS) program, which combines classroom learning with community-based outreach initiatives. In addition, he plans to introduce technology and distributive (distance) learning models, which would enable students in Haida Gwaii to learn core curriculum offered at UBC’s Point Grey campus. Zed believes that these opportunities will be available within two years.

The following factors have enabled UBC’s community service model in Haida Gwaii to gain the acceptance of local people and create an effective cross-cultural approach, says Dr. Christopher Zed:

Communication: mutual respect and trust

- a willingness to ask many questions like “What, specifically, do you feel that you need? How can we reduce the no-shows?”

- clarity on how treatment and care decisions are made; for example, whether via the extended family, Haida chief or First Nation band

- enough humility to say: “Here’s where we’re struggling, and here’s where we’re failing”

Collaboration: local engagement and buy-in

- ongoing partnerships and an excellent relationship with key First Nation decision-makers, such as the local band councils and the health director

- school principals and teachers who champion the oral health curriculum provided by UBC Dentistry

Cultural competencies: understanding values and beliefs

- an awareness of how parents’ own attitudes and fears about dental practices influence their children

- an appreciation of the differences in how people access and believe in their dental care



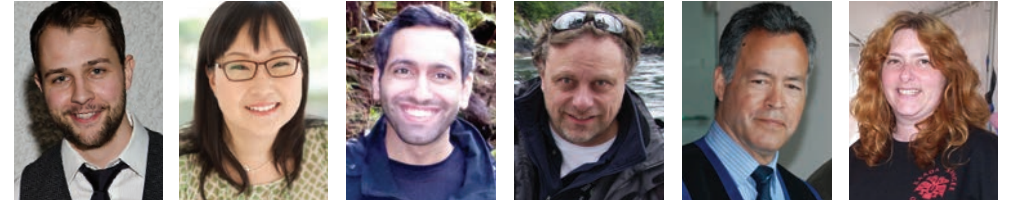
What do students and stakeholders say about their Haida Gwaii dentistry experience?

Dr. Matthew Gustafson, general practice resident (January-February 2012): A teenage patient struck in the face while playing road hockey would likely have lost his teeth without the specialist care he received, says Gustafson, who repositioned the youth’s teeth and gave him a dental splint. Later during his 10-week rotation, Gustafson removed the patient’s splint and restored some chips in his front teeth. “What left the biggest impression on me during my rotation was the chance to provide service to a group of isolated people who would otherwise not have access to treatment.”

Gustafson saw patients ranging in age from 11 months to 80-something. Besides doing multiple fillings, he did preparations for crowns and bridges, partial and complete denture fabrications, cleanings, root canals and extractions. He also worked with three specialists: a pediatric dentist who used oral sedation on children with behaviour management problems, an oral surgeon who extracted difficult wisdom teeth using intravenous sedation, and a periodontist who did soft tissue grafts and implant placement.

The Haida Gwaii rotation provides an excellent opportunity to learn from specialists, hone your technical skills and see a large number of patients with a wide range of treatment needs, Gustafson says. Culturally, the rotation’s approach stresses the importance of being mindful of the customs of patients, he adds.

Dr. Ellen Park, endodontic resident (one-week rotation, September 2010): Ending a work day with a kayak trip through spectacular scenery, and a campfire, is “exquisite,” Park says. “I was impressed to see a thriving and well-appointed dental clinic in such a beautiful natural setting.”



From left to right: Matthew Gustafson, Ellen Park, Paul Mikhail, Les Campbell, Robert Mills and Michelle Brown.

When not helping students perform root canals, Park says, she learned a lot from UBC Dentistry faculty, who provided practical tips and tied them into ongoing research.

The local community was quick to welcome the students: “Artists stopped by with their art work. The proprietor of the local coffee shop steered us toward incredible hikes and lent us his kayaks. Everyone was quick to chat and say hello. The clinic patients I met were friendly and full of character.” She definitely wants to go back for another rotation.

Dr. Paul Mikhail, a 2012 UBC Dentistry grad (two-week rotation, April 2012): A military dentist in Ottawa for the federal government, Mikhail now does recall exams more efficiently thanks to his rotation in Haida Gwaii.

Then a fourth-year DMD student, he also performed emergency work on a cracked tooth and watched the pediatric dentist work with the general practice hospital residents. He appreciated the opportunity to see how a public clinic operates.

While on the islands, Mikhail hiked on trails and went clam digging. “It’s beautiful out there. We loved the environment and liked the people a lot. It’s a very relaxed kind of life.”

Dr. Les Campbell, UBC endodontics grad student (July 2012): From a panoramic view atop Tow Hill to eating freshly caught salmon at a waterfront home, Haida Gwaii is “really incredible,” says Campbell. “The view is unaffordable anywhere else. The place is magical.”

When he wasn’t supervising general practice residents, dentistry graduates or undergraduates, Campbell was catching salmon and halibut and exploring the islands, which he has visited a handful of times on his own.

He says that he found his role as mentor at the Skidegate clinic fun and satisfying. The newly minted grads saw endodontic challenges they had never encountered and asked questions

that prompted him to rethink the foundations of his training. “Being a teacher, you’re a lifelong student,” he says.

Robert Mills, chief councillor, Skidegate Band Council: His 14-year-old autistic daughter, whom he describes as low functioning, received phenomenal treatment at the Old Massett clinic. With great patience and interaction, the dentist got her accustomed to using a toothbrush and had her teeth cleaned with the “air-powered tool.” “I was very surprised,” he said. “Usually, I have to take her to Children’s [Hospital] and generally, they knock her out.”

Mills calls the clinic service “awesome” and says he hasn’t heard any negative remarks about it. The education program at the elementary school and the display booth at the annual Skidegate Days summer event, which offers oral care information and free toothpaste, floss and sugar-free gum, have been a success, he says. “Overall, our community members have better access to dental care.”

It can still take months to get into the clinic, he adds, but not if you ask to be put on a cancellation list. Mills has one complaint: Too many off-reserve people and Old Massett residents are coming to the Skidegate clinic.

Michelle Brown, health administrator, Haida Health Centre in Old Massett: It would be awful if UBC Dentistry wasn’t working in Old Massett, she says. “The closest dentist is a hundred kilometres away in Skidegate. Nobody would go.”

With no orthodontist on the island, her 17-year-old son has received help with his braces at the Old Massett clinic. (UBC’s graduate orthodontics program plans to start rotations in Haida Gwaii soon to provide such service from a specialist.) He has also learned about flossing at school, as have his two younger siblings. Pictures of gum disease, along with sessions on cancer prevention and good oral hygiene, have helped promote better health in the community, she says.

IN VIVO IMAGING

Fascinating Voyage of Discovery

BY MARI-LOU ROWLEY

Assistant professor in the Department of Oral Biological & Medical Sciences, Nancy Ford is an expert in micro-computed tomography (micro-CT) and in vivo small animal imaging. As director of the Centre for High-Throughput Phenogenomics, her work involves optimizing images, minimizing X-ray exposure and navigating massive, complex data sets.



Medical imaging has come a long way since 1966, when the classic film *Fantastic Voyage* was released. In the movie, a submarine and crew are shrunk to microscopic size and injected into a diplomat's bloodstream. The remarkable images in that sci-fi fantasy provided a glimpse into what researchers are able to see today with powerful electron, laser and light microscopy in the Centre for High-Throughput Phenogenomics, recently located to UBC's new Pharmaceutical Sciences Building.

Micro-CT is the research tool of choice for centre director, imaging physicist and Dentistry assistant professor Dr. Nancy Ford. Like a clinical CT scan, micro-CT uses X-rays to create cross-sectional 3D images of organs, tissue and bone, which are reconstructed in a computer model. The term "micro" refers to the micrometre-range pixel size used to produce high-resolution images.

“The biggest advantage of micro-CT is that you can image the same animal multiple times over the course of a study, so you can get a picture of a disease as it progresses, or monitor response to a therapy,” says Ford. Not only is the technique reliable, it reduces the number of animals used in research and provides a direct link back to clinical diagnosis. “What we can discover in animals can easily be applied back to humans, because we diagnose using CT imaging in patients and animals.”

Micro-CT has been used extensively to study bone, because of the large difference in attenuation—the absorption of X-ray photons—between soft tissue and denser bone. Additionally, it can detect similar differences in attenuation between different types of bone tissue. The technology has been crucial to the research by UBC dentistry and medical colleagues on regenerating craniofacial bone and periodontal tissue (see *Impressions* spring 2012 “Host-Grown Tissue and Bone—Using Stem Cells in Periodontal Regeneration” online at www.dentistry.ubc.ca/go/regen).

Take a Deep Breath—Hold It!

Air and soft tissue also exhibit large X-ray attenuation differences, making micro-CT well suited for imaging animal models of respiratory disease. Before Ford came to UBC, she and colleagues at the University of Western Ontario began a project, funded by the Canadian Lung Association and Ontario Thoracic Society, to study the respiratory patterns in normal, healthy rodents and how healthy lungs respond to mechanical ventilation. Although the goal of their research, which is still ongoing, is to provide information on how mechanical ventilation affects the lungs, the research has implications in dental sleep medicine as well.

Ford and colleagues are working to understand how different respiratory patterns can cause changes in lung structure and function, such as lung inflation and deflation, or how inhaled air spreads inside healthy lungs. Ford is using respiratory-gated micro-CT, where the scanner acquires images at specific phases or

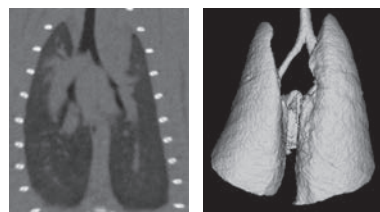
portions of the breathing cycle, to compare the respiratory function in free-breathing and mechanically ventilated rodents.

“In clinical CT the patient is asked to breathe in and hold, and the scanners are fast enough and the patients are compliant enough that we can get good images,” Ford explains, “but mice and rats are not very compliant.”

Traditionally, the animals are anaesthetized and put on mechanical ventilation in order to control breathing and synchronize the images with the respirator. Proponents of mechanical ventilation say free-breathing animals breathe differently for each breath, so studies may not be capturing the exact same point in the respiratory cycle. Ford begs to differ.

“I have found that the respiratory waveform is fairly constant. What I think is going on with mechanical ventilation is that they are over-inflating the lungs.” Ford images the same animal both ways—free-breathing and mechanically ventilated—to compare how much air is in the lungs at each point and then quantify the differences between methods. “This is important, because depending upon what disease symptoms you are looking at, you may not be able to see the symptoms if lungs are over-inflated,” she says.

“I work mostly on free-breathing animals because I think it is better to look at how they actually breathe, as I believe it will be more relevant to the physiology of disease.” – Dr. Nancy Ford



Left: A coronal slice through the thorax of a rat obtained using micro-CT imaging. The image represents the end expiration (deflation) phase of the respiratory cycle and is reconstructed with 0.15 mm voxel spacing. A voxel is a three-dimensional pixel. Right: An isosurface (3D surface representation of points), obtained from the image on the left, showing the airways and outer surfaces of the lungs during end expiration.

Ground Squirrel Serendipity

Ford’s respiratory research took an interesting turn when a biology colleague started studying the respiration and metabolic function of ground squirrels to determine surfactant levels and chemical composition inside the lungs during hibernation. “They were trying to understand how animals are able to not breathe for minutes at a time and be perfectly fine and happy,” says Ford. “The collaborators suggested we work together to get 3D images in order to correlate what is going on within the lungs to the chemical composition.”

Since hibernation mimics apnea, where a series of breaths are followed by a long period with no respiration, the study of the ground squirrels will provide valuable insight into this prevalent sleeping disorder, which is often treated with mechanical ventilation. It will surely be of interest to Ford’s colleagues in dental sleep medicine, who are working to develop alternative therapies (see *Impressions* fall 2011 “And to All a Good Night! UBC Leaders in Dental Sleep Medicine” online at www.dentistry.ubc.ca/go/sleep). Ford’s research could aid in understanding the long-term effects of mechanical ventilation, which is known to damage the lungs.

A considerable challenge of working with high-throughput imaging is storing and analyzing massive amounts of data. The squirrels posed their own unique problems. “The data was a lot more complicated because there are large portions of the scan where there is no breath, and we were using automated codes to detect breathing,” Ford explains. “We are now working on how to reconstruct the data to make sense of it all.”

Determining Maximum Dose

Part of Dr. Nancy Ford’s research involves determining the maximum X-ray dose that can be administered to animals so that the disease model being studied isn’t affected. “The lungs are very sensitive, so we want to ensure that we aren’t causing changes in lung tissue that could be mistaken as a symptom of respiratory disease.”

In comparison to clinical CT, the radiation dosage in micro-CT is greater due to higher image resolution and multiple scans in a single session. “If you add up all the scans an animal is receiving, you don’t want it to be higher than a single fraction of radiation therapy,” says Ford. “If you are studying a tumour growing and you take an image every week, then the tumour could start to shrink and it is difficult to know whether this is because of your experimental parameters or the X-ray imaging.”



Dosimetry equipment used for measuring X-ray dose.

PHOTO BY TERRY WINTONYK

Cone Beam CT—Quantifying Risks Versus Benefits

The days of the traditional dental bitewing X-ray are almost gone. Most dentists today have CT imaging technology. Cone beam computed tomography, or CBCT imaging, provides detailed information about the 3D structure of nerve paths, soft tissue and bone. Image data can be obtained for a complete dental or maxillofacial area or for a limited region of interest. Several software programs on the market allow dentists to segment and transform the digital images into models that are used in the creation of surgical guides.

We are told that radiation dosages in standard dental radiography are minimal—similar to an airplane trip across the country. Radiation exposure in CBCT is supposedly less. However, not all scanners use the same dosage, which can range from 8 to 250 μ Sv (www.conebeam.com/cbctchart).

Ford is concerned that CBCT manufacturers have understated radiation dosages, particularly since not all tests and machines are equal. “There are a lot of different ways to make an image, with many fields of view and parameters that can be changed,” she explains. “It also depends upon what part of the patient you are scanning, and the size of area you are looking at. It is not a matter of pushing a button and each patient receives an equal low dose.”

She notes that there has been very little study of dose measurements, and these are not adequately described in either scientific or manufacturers’ literature. In her current study on CBCT image quality, Ford is aiming to compare and quantify measurements on a number of different machines in order that dentists can better assess potential radiation exposure. Ford is particularly concerned about overexposure in children, as several applications for CBCT, such as orthodontics, target children.

Customizing Algorithms to Fit the Patient

Ford became interested in medical imaging while working as a research assistant in digital mammography and detector technology at Toronto’s Sunnybrook Hospital. Today, she is working with radiologists at Toronto’s Hospital for Sick Kids to assess reconstruction algorithms for clinical CT imaging of pediatric patients. “In medicine everything is optimized for the average adult male,” notes Ford. “Clearly, the imaging constraints are different for children because they are smaller, so what you are looking at is smaller, their tissues attenuate X-rays differently, and typically children have a lot less fat than adults.”

Ford assessed the image parameters of the new algorithm to determine how it performs at the pediatric level. “You don’t want to add to the radiation load if you don’t have to—particularly in children. It is a load the patient will be carrying for the rest of their lives—and it’s cumulative.”

ALARA – The Guiding Light

“A guiding principle for use of all X-rays, including CBCT, is to keep radiation exposure as low as is reasonably achievable (ALARA) . . . Importantly, clinicians should perform radiographic imaging, including CBCT, only after professional justification that the potential clinical benefits will outweigh the risks associated with exposure to ionizing radiation. However, CBCT may supplement or replace conventional dental X-rays when the conventional images will not adequately capture the needed information.” American Dental Association, July 30, 2012

CURRICULUM RENEWAL GIVES STUDENTS EARLIER CLINICAL SKILLS TRAINING

BY TERRY WINTONYK



Dr. Leandra Best

When the fall term began for second-year UBC Dentistry students, it looked nothing like previous second-year terms. And neither did the students. They began to look and act like dentists. They were in the clinic, dressed in scrubs and masks, positioned over dental chairs, handpieces in hand. The acquisition of psychomotor skills in operative dentistry—the hands-on skills used to place a restoration in a tooth—started a whole lot sooner in the year, thanks to major changes in the curriculum.

The Faculty of Dentistry had long wanted students in the Doctor of Dental Medicine program to start clinical training earlier in their second year. When a review of the relevance of biomedical sciences courses resulted in significantly abbreviated reproduction content in second year, opportunity knocked for change to the curriculum—and Dr. Leandra Best, associate dean of Academic Affairs, knew how to seize it.

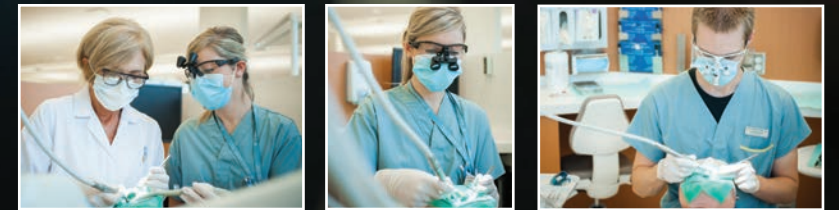
The enormous task of re-engineering the second-year curriculum could not have landed on a better desk. It was a dream come true for Best, who is fearless when it comes to change. She has years of experience in dental education

and a passion for learning and for improving the learning of others. Her motto is collaboration.

In the first two years of dental school at UBC, students take biomedical science courses in the Faculty of Medicine, in addition to their longitudinal dentistry course, to build foundational knowledge on the medical management of diseases. Sharing resources and studying commonalities in both professions makes logistical sense. Strong connections between the biomedical sciences and the practice of dentistry are made for the dental students by adding oral health-related contexts to their problem-based learning cases in the biomedical science coursework.

However, many components of the medical curriculum—such as the reproduction course—go far deeper in medical knowledge than dental students need.

In our “plug and play” modern world, words like component, module, section, block—commonly found in the language of curriculum—subtly suggest ease of re-order. But dental curricula are well-structured worlds; to make change takes immense planning and across-the-board collaboration—particularly when the Dentistry course timetable is enmeshed with Medicine’s timetable. Such change is usually incremental; rarely does it happen all at once.



“The opportunity to dive into clinical dentistry earlier than previous years is a welcomed change that benefits us due to the time it takes to develop proper psychomotor and clinical skills.” – Jordan Sanders, second-year DMD student

Biomedical Sciences–Assessing What Dentists Need to Know

Best gathered together feedback that had been collected over the years from both students and instructors. The common concern from students was that they didn’t understand the need for all the medical information and wondered why it took so long for them to learn technical dentistry skills. From faculty and tutors the chief concern was not having enough time for what they wanted to accomplish.

Possibly the strongest catalyst for re-examining the breadth and depth of medical content came from the Faculty’s last accreditation review in 2010, which suggested that the medical course content that is not relevant to dentistry be reduced. Since students wanted to do dentistry, to learn the tools of the trade, while faculty and tutors are challenged with the lack of time to teach it, doing an evaluation of the medical courses as suggested by the accreditation review was an obvious next step.

Best and a team of faculty members received a UBC Teaching and Learning Enhancement Fund (TLEF) grant to conduct a one-year study to identify the foundational biomedical sciences learning objectives required for new graduates of the UBC Dentistry program. A panel of fourth-year UBC dental students and faculty (dental specialists, general dentists, basic scientists) was surveyed, using the Delphi method (Rand Project 1959) for decision-making. The aim was to reach a 75 percent consensus among panelists regarding each of the 13 year one and two medical courses reviewed.

From the 81 learning objectives in the medical reproduction course, there was a 95 percent consensus that 76 out of 81 learning objectives were not relevant to the practice of dentistry, while four learning objectives were “need to know,” leaving one objective where consensus could not be reached. Best says: “We readily identified that the medical reproduction course stood out to be further scrutinized and determined that 106 hours of medical

reproduction content could be reduced to 17 relevant to the practice of dentistry.”

Removing students from this 106-hour medical course and covering what dentists need to know of reproduction in 17 hours opened up 89 hours in the second-year curriculum timetable. Best’s next task was to spearhead a revision of the entire second year.

Medical Science and Clinical Skills: A Balancing Act

At UBC, significant efforts have been made to improve the correlation of biomedical sciences to clinical dental practice. The Faculty of Dentistry provides dentistry-related components used in biomedical science courses, such as problem-based learning scenarios that include dental triggers. The introduction of the Dental Applied Learning Experiences (case-based learning) in the longitudinal dentistry course further strengthens connections to dentistry. Additionally, Dentistry faculty members teach in Medicine’s head and neck anatomy laboratory, and the medical anatomist is present in the dental clinic; both encourage students to link the biomedical science to the practice of dentistry.

Clinical skills training for dental students actually starts in year one with the Introduction to Clinical Dentistry (DENT 410) course, including supervised simulated patient experiences among students and volunteers. (Supervised patient treatment with actual patients starts in the second year.) It wasn’t that students were learning only medicine-related information and not receiving clinical dentistry training in the first two years, but rather the issue was one of balance and distribution.

Best explains: “At UBC, dental students learn the medical management of disease before the surgical management. If students received psychomotor skills/operative dentistry training, a major module in year two, too early (such as in the first year), there is a risk that students will focus on the hand drill to the detriment of the medical management of

disease. But the reverse can also happen: delaying it too long can be frustrating for the dental students, and concentrating it too much may be stressful and doesn’t allow enough repetitious practise.”

Six years ago, psychomotor skills/operative dentistry training was taught at the end of year two in an intense month often referred to as Boot Camp. Students were introduced to the handpiece, started to learn how to position themselves ergonomically, and in just four weeks they had to accomplish a number of skill sets so that they could move on into third year. “That was an intensive time,” Best remembers. “They needed more time to practise, to enjoy developing the skill sets and to become more confident.”

In 2007, the Faculty was able to move the Psychomotor Skills/Operative (DENT 420 PSO) module forward for a January start. With the time freed up in 2012 by greatly reducing the reproduction content and now delivering the 17 hours over several modules in the DENT 420 Introduction to Diagnostic Sciences module, the Psychomotor Skills/Operative module has been moved to the beginning of second year (in late August)—a monumental change. But that is not all that changed.

Revising the Whole Second Year: The Domino Effect

Removing the medical reproduction course from the second-year DMD program caused a chain reaction of additional improvements. Guided by a commitment to collaboration, and with the approval of the Faculty’s Curriculum Effectiveness Teaching Committee, Best spent many hours consulting broadly with her Academic Advisor Team, faculty and students. One identified goal was to start clinical skills training sooner to increase practice repetition. “That we did,” Best says, “and we achieved another goal in second year: to expose students to even more kinds of clinical activity that helps them understand why they are learning certain content in the curriculum. When you learn theory, it’s

more meaningful to the learner if there are opportunities to apply it right away. Therefore, we sought opportunities for students to apply their knowledge.”

With the Psychomotor Skills/Operative (DENT 420 PSO) module underway a full four months earlier in second year, some of the skills sets that had been taught early in the third year have now been moved into second year, including the analysis of cephalograms component of the orthodontics module. And because second year is composed of integrated modules, pediatric dentistry and orthodontics were naturally blended and the module changed from Introduction to Pediatric Dentistry to Introduction to the Child Patient (DENT 420 ICP), which covers the introductions to both orthodontics and pediatric dentistry.

The second-year Introduction to Prosthodontics (DENT 420 IPROS) module now starts earlier in the year, while the patient care associated with the Professionalism and Community Service (DENT 420 PACS) module comes later. This means that second-year students will have greater skills sets, so can do more out in the community. With the DENT 420 IPROS module under their belt, they will be able to fabricate a set of complete dentures for a patient. Introductory prosthodontics implant sessions from third year are now also integrated into the second-year prosthodontic module.

The instrumentation component of periodontics—from the beginning of third year—was also repositioned into second year. This filled a gap that has existed in the application of periodontal skills offered between first year and third year. “We always knew we needed to find time for students to continue to practise skills they started to learn in first year and continue to practice in second year and beyond—we needed to bridge a gap in second year, and now we have improved it,” Best says. “We needed this kind of opportunity to enrich the second-year curriculum.”

What Do the Students Think?

And how is second year so far? Best says, “It’s going great!” The feedback she’s getting from second-year students is that they are really enjoying the clinical dentistry. “Students are excited, because they feel like they are in dental school.”

“Amazing,” says second-year student Jordan Sanders. “The opportunity to dive into clinical dentistry earlier than previous years is a welcomed change that benefits us due to the time it takes to develop proper psychomotor and clinical skills.” While acknowledging that the workload might be heavier, Sanders says he loves the hands-on dental experience.

Likewise, classmate Carmen Hansford is a big fan of the recent curriculum changes: “Working on our psychomotor skills and learning clinical armamentarium earlier in our education provides more balance between the clinical aspect of dentistry and the biomedical sciences of medical school in the first two years.”

These high appraisals come as no surprise to Best. When she presented a template of the “new” second year to senior students, they were very enthusiastic—they saw that their feedback over the years had been addressed. This enthusiasm spread quickly among students in all years.

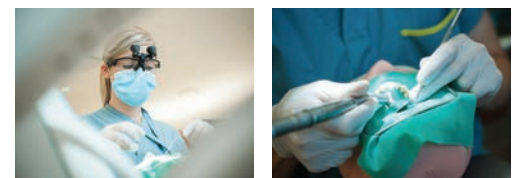
The Dynamism of Curriculum

As one of the four UBC Dentistry faculty members who serves on the American Dental Education Association Commission on Change and Innovation Liaison (ADEA CCI), Best is familiar with curricula at other dental schools. “We’ve learned that UBC is seen as progressive, and other schools are striving to make changes like we’ve done here in recent years.”

And more change there will be. The survey using the Delphi method generated a bumper crop of data that will inform future curriculum renewal. Removing the medical reproduction course was just the beginning. “We are planning

and moving quickly. The Faculty of Medicine curriculum is changing significantly, and it may be that Dentistry is integrated with the medical program for only a year and a half. It would be a fabulous thing to use the second half of the second year solely for the dentistry-specific curriculum. It could happen by 2014,” she says.

The dedication of many people and their willingness to collaborate to improve the learning experiences for the dental students is the core behind this recent successful change. For Best, the joy of working with curriculum is that it is dynamic, not stagnant. Hence, faculty need to continue to develop it for the enhancement and ongoing relevancy of the teaching and learning experience for both faculty and students.



Top: Dr. Karen Gardner (C), clinical associate professor, reviews a procedure performed on a mannequin head by second-year students Jordan Sanders (L) and Carmen Handsford.



Sayena Faraji (L) and Kim Nguyen

Dental Hygiene Students—Filling a Need, Enriching Their Learning

For two and a half days, a community health unit bustled with people. In the front hall, patients were triaged and volunteer dental students and supervising dentists treated patients' oral health needs.

And, in an office, with one dental chair, two volunteer dental hygiene students were stationed. For Kim Nguyen and Sayena Faraji, second- and third-year dental hygiene students respectively, this was the highlight of their school year.

"We were perhaps the busiest volunteers," says Sayena, a second-time volunteer on the annual trip to serve west-coast First Nation communities. "After triage and assessment, the people came to us for dental hygiene care—we treated over 70 people."

In 2010 and 2011, UBC Dentistry alumni, student volunteers and faculty members volunteered at a clinic for the Penelakut First Nation on Penelakut Island, located east of Chemainus. This past July, the volunteer clinic moved to Chemainus, on Vancouver Island. The change of location allowed the clinic to serve a greater number of First Nations groups through H'ulh-etun Health Society. Not only the Penelakut, but also the Halalt, Lyackson and Malahat First Nations were able to access

the clinic's basic restorative and preventive dentistry services, including simple endodontic work, extractions and scaling.

"It was my first time," says Kim, "and the pace picked up fast." At first she found it nerve-racking to have to complete a patient's care every hour. She also worried about her skill level, but quickly credits Cathy Chatten, a volunteer dental hygienist, with providing excellent guidance.

Both Kim and Sayena had "wow" moments. Sayena gained insight into changing the way education of the patient is done—basically, adapting the information and how it is given, within a holistic context, to suit the individual patient. "You take into account their history and you gain a sensitivity to delivering information so it's not so top-down. You deliver it in a way that can be processed by the patient."

Along with doing actual procedures, Kim found the experience "really eye opening" because of the range of patients, from

nine-year-olds to 60-year-olds. Hearing patients' life stories significantly broadened her outlook on the uniqueness of each and every patient. The patients were also very appreciative of her work, which made the experience particularly rewarding.

On campus, the focus is on the protocols of the clinic, but valuable perspectives that continue after graduation are learned through working in the community. "It makes you a well-rounded future health professional—you know what's out there beyond a clinical practice setting," says Sayena, who would like to pursue a master's degree in public health. "People think that once you graduate all you do is go into clinical practice, but there are so many more opportunities in the community." Likewise, Kim has enjoyed working with people who do not have access to primary care and sees herself branching off from ordinary clinic work. And she plans to continue volunteering at clinics during her next two years of school.

Both agree that all dental hygiene students would benefit from this volunteer experience—especially from working with dental students, observing and assisting with suctioning. "We saw a lot of procedures like restorations and endodontics, and they needed us to perform local anaesthetics," Sayena says. She noted that there is a lot of need for primary care during a volunteer clinic, so more dental hygiene volunteers would be very welcome.

Kim and Sayena have encouraging advice for future volunteer dental hygiene students: step out of your comfort zone, try new things, don't be scared to ask questions because there is always help at hand, don't worry about skill level, and above all, enjoy the experience.

The Chemainus volunteer clinic is made possible with support of the Rotary Club of Chemainus, the Rotary Club of Steveston and the Dental Mission Project Society. "Adoptive Rotary parents" hosted volunteers in their homes. For a full list of volunteers, please see the "Thank You" page in this issue of *Impressions*.



Melissa Milligan

Kathryn Hunter

"After screening 50 children under the age of five in one morning, you start understanding what to look for, what's normal, what's not."
— Kathryn Hunter, DMD student

Group Mission to Colombia—An Outstanding Experience for Dental Students

In April 2012, then DMD 2012 candidates Melissa Milligan and Kathryn Hunter travelled to South America, where they joined students and dentists from the University of Southern California Faculty of Dentistry. The USC faculty offers a volunteer dental program in collaboration with Ayuda Inc., a not-for-profit organization focused on providing free dental care to underserved communities. This was the second year that the Sinclair Travel Fellowship Program supported the UBC Dentistry fourth-year travel elective.

The team travelled to Cartagena, Colombia, where they treated 845 patients in a local barrio of 13,000 people. The high level of organization and teamwork, and the special focus on young patients and their dental problems, were particularly meaningful for the two UBC students.

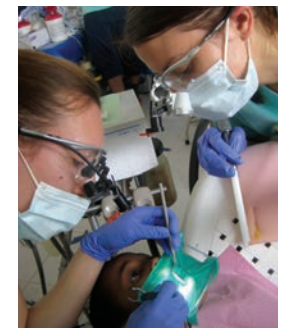
"After screening 50 children under the age of five in one morning, you start understanding what to look for, what's normal, what's not," says Kathryn, who shared that during her training at UBC she was uncomfortable with having a young child cry in the chair. "It just wasn't something that I thought was a part of dentistry, and my first instinct was to have someone else take over," she says, and noted that at the UBC clinic child patients are usually age five and older.

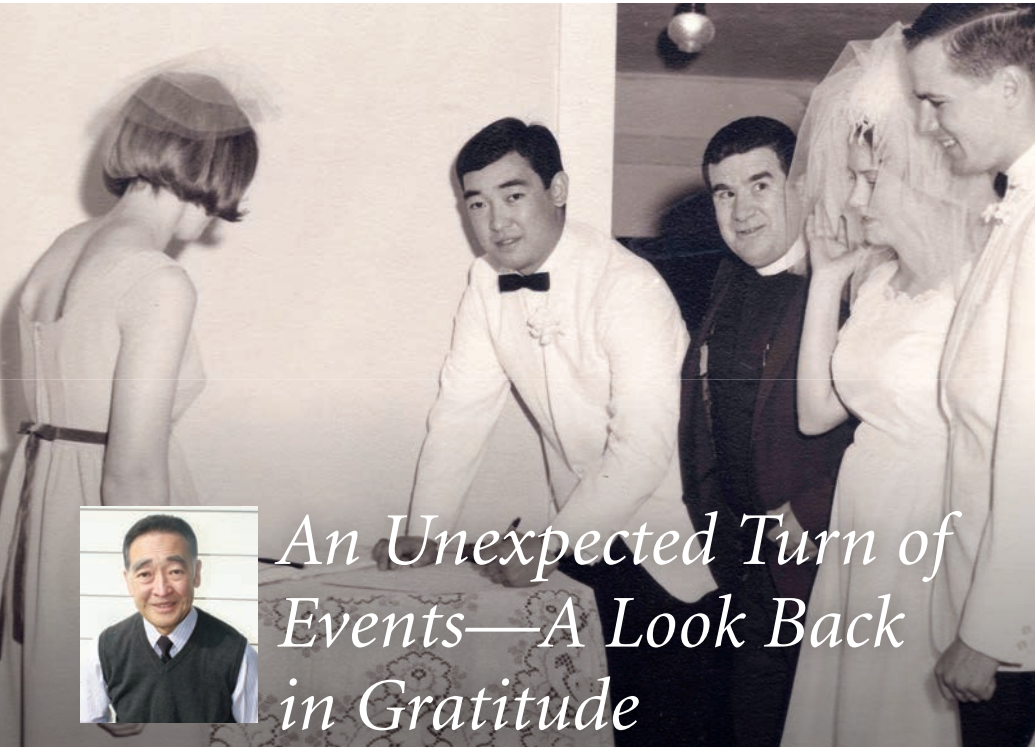
For four hours on one day in Cartagena, Kathryn gave children needles to anaesthetize them before starting their dental treatment. "I don't think I've ever seen so many crying children. At first I thought they'd all hate me." However, Kathryn learned a valuable lesson that day: even when kids are crying, they still need help to clear their mouths of disease, and in the end, no matter how much they dislike it at the time, they are grateful. Her most touching moment, among many hugs, kisses and

articulations of *gracias*, was a huge smile and a wave from a boy she was convinced hated her because he had screamed during his treatment. "I was ecstatic!" she recalls.

"The triage system developed by the group allowed for patients to be seen in a timely and orderly manner," says Melissa. She and Kathryn worked triage on their last day, and Melissa credits this system for their efficiency. Another highlight for her was working with radiology and learning how to use the NOMAD hand-held, portable X-ray machine. Melissa also gained more experience with atraumatic restorative treatment (ART) and extractions. "Working with the Ayuda team was an outstanding experience. Everyone had a key role to play and felt supported by their colleagues. This meant we all had the opportunity to enhance and expand our dental skills and comfort zones in the clinic."

For Melissa, a passion for combining humanitarian acts and travel has been percolating throughout dental school. Her experience in Colombia could be just the tip of the iceberg—she hopes to work with the Ayuda group again. She is excited, she says, by how such a large group of people could organize themselves into an efficient, temporary dental clinic to support a community in need.





An Unexpected Turn of Events—A Look Back in Gratitude

In the summer of 1968, Dr. Russell Yamada received a telegram that for all intents and purposes changed the direction of his life.

This was during the height of the Vietnam War. Yamada had just graduated from Oregon State University and had applied to their dental school—dentistry and medicine were two areas of study that offered draft exemptions—but he was not accepted. Recalling that his grandfather had emigrated from Japan to New Westminster, BC, in 1898 was enough inducement for Yamada to then apply to the UBC Faculty of Dentistry.

When he did not get any response from UBC, Yamada pursued other options, and in July of 1968 was accepted to attend US Naval Officer

Candidate School. His orders were to report to Newport, Rhode Island, on August 27, 1968—where he would have trained alongside former US presidential candidate John Kerry. In refocusing his energy on a naval career, Yamada had put himself just a few months away from possible battlefield duty.

On August 1, 1968, however, Yamada received his first ever Western Union telegram. It read, *“Pleased to inform you application for admission approved. Wire \$100 deposit immediately. Further instructions to follow when postal strike settled. Signed: S Wah Leung, Dean, Faculty of Dentistry UBC.”*

At first, Yamada was wary, not sure he could believe the telegram. But when his admission was verified, he went into shock—suddenly a completely different life path than the one he was about to assume with the US Navy had opened up.

The impact of that one short telegram on Yamada’s life was far-reaching. Not only did UBC Dentistry provide him with the education for a profession that he still practices 41 years later, but while at UBC he also made several lifelong friends and met his wife Sylvia.

Yamada wishes that he had expressed his gratitude more when former Dentistry dean Leung was alive. So now, in Leung’s honour, Yamada would like to thank UBC Dentistry. “I am grateful for all that this profession has offered me, and the UBC Faculty of Dentistry had a great deal to do with this. I was inspired to make a gift for the new graduate clinic and for ongoing dental education because of the gift dean S. Wah Leung and the Faculty of Dentistry gave to me: an opportunity to study dentistry at UBC.”

The new graduate clinic will be completed in early 2013 and will house 20 new operatories, a digital learning centre, patient consultation rooms and seminar space. There are several naming opportunities in support of the new clinic. To find out more, contact the UBC Dentistry Development team at [dentistry.development@ubc.ca](mailto:development@ubc.ca).



Recognizing Those Who Make a Difference in Our Lives

Recognition can be given in many different ways. Drs. Rokshana and Khozema Chherawala—known for their generosity and kindness, not only with their patients, but also with their staff—stepped forward this past year to generously support the extensive renovation project in the John B. Macdonald Building (JBM)—and to honour their hard-working staff members. In addition to supporting the naming of one of the new conference rooms, the Chherawalas decided to make a secondary gift, “adopting an op” (operatory) in the Nobel Biocare Oral Health Centre. And they decided to recognize the people who directly contribute to the operation and day-to-day success of their busy practices in Maple Ridge and Port Coquitlam by putting their names on the dedication plaque located in Operatory 10.8.

In October, the Chherawalas invited their dental office workers to the official unveiling of the new Chherawala Conference Room in the JBM—but then, to the surprise of the invited staff members, each was handed a pair of gold scissors with which to cut the ribbon on their newly dedicated operatory.

“I felt extremely proud and was so touched to be included on this dedication,”

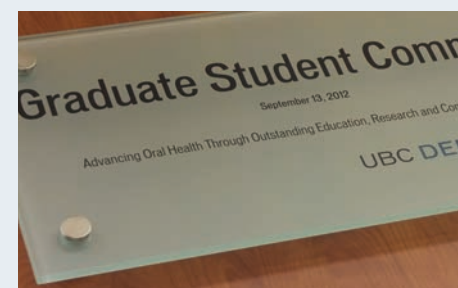
says Julie Parkes, who has been the Chherawalas’ office manager for 11 years.



A mother’s love and compassion was honoured when Dr. Mahsa Soraya dedicated newly built conference room 270A to her mother Homa. It was her mother’s commitment and passion for education and knowledge that inspired Dr. Soraya to surprise her family with the conference room dedication. This past October, family members and close friends were invited to an afternoon tea to inaugurate the facility. The celebration was a wonderful opportunity for UBC Dentistry to recognize Dr. Soraya and her husband Dr. Alex Galo, both UBC Dentistry alumni from the Class of 1991, for their commitment to helping provide this interactive and dynamic learning space for Dentistry students.

Dr. Soraya’s commitment to students also extends to her role as one of over 300 UBC Dentistry part-time faculty members—dental professionals who often give up practice or personal time to fill roles as clinical instructors, clinical educators, small-group-learning tutors and community service tutors.

To learn more about how to support the JBM Renovation Fund, or to become a part-time faculty member or volunteer for the Volunteer Community Clinic Program, contact Jane Merling at 604-822-5886 or merling@dentistry.ubc.ca.



MAKE IT COUNT

Congratulations to alumnus Dr. Jerry Jacob from the Class of 1996 for “adopting” the first study carrel in the newly renovated Graduate Student Commons.

With your gift of \$5,000, you too can help support a new study carrel for a graduate student in endodontics, orthodontics, pediatrics, periodontics or prosthodontics.

To learn more, contact Nik Williams-Walshe at 604-822-6808 or nww@dentistry.ubc.ca

2014

50 years

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CLASS NOTES AND EVENTS

Share your news with classmates, faculty and friends. Look for reunion announcements and events for all alumni. Submit alumni stories and keep in touch at www.dentistry.ubc.ca/alumni

1970s



Yolanda Buxton
Dip DH 1972

We met for our 40-year celebration on September 15, 2012, for a walk around the Granville Island seawall, followed by appetizers and a Thai dinner at my home. Those who attended enjoyed reminiscing about our days at school and shared recent accomplishments and stories. We hope to see more of you for the 45-year reunion!



DMD 1973 REUNION

Wayne Peace DMD 1973 is organizing something a little more exotic for next year's class reunion in celebration of 40 years since graduation. He is thinking of either an Alaska cruise or a European river cruise. To find out more and to vote for your choice, contact him at waynepeace@gmail.com or alumni@dentistry.ubc.ca

KEEP IN TOUCH

www.dentistry.ubc.ca/alumni



Jill Moore
Dip DH 1976

Recently Jill (pictured here on the left with Susan Wacker DMD 1986) volunteered her time on Open Wide Community Clinic Day to deliver free dental hygiene, at the CDI College in Burnaby, BC, to clients of the Salvation Army and the YWCA. Other dental hygiene alumni volunteers included Nicole Chien BDS Sc 2012 and Cathy Jackson Dip DH 1979. See the "Thank You" page for all the volunteers.

DMD 1978 REUNION

The DMD 35-year reunion will be at the home of Ed O'Brien following the class photo at the Annual Alumni Reception at the Pacific Dental Conference on Friday, March 8, 2013. For more information, contact Ed at edobrien@telus.net or alumni@dentistry.ubc.ca

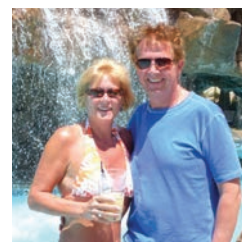


Hank Klein
DMD 1978

Wendy Rondeau
DMD 1979

1970s grads Hank Klein and Wendy Rondeau attended Dean's Night at the Italian Cultural Centre on September 26, 2012. At the event, Hank was given a special thank you for his volunteer service on the UBC Dentistry Board of Counsellors, and Wendy attended for her service to the Volunteer Community Clinic Program. Volunteerism at the Faculty of Dentistry continues to grow each year. To volunteer, contact alumni@dentistry.ubc.ca

1980s



Patrick Manders
DMD 1980

Patrick and his wife Janice enjoyed a trip to Las Vegas, compliments of Nadean Burkett & Associates. They won the trip at the Annual Alumni Reception at the Pacific Dental Conference last year.



Chris Hacker
DMD 1981

Chris has joined the College of Dental Surgeons as a part-time complaint investigator. Prior to joining CDSBC staff, he served on various College committees. Chris is a founding member of the Study Club Alliance of BC, an active member of the American Academy of Gold Foil Operators and the Academy of R.V. Tucker Study Clubs, and is a Fellow of the American College of Dentists. Chris also serves as secretary for the Associated Ferrier Study Clubs and has practised general dentistry for over 30 years. He lives in Vancouver with his wife and two children.



Richard Wilczek
DMD 1981

Congratulations to Richard, who has been elected president of the British Columbia Dental Association.



Doug Conn
DMD 1982

Members of the DMD Class of 1982 enjoyed their 30-year reunion at the Cove Lakeside Resort in West Kelowna, BC, from June 22 to 24, 2012. The weekend activities included dinners at the Bonfire Grill and the Quail's Gate Old Vines Restaurant, as well as wine-tasting and long walks together along the lake. Everyone agreed that it felt just like old times and like dental school was just yesterday.

DMD 1983 REUNION

In celebration of 30 postgraduation years, Bill Liang and the DMD Class of 1983 are planning a dinner following the Annual Alumni Reception at the Pacific Dental Conference on March 8, 2013. To find out more, email either wliang@implant.ca or alumni@dentistry.ubc.ca

Dip DH 1983 REUNION

For information on the Dip DH 30-year reunion, contact Maria Taylor (née Nibbelink) by email at taylordavid@shaw.ca or alumni@dentistry.ubc.ca

PLANNING A REUNION?

For ideas, contact Jenn Parsons, manager of Alumni & Community Affairs, at 604-822-6751 or alumni@dentistry.ubc.ca



Joan Eaton
Lange Soo
DMD 1987

On a gorgeous warm weekend at the end of September, 10 classmates from the DMD Class of 1987 met in the Kelowna area for their 25-year reunion. The luxurious Cove Lakeside Resort was the venue for the weekend. An informal barbecue was held in the spacious hospitality suite on Friday night, where everyone had a chance to catch up and relax. Saturday morning, Dr. Charles Shuler, dean of UBC Dentistry, gave a very informative and interesting lecture on bisphosphonates. After the lecture, the group was treated to a private wine tasting at Quail's Gate winery, followed by a visit to Mission Hill winery. A more formal dinner was held that evening at the Bonfire Grill in the resort, which gave everyone yet another chance to visit and reminisce. The reunion ended with a leisurely Sunday brunch for those who didn't have early flights to catch in the morning.



Lange Soo
DMD 1987

During April the Semiahmoo Dental Outreach group led by Dr. Ken Stones headed to Vietnam on a dental mission. Our group consisted of six dentists and three dental hygienists. We performed preventive, restorative and surgical dental care on over 500 school-age children at a school in a rural area outside of Da Nang. It was an incredible experience to travel to that part of the world and be able to use our skills to give back in a meaningful way. What made it even more special was to share the experience with fellow classmates Les Ennis, Joan Eaton and Janis Boyd at the time of our 25-year grad anniversary! Our experience also inspired us to raise money for the Class of 1987 Travel Fellowship Endowment Fund to support DMD students on international community outreach programs in Southeast Asia.

DMD 1988 REUNION

Plans are underway for the DMD Class of 1988 reunion next year. For information, contact either Alan Lau, Brian Standerwick or David Yu through the alumni office at alumni@dentistry.ubc.ca



Ernest Lam
DMD 1989

Congratulations to Ernest, who was appointed as a professor at the University of Toronto's Faculty of Dentistry effective July 1, 2012.

1990s



Anita Gartner-
Makihara
DMD 1993

Anita (pictured here on the left with Agnes Yngson from CDI College) led a team of 14 alumni, both dentists and hygienists, who provided free dentistry and dental hygiene to clients of the Salvation Army and YWCA in Burnaby, BC. She wishes to thank the following for their volunteer time and support: Wendy Rondeau DMD 1979, Laura Caylor DMD 2010, Susan Wacker DMD 1986, Stephanie Cheng DMD 2011, Tim Yan DMD 1989, Hanah Tsao DMD 2011, Jimmy Loo DMD 2003, Jill Moore Dip DH 1976, Cathy Jackson Dip DH 1979, Nicole Chien BDS Sc 2012 and Mark Norris DMD 1979; pediatric dentistry graduate students Drs. Andrew Wong, Jennifer Park and Shan Sun; and the staff of CDI College, Burnaby campus, as well as Patterson Dental, the BCDA and the YWCA. Without such committed co-operation, the day would not have been such a success—39 people were treated, nearly half of them children. Many, many thanks!



Reza Nouri
DMD 1994

With great coaching once again by Dr. Charles Shuler, dean of UBC Dentistry, the alumni/faculty soccer team was victorious over the students in a very close game last spring. Pictured here are the team and Reza with his daughter Melika. To join the 2013 alumni/faculty team, email Reza at rezanouri@telus.net

DMD 1998 REUNION

The DMD Class of 1998 is planning a 15-year reunion dinner to follow the Annual Alumni Reception at the Pacific Dental Conference. For more information, email alumni@dentistry.ubc.ca

2000s



DMD 2008 REUNION

Danielle Woo, Priya Jeganathan and Julie Ng are planning a five-year reunion long-table dinner at the Irish Heather on Friday, March 8, 2013, following the class photos at the Annual Alumni Reception at the Pacific Dental Conference. For information, email daniellewoo@hotmail.com or alumni@dentistry.ubc.ca



Aidin Ghotbi
DMD 2008

Sanaz Najian
DMD 2011

Aidin and Sanaz were married at the Dreams Riviera Cancun Resort & Spa, Puerto Morelos, Mexico, on May 1, 2012. Several alumni attended.



Sarah Garbelya
Jorell Valdes
DMD 2012

The dental and dental hygiene students of the 2012 graduating class donated money to a fund to purchase two cameras for the UBC Dentistry clinic. We hope the tradition will continue next year with the Class of 2013.



Cameron Garrett
DMD 2012

Kaiden E. Garrett was born on Saturday, September 22, 2012, to Cameron Garrett and his wife Sara Edwards. Kaiden weighed in at a healthy 7 lb. 9 oz. and had lots of red hair. Go figure? Mom and baby are doing well, but Dad is missing his sleep. Cameron and Sara are already accepting applications for future babysitters.

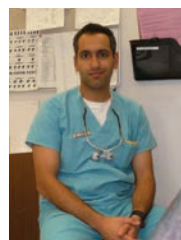
FRIEND US ON FACEBOOK

Find Jenn Parsons, manager of Alumni & Community Affairs, on Facebook.



Kathryn Hunter
Melissa Milligan
DMD 2012

Melissa and Kathryn, photographed here with Dr. Bill Brymer, are enjoying some time after completing their recent volunteer mission trip to Cartagena, Colombia with the Ayuda group from the University of Southern California.



Paul Mikhail
DMD 2012

Hello everyone. I moved to Ottawa and am working with the Department of National Defence. Teresa and I are settling in, and the city is growing on us. I definitely miss Vancouver; it is such a gorgeous city. Hope you are all doing well and enjoying life! I miss you all.



Rachel Pang
BDS 2012

Rachel is pleased to announce her recent marriage to Josh Rosenberg on September 9, 2012, in Vancouver, BC.

SHARE

Send an alumni story or update for "Class Notes" to alumni@dentistry.ubc.ca

FOLLOW US ON TWITTER

Follow Alumni & Community Affairs
@dentalum_at_ubc
www.twitter.com/dentalum_at_ubc

Almost Alumni



Michelle Foster
BDS 2014

Vancouver Homeless Connect 2012 took place on Friday, October 12, 2012, at the Aboriginal Friendship Centre on East Hastings Street in Vancouver as part of Homelessness Action Week 2012. The event was hosted by the City of Vancouver, with support from the Regional Steering Committee on Homelessness and the Aboriginal Homelessness Steering Committee. Representing UBC Dentistry, our group of students provided toothbrushes, toothpaste and basic oral hygiene instruction to the event attendees. We enjoyed the opportunity and noticed that this community demonstrated great dental knowledge and general awareness of health, but lacked the ability to access care. We established a good rapport with the people in attendance and the organizers of the event, and look forward to continuing our involvement by expanding the dental services next year. Thank you to the students who volunteered: Tamara Edinger (holding child), Michelle Foster (to the right of Tamara), Kim Nguyen (with a client), and Kelsey Singer, all BDS 2014.



Phil Hou
DMD 2014

The SuperChefs Cookery Society for Kids, founded by Greg Chang DMD 1986, ran seven summer cookery camps this year at various inner-city schools in Surrey, BC. These were presented in partnership with Surrey School District #36, Basketball BC and the Kinsmen Lodge. One of our third-year DMD students, Phil Hou, participated as guest chef instructor. His culinary talents were called on to show the young students from James Ardiel Elementary School how to prepare a pasta lunch for the elders living at the Kinsmen Lodge.



Mike Stearns
DMD 2014

This summer, 20 volunteer dentists, hygienists, students and friends went to Chemainus to volunteer with the H'ulh-etun Health Society. This volunteer clinic was by far the most rewarding and humbling experience I have been a part of during my dental education. It was great to meet and interact with so many unique people from that area over our three days. In addition, getting to work with, and learn from, past UBC Dentistry graduates was rewarding and an inspiration for all us students. Hearing the stories of the local people, meeting their families and seeing the smiles on their faces after we were able to provide them with dental treatment made this trip one that I will never forget. We were grateful for all participants and especially the alumni—check them out on the "Thank You" page in this issue of *Impressions*.



Chris Dare
DMD 2015

Fresh off final exams, Chris headed to Alaska to attempt to summit Denali (Mount McKinley), the highest peak in North America, standing at 20,327 feet (6,196 metres). This year was an especially poor year on the mountain, with traditionally bad weather becoming even more extreme and dangerous. Only 41 percent of all climbers that attempted Denali in 2012 succeeded. While personally hauling 150 pounds of gear and food, Chris battled -30 C temperatures and high winds over 15 days to successfully reach the summit on June 16, 2012.

Mount McKinley is the third of the Seven Summits mountains that Chris has completed climbing—the previous two were Mount Kilimanjaro in Tanzania and Mount Elbrus in Russia. The Seven Summits is a mountaineering challenge to climb the highest peak on each continent.



Bruce Chou
DMD 2015

We four lucky first-year DMD students—Paul Lee, Kevin Shen, Michael Tsai and myself, Bruce Chou—embarked on a journey to Korea this past summer. Our Korean hosts and friends fully immersed us in the Korean culture: socially, culturally and academically. Here we are dancing with our new friends to the song "Gangnam Style" by PSY, a well-known South Korean singer, songwriter, rapper, dancer and record producer.

Recent Events



Alumni Reception at the Ontario Dental Conference

Over 40 alumni and friends joined dean of Dentistry Dr. Charles Shuler at the Real Sports Bar and Grill following the Ontario Dental Conference on May 11, 2012, for chicken wings and refreshments, compliments of Dentsply Canada. Unfortunately, play-off hockey was not being shown on the big screens, but everyone had fun nonetheless. Mark your calendars for the next alumni event in Ontario on May 3, 2013, at the same place. For more information, contact alumni@dentistry.ubc.ca.



Welcome Weekend: BZZR Garden, Sports Day, Annual Alumni & Friends Golf Tournament

Welcome Weekend, September 14 to 16, 2012, opened with a Friday night BZZR Garden, hosted by the Dental Undergraduate Society, and a Sports Day on McInnes Field on Saturday. Over 150 students and faculty participated, with the Class of 2015 taking the winning trophy. Thank you to Tony Bae DMD 2013 and the sports reps from all years: Victoria Rogoschewsky DMD 2016, Matthew Chin DMD 2016, Carmen Hansford DMD 2015, Bradley Asay DMD 2015, Dilraj Bal DMD 2014, Graham Macdonald DMD 2014, Caitlin Meredith DMD 2013, Bryan Wong DMD 2013 and Chris Lee BSc 2015.



Zach Zeiler
DMD 2015

Never having attended the Alumni & Friends Golf Tournament, I was unsure of what to expect. I was even unsure of how the Faculty—let alone the Dentistry dean himself—would respond to our bald-capped, fake-bearded “Team Shuler” costumes (see photo). At 10 a.m., however, when the “Teenage Mutant Ninja Turtles” (winner of the costume contest) and the “Flapper Girls” arrived in full force, I knew our attire would be more or less par for the course. From on-course activities—Scotiabank rubber ducky chipping contest, Advil massage tent, Aurum Ceramic longest drive contest, Paul McCartney tickets giveaway from Nadean Burkett & Associates, and the Sinclair marshmallow drive—to playing the game of golf, the tournament was a blast to help plan and take part in. Congratulations to Brian Standerwick DMD 1988, Brian Sully-Daniels DMD 1989, Rob Staschuk DMD 1989 and Craig Dewar, Nobel Biocare, who walked away with the Monarch trophy. Thank you to all the volunteers, alumni partners and prize donors.



Jay Chan
Steven Huang
DMD 2014

Volunteer Community Clinic Program Forum

Students hosted a forum about the Volunteer Community Clinic Program on September 15, 2012. Over 30 DMD and BSc student leaders, community dentists and faculty members involved with the program were in attendance. The forum was a huge success and was instrumental to the planning of this year's volunteer clinic program, which will be running 16 clinics during the 2012-2013 academic year. The students have been active in securing dental supplies needed for the upcoming volunteer clinics, and the program recently received a large donation of dental supplies from Patterson Dental. Many thanks to Patterson Dental for their continuing support. Pictured on the left are Red Barnes from Patterson Dental, Jay and Steven (right). Jay is also pictured leading the forum.



Jennilee
Jamison
DMD 2009

Alumni Wine Reception at Northwest Dental Society, Edmonton

It was a pleasure to meet with UBC Dentistry alumni, as well as the dean and our alumni staff, at a reception here in Edmonton. I had the opportunity to meet some fellow UBC grads (dental and dental hygiene—including Sam Heron BSc 2012, pictured here with the dean, Dr. Charles Shuler) that I hadn't met before, as well as to chat with some people I hadn't seen for a few years. The reception reminded me of the fun events we had while attending UBC—a fancier BZZR garden, if you will. I hope I can ride my new Harley-Davidson motorcycle to the next event!



Taste of Vancouver Island, Victoria

UBC Dentistry alumni from Vancouver Island and the Victoria & District Dental Society joined Dr. Charles Shuler, dean of UBC Dentistry, for local food and wine at the Taste of Vancouver Island reception on October 13. The event was held at the Inn at Laurel Point in Victoria, BC. This year, proud parents Elizabeth Watt DMD 2006 and her husband Chris brought along Evelyn, the newest addition to their family, born August 7, 2012.



Alumni Wine Reception at TODS Meeting, Kelowna

Thompson Okanagan Dental Society alumni joined Dr. Charles Shuler, dean of UBC Dentistry, at the annual alumni wine reception following the TODS meeting in Kelowna this past October. Pictured here at the event is Dan Rootes DMD 2006.

More Events for Students and Alumni



5TH ANNUAL BATTLE OF THE BANDS: FACULTY/ALUMNI VS. STUDENTS

Friday, January 18, 2013 · Doors open at 7 pm (first band at 8 pm)

Ballroom, Thea Koerner Graduate Student Centre, UBC Point Grey Campus

Tickets on sale soon!



YOUNG ALUMNI & STUDENT RECEPTION AT THE PACIFIC DENTAL CONFERENCE 2013

Thursday, March 7, 2013 · 7 – 9 pm

All recent graduates and students in third and fourth years are invited. Complimentary beverage and appetizers provided.

Location to be determined, but will be within walking distance of the Pacific Dental Conference.

RSVP to alumni@dentistry.ubc.ca



ANNUAL ALUMNI RECEPTION PACIFIC DENTAL CONFERENCE 2013

Friday, March 8, 2013 · 6 – 8 pm

Second Floor Lobby, Vancouver Convention and Exhibition Centre

Commemorative anniversary class photos to be taken of: 1968, 1973, 1978, 1983, 1988, 1993, 1998, 2003, 2008 and 2012. A trip for two to stay at the Bellagio Hotel in Las Vegas, with tickets to see Cirque du Soleil's production of *O* is the prize for the alumni getaway contest, compliments of Nadean Burkett & Associates.

No RSVP is necessary, but if you would like to organize a class reunion to follow the reception, contact Jenn Parsons at alumni@dentistry.ubc.ca

COMMUNITY PARTNERS



Colgate



ALUMNI PARTNERS



UBC ALUMNI WEEKEND

Saturday, May 25, 2013

UBC Point Grey campus

For more information, visit www.alumni.ubc.ca or email alumni@dentistry.ubc.ca

Stay in Touch

The alumni relations department at UBC Dentistry can help you stay connected with your fellow graduates, plan and promote reunions, and keep you informed of upcoming educational opportunities. To learn more, contact Jenn Parsons, manager of Alumni & Community Affairs, at 604-822-6751 or alumni@dentistry.ubc.ca

Stay connected to more than 2,300 alumni. Share your news, thoughts or comments. Visit www.dentistry.ubc.ca/alumni

MENTORSHIP PROGRAM

The UBC Faculty of Dentistry & BC Dental Association Dental Mentorship Program, sponsored by CDSPI, is recruiting dentists to be mentors. If you are interested in being paired up with a student, contact Alex Hemming at ahem@dentistry.ubc.ca



ALUMNI RECEPTION AT THE ONTARIO DENTAL CONFERENCE

Friday, May 3, 2013 · 6 pm

Real Sports Bar and Grill, Toronto, Ontario

Join alumni and friends for chicken wings and beer at the alumni reception following the Ontario Dental Conference.

For more information, email Diana Younan DMD 2010 at deeyounan@gmail.com or alumni@dentistry.ubc.ca

Thank you to all our volunteers and industry supporters. **ALUMNI VS. STUDENTS HOCKEY GAME** · Jeffrey Coil DMD 1985 PhD 1992 · Dr. Leo Fung · Dr. Peter Kearney · Joel Marco DMD 1992 · Dr. David Newman · Alex Rosenczweig DMD 2002 · Zak Shuler · Brian Standerwick DMD 1988 · Richard Standerwick DMD 1975 · Brian Sully-Daniels DMD 1989 · Glenn van As DMD 1987 · Dr. Cheng Lun Wang · David Yu DMD 1988 **DENTAL MENTORSHIP PROGRAM** · Tristen Aull DMD 2013 · Tony Bae DMD 2013 · Dr. Pamela Barias · Dan Berant DMD 2013 · San Bhatha DMD 2001 · Janis Boyd DMD 1987 · Coco Butler DMD 2013 · Stefan Caney DMD 2013 · Suzanne Carlisle DMD 1997 · Dr. Tom Cheevers · Ji Won Choi DMD 2013 · Matthew Choi DMD 2013 · Susan Choi DMD 2013 · Dr. Rodney Clarence · Heather Cooke DMD 2013 · Dr. Zahra Davami · Jeffry Davis DMD 1980 · Dr. Inderjit Dulay · Dr. Ashley Dykun Yakiwchuk · Kaitlin Enns DMD 2013 · Flore-Anne Foellmi DMD 2013 · Ray Fong DMD 1989 · Matt Francisco DMD 2013 · Elnaz Ghandchi DMD 2013 · Azadeh Ghasemi DMD 2013 · Judy Gough DMD 1995 · Silke Gumpinger DMD 2003 · Sarah He DMD 2013 · Ahmed Hieawy DMD 2013 · Dr. Kathy Horwood · Vivian Huang DMD 2013 · Jenny Johal DMD 2013 · Heather Jones DMD 2013 · Dr. Chris Kan · Monika Kasprzak DMD 2013 · Andrew Kay DMD 1981 · Jinny Kim DMD 2013 · Scott Kollen DMD 2013 · Karthik Lakshminarayanan DMD 2013 · Alisa Lange DMD 1994 · Dr. Mario Laskaris · Kevin Lauwers DMD 2005 · Angelique Leung DMD 1988 · Dr. Kevin Li · Dr. Frederick Li · Charis Luk DMD 2013 · Firouzeh Majlessi DMD 2013 · Caitlin Meredith DMD 2013 · Nasim Mitha DMD 1986 · Gregory Nelson DMD 1983 · Robert Paterson DMD 1981 · Michael Racich DMD 1982 · William Riddell DMD 1987 · Nima Salimipour DMD 2013 · Nicholas Seddon DMD 2006 · Vikrant Sharma DMD 2013 · Dr. Andrew Shearon · Dr. Robert Sims · Brian Standerwick DMD 1988 · Grant Sun DMD 1981 · Janet Thom DMD 1990 · Akash Villing DMD 2013 · Gennia Vorobyev DMD 2013 · Erica Wang DMD 2013 · David Waterman DMD 1979 · Alex Wong DMD 2013 · Bryan Wong DMD 2013 · Jocelyn Yang DMD 2013 **INSTITUTE OF ABORIGINAL HEALTH SUMMER SCIENCE CAMP** · Andrea Baird DMD 2016 · Dr. Bill Brymer (faculty) · Jay Chan DMD 2014 · Natalie Chaudhary DMD 2014 · Danielle Coulson DMD 2014 · Mike Crisanti DMD 2013 · Aleem Kara DMD 2014 · Ann Khosla DMD 2014 · Shamsheer Sandlas DMD 2015 · Laura Schmidt DMD 2015 · David Sweet OC DMD 1978 · Charlene Tai DMD 2014 · Sinthi Vaithilingham DMD 2014 · Zachary Zeiler DMD 2015 **KELOWNA GOSPEL MISSION DENTAL CLINIC** · Dr. Richard Bell · Dr. Bradley Bishop · Dr. Gordon Black (GPR 1997) · Dr. David Bobyn · Brent Corlazzoli DMD 1996 · Dr. Paul Coulter · Dr. David Crocker · Dr. Steven Faigan · Dr. Shane Gagner · Dr. Colin Hughes · Ian Leitch DMD 1983 · John Macdonnell DMD 1994 · Thomas Martin DMD 1987 · Michael Matwychuk DMD 1999 · Dr. Bill Mulgrew · Russell Naito DMD 1987 · Dr. Todd Penkala · Dr. Michael Rampado · Dr. Jeffrey Stewart · Dr. Keelen Tymkiw · Dr. Edsard Van Steenberg · Dr. Thomas White · Richard Wilczek DMD 1981 **OPEN WIDE COMMUNITY CLINIC DAY** · Laura Caylor DMD 2010 · Stephanie Cheng DMD 2011 · Nicole Chien BDS Sc 2012 · Anita Gartner-Makihara DMD 1993 · Cathy Jackson Dip DH 1979 · Jimmy Loo DMD 2003 · Jill Moore Dip DH 1976 · Mark Norris DMD 1979 · Dr. Jennifer Park MSc/Dip Pedo 2014 · Wendy Rondeau DMD 1979 · Dr. Shan Sun MSc/Dip Pedo 2014 · Hanah Tsao DMD 2011 · Susan Wacker DMD 1986 · Dr. Andrew Wong MSc/Dip Pedo 2014 · Tim Yan DMD 1989 **SUMMER STUDENT PRACTITIONER PROGRAM** · Dr. Roger Armstrong · Chris Barlow DMD 1989 · Dr. Monica Berant · Ruby Bhullar DMD 2007 · Dr. R.R. Blanchard · Janis Boyd DMD 1987 · Dr. Jim Brass · William Brooke DMD 2003 · Cory Brown DMD 2009 · Chris Bryant DMD 1991 · Dr. Awdesh Chandra ·

THANK YOU

Dr. Andrew Cheng · David Ciriani DMD 1987 · Dr. Luke Cockerham · Dr. Gerald Dyck · Joan Eaton DMD 1987 · Leslie Ennis DMD 1987 · Laurance Flagg Dip DH 1978 DMD 1988 · Simon Gooch DMD 2011 · Dr. Scott Kaplan · Zoltan Keresztes DMD 1982 · Dr. Dan Kinkela · Rod Low DMD 1985 · Brent Moore DMD 2010 · Hugh Mori DMD 1973 · Jeff Nakagawa DMD 1977 · Dr. Alastair Nicoll · Bob Pipars DMD 1978 · Dr. Paul Pocock · Donald Ragan DMD 1974 · Dr. Sandeep Sachdeva · Dr. Sarika Sachdeva · Nicholas Seddon DMD 2006 · Dr. Mark Spitz · Dr. Elmer Thiessen · Dr. Michael Thomas · Andrew Tkachuk DMD 1990 · Dr. Sunil Venugopal · Richard Wilczek DMD 1981 · Dr. Glen Wilson · Dr. Roland Yap **UBC DENTISTRY BOARD OF COUNSELLORS** · Tony Bae DMD 2013 · Richard Busse DMD 1986 · Dr. Ken Chow · Susan Chow DMD 1972 · Brenda Currie Dip DH 1976 BDS Sc 2004 MSc 2007 · Carrie De Palma BDS Sc 2010 · Mr. Craig Dewar · Julie Kwan BDS Sc 2013 · Mark Kwon DMD 1997 · Mrs. Sophia Leung CM · Dr. Jin Li-Jian · Mr. Tuomas Lokki · Mr. Hyo Maier · Mr. David Poole · Mr. Kishore Pranjivan · Tom Roozendaal DMD 2001 · Nick Seddon DMD 2006 · Dr. Chuck Slonecker · Margit Strobl BDS Sc 2008 · Mr. Ron Suh · Dr. Tim Tam · Ash Varma DMD 1983 · Dr. Bill Wong · Benjamin Yeung DMD 1983 · Ron Zokol DMD 1974 **VOLUNTEER CLINIC-CHEMAINUS** · Bob Blacker · Dr. Bill Brymer (faculty) · Coco Butler DMD 2013 · Kathy Chatten · Natalie Chaudhary DMD 2014 · Joanne Dawson · Sayena Faraji BDS Sc 2013 · Flore-Anne Foellmi DMD 2013 · Cameron Garrett DMD 2012 · Dustin George DMD 2011 · David Hemerling DMD 1993 · Elizabeth Johnson-Lee DMD 1992 · Kim Nguyen BDS Sc 2014 · Doug Nielsen DMD 1972 · Susan Nielsen · Jon Paxon DMD 2013 · Mike Stearns DMD 2014 · Jason Tao DMD 2013 · Akash Villing DMD 2013 · Erica Wang DMD 2013 **VOLUNTEER CLINIC-MT. PLEASANT COMMUNITY CENTRE** · Bob Blacker · Dr. Bill Brymer (faculty) · Keith Engel DMD 2014 · Bardia Ghassemi DMD 2015 · Dr. David Hemerling · Priya Kandola DMD 2014 · Kyla Leung DMD 2015 · Doug Nielsen DMD 1972 · Susan Nielsen · Vikrant Sharma DMD 2013 · Mike Stearns DMD 2014 · Akash Villings DMD 2013 · Jocelyn Yang DMD 2013 **VOLUNTEER CLINIC-VANCOUVER NATIVE HEALTH SOCIETY** · Ashkan Afshinkia DMD 2014 · Dr. Zina Alkafaji · Brad Asay DMD 2015 · Tony Bae DMD 2013 · Coco Butle DMD 2013 · Taneshwar Chahal DMD 2014 · Matthew Choi DMD 2013 · Bruce Chou DMD 2015 · Heather Cooke DMD 2013 · Payam Eslami DMD 2013 · Robyn Isaacs DMD 2010 · Ben Jinn DMD 2015 · Roger Kiang DMD 2016 · Jinny Kim DMD 2013 · Amanda Lacerda DMD 2015 · David Larsen DMD 1987 · Ryan Lauwers DMD 2004 · Andrew Lee DMD 2014 · Jinny Nam DMD 2014 · Dennis Nuygen DMD 2015 · Julianne Proniuk DMD 2015 · Wendy Rondeau DMD 1979 · Fiona Roth DMD 2016 · Harlene Sekhon DMD 2014 · Sinthi Vaithilingham DMD 2014 **VOLUNTEER COMMUNITY CLINIC PROGRAM-STUDENT LEADERS** · Steven Barkwell DMD 2014 · Shane Bot DMD 2014 · Jay Chan DMD 2014 · Eugene Chien BDS Sc 2011 · Matthew Choi DMD 2013 · Susan Choi DMD 2013 · Danielle Coulson DMD 2014 · Matt Francisco DMD 2013 · Steven Huang DMD 2014 · Priya Kandola DMD 2014 · Ambreen Khan BDS Sc 2013 · Jamie Marshall DMD 2015 · Scott Martyna DMD 2012 · Graham McDonald DMD 2014 · Lachlan McLean DMD 2013 · Laura Schmidt DMD 2015 · Sharon Shao DMD 2014 · *Those listed with MSc/Dip Pedo, DMD or BDS Sc years from 2013 through 2016 following their name are candidates for graduation in the specified year. UBC Dentistry appreciates all who volunteered their time. We apologize if your name or organization was missed.*

CONTINUING DENTAL EDUCATION 2013

This calendar is subject to change.
For updates to spring 2013 course offerings, visit www.dentistry.ubc.ca/cde

JANUARY 2013

- 12 (SATURDAY)
Better Medicine, Better Dentistry-Dental Pharmacology Update
Dr. Mark Donaldson
- 19 - 20 (SATURDAY - SUNDAY)
Cone Beam CT Program for Dentists
Dr. Robert Langlais, Dr. James Mah
- 28 (MONDAY)
Cone Beam CT Program for Dental Assistants and Hygienists
Dr. Robert Langlais, Dr. James Mah

FEBRUARY 2013

- 4 - 8 (MONDAY - FRIDAY)
Adventure & Learn: Hawaii 2013
Dr. Paul Child, Dr. Sonia Leziy, Dr. Brahm Miller, Mr. Jesse Miller, Dr. Byoung Suh
- 14 - 16 (THURSDAY - SATURDAY)
Ski & Learn
Dr. Samson Ng, Dr. Phoebe Tsang
- 23 (SATURDAY)
Applied Dental Materials-An Overview
Dr. Ricardo Carvalho, Dr. Adriana Manso

APRIL 2013

- 6 (SATURDAY)
Infection Control: That Thing That You Do-Why Do You Do It?
Dr. John Molinari
- 20 (SATURDAY)
So Little Room, So Much to See-Baby Steps
Dr. Greg Psaltis
- 26 - 28 (FRIDAY - SUNDAY)
Inhalation and Oral Sedation in Dentistry
Dr. David Donaldson, Dr. Mark Donaldson, Dr. Fred Quarstrom

MAY 2013

- 11 (SATURDAY)
Dental Caries Update-It's About More Than Just Filling Holes!
Dr. John Maggio

FOR REGISTERED DENTAL HYGIENISTS AND CERTIFIED DENTAL ASSISTANTS

JANUARY 2013

- 28 (MONDAY)
Cone Beam CT Program
Dr. Robert Langlais, Dr. James Mah

MAY - JUNE 2013

Orthodontic Module for Certified Dental Assistants and Registered Dental Hygienists
Spring dates for Lecture Sessions, Clinical Session A and Clinical Session B will be posted on www.dentistry.ubc.ca/cde

CLINICAL PARTICIPATION COURSES 2012 - 2013

September 2012 - June 2013
Basic Orthodontics for the General Practitioner
Dr. Paul Witt

September 2012 - August 2013
Advanced Orthodontics for the General Practitioner
Dr. Clement Lear

October 2012 - March 2013
Cutting-Edge Periodontal Surgery for the General Practitioner
Dr. Jim Grisdale

STUDY CLUBS 2012 - 2013

October 2012 - May 2013
Advanced Fixed Prosthodontics for the General Practitioner
Dr. Chris Wyatt

October 2012 - May 2013
Basic and Advanced Periodontics for the General Practitioner
Dr. Tassos Irinakis, Dr. Dimitrios Karastathis

For dates, times and locations of Clinical Participation Courses and Study Clubs, visit www.dentistry.ubc.ca/cde

FOR FULL DETAILS OF CDE COURSES AND TO REGISTER VISIT DENTISTRY.UBC.CA/CDE

ADA CERP

Continuing Education Recognition Program