



Dental Bites

October 2014

Short Takes

***Associate Dean for Academic Affairs Phyllis Beemsterboer, M.S., Ed.D., was recently appointed to a three-year term on the Board of Regents for the American College of Dentistry. Dr. Beemsterboer is the liaison for the ethics group.**

***Assistant Professor of Periodontology Harjit Singh Sehgal, B.D.S., M.S., F.A.G.E., recently received the American Academy of Periodontology Foundation**

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Class of 2017 Receives White Coats

The Class of 2017 was recognized and celebrated in mid-September for their symbolic transition from didactic education to the clinical care of patients. Seventy-five second-year dental students received their personalized white lab coats in a formal ceremony in the OHSU Auditorium.



Second-year dental student Travis Davis (center) receives his white coat from Steven Gold, D.D.S., Hawthorne group leader, on Sept. 12's Class of 2017 white coat ceremony. Peter Morita, D.M.D. '86, associate dean for patient services, is at right. (Photo Aaron Bielek)

The white coats were generously provided in part by the Oregon section of the American College of Dentistry (ACD).

"The white coat is a big step toward ethics and professionalism," said OHSU School of Dentistry Alumni Association President **Mark Alder**, D.M.D. '80. "Ethics and professionalism are not just a theory anymore because you will be seeing patients for the rest of your dental careers. Dentists are held in high regard because we have high standards," said Dr. Alder. "Now is the time to develop good habits that will last the rest of your life."

Dean **Phillip Marucha**, D.M.D., Ph.D., read the nine tenets of professionalism from the wallet cards also provided by ACD: respect, beneficence, compassion, competence, integrity, justice, professionalism, tolerance, and veracity. "Dentistry is a great profession," said Dr. Marucha. "You are now at the doorway to the clinical training program. You need to learn as much as you can from faculty, staff, students, and patients to become the best dentists possible."

New Grant for Machida Lab

The lab of **Curt Machida**, Ph.D., '83, principal investigator and professor of integrative biosciences and pediatric dentistry, recently received a three-year, \$455,520 R15 grant from the National Institutes of Health (NIH)'s National Institute of Dental and Craniofacial Research. R15 grants are academic research enhancement awards for educational institutions to provide research experiences for students and graduate residents. Under this grant, Machida and his team will study cariogenic microorganisms in children with severe early childhood caries. The title of the project is: "*Dominant Mutans Streptococci Genetic Strains in Caries-Active Children.*"

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Staff Profile: Jenna Wilkinson

It takes less than a minute during an interview with **Jenna Wilkinson** before the longtime administrative coordinator for the office of admissions and student affairs is interrupted.

"Is there any pizza left?" a dental student wants to know. The phone rings as Jenna tells the student that, sadly, the pizza is gone. "That's my job," she said, with a laugh. "Constant activity. It definitely makes the time fly by."

Jenna was born in Casper, Wyoming, moving to Bountiful, Utah, in junior high. She attended the University of Utah, receiving a bachelor of science in human development and family studies in 1999.

After graduation, a two-week road-trip along Highway 101 brought Jenna to the west coast and, although she never stopped in Portland proper, she ultimately decided to move, selecting the Rose City for its size and beauty.

Jenna was an assistant group home manager for children with very special needs, and then managed a home for five adults also with special needs. In September 2003, Jenna took a temporary job in admissions and she became fulltime the following January.

"The events that we coordinate are the most memorable primarily because they highlight all the major milestones of dental student life: admissions, orientation, white coat, graduation," said Jenna. "Getting to know the students over the course of five or more years is a rewarding experience."

Jenna's responsibilities include handling dental student and applicant questions, managing student registration and the processing of grades, constant communication with OHSU's Registrar and Financial Aid Office, collaboration on the term course schedules and the course evaluation system, and helping to coordinate events.

Jenna was a competitive swimmer in high school and she recently returned to running, completing two 5K's since giving birth to **Rowan**, 19 months. Besides entertaining her son with her partner **Jason**, she tries to stay creative and get outside. Jenna is a fair-weather biker from her home in southeast Portland. She and her family enjoy hiking, camping, exploring and gardening.

"I have no idea where the last 11 years have gone!" she said. "Thankfully **Andrea** and **Mark** provide humor each day."

(See more profiles on the office of admissions and student affairs staff on pages three, four, and six)



The office of admissions and student affairs team on Sept. 12 (from left to right) Andrea Williams, Jenna Wilkinson, and Mark Mitchell. (Photo Aaron Bielek)

Staff Profile: Andrea Williams

This time of year is busy, but exciting for **Andrea Williams**, who has fond memories of going back to school and appreciates being able to help create the same experience for dental students.

"I loved school and I loved going to the dentist as a child, so I feel fortunate to be able to combine the two," said the longtime administrative coordinator in the office of admissions and student affairs. "It is a privilege to see a student work hard as a pre-dent to gain admission, walk them through the matriculation process and to finally realize their goal of becoming a dentist at graduation, and sometimes even residency. It is rewarding to meet up with former students, several of whom have remained friends, and catch up with the goings on of their practice and families.

"While the yearly processes are cyclical, we can never predict how an individual class's personality will develop. You can determine pretty quickly who the student leaders will be. It definitely makes each year interesting," she said.

Andrea grew up in Lebanon, Ore., attending classes in a two-room school house and spending summers at her grandparents' dairy in Plainview driving tractors, moving water pipe, and bucking hay. She attended George Fox University in Newberg, graduating with a bachelor of science in interior design, minoring in art.

After college graduation, Andrea went into retail near her hometown, and then she moved to Portland for a job opportunity at Intel as a business analyst.

"Deep down I am still mesmerized by city lights!" said Andrea.

Andrea joined OHSU in 2002 for what was to be a temporary job in the patient resource center, moved on to become a cashier in patient business services, and eventually transferred to the office of admissions and student affairs in 2005, where she coordinates recruiting, application, and interview materials and processes, DS1 orientation, DS2 white coat ceremony, DS4 graduation, social media, and the student portal (URL is student.ohsu.edu).

"I like that no day is ever the same," said Andrea. "I feel very fortunate to work with **Mark (Mitchell, M.A.,** associate dean for admissions and student affairs), and **Jenna (Wilkinson,** administrative coordinator). I am lucky because it is a rare opportunity to work with the same people for nine years doing something you still like."

With her background in design and art, Andrea enjoys a creative outlet, and cakes are her current passion. A recent confection was a two-tiered raspberry-filled pink cowboy-themed white cake for her one-year-old niece's birthday.

"I took a cake class with **Susie Clinton** (clinic information analyst) about eight years ago, and I would bring my practice cakes in for the students the next morning after class," said Andrea. *(continued on page six)*

Staff Profile: Mark Mitchell, M.A.

You might say it was a car that drove **Mark Mitchell** to dentistry. A 1988 red Honda Civic hatchback to be exact.

The associate dean for admissions and students affairs was studying elementary education at the University of Southern California (USC) and needed a job to pay off his new vehicle. "A classmate suggested working at the school of dentistry and I ended up working 25 hours a week with the doctor of dental surgery coordinator for three years," said Mark. "I managed the processing of doctor of dental science applications in an office which was right next to the clinic. USC is a big operation, and it was really exciting.

"You can definitely say I fell into dentistry, and never left. Everything in my life has happened by chance and I guess there is a reason."

Mark's early years were in Kensington, Md., and he moved to Washington, D.C. when he was seven. His father, a native Brit, was a historical geographer at the University of Maryland, and Mark remembers sitting in on lectures, practicing his map drawing. His mom was in the U.S. Peace Corps and she took Mark to Costa Rica for two years when he was nine. "I came back a different person," he said. Mark and his mom then moved to Dallas, Texas, and Mark graduated high school there before heading to Southern California.

Mark received a bachelor of science in education in 1991. Undecided about his future, he continued working at the USC School of Dentistry, and began exploring master's programs, finding a program in higher education administration and policy analysis. "I had no idea there was such a thing," he said. Mark completed his master of art's degree from Stanford in 1994, and then returned to USC as director of recruitment and evaluation in the dental school.

In the early 2000s, Mark's OHSU predecessor **Nora "Chipper" Cromley** who he knew from the admissions, financial aid, and student affairs section of the American Dental Education Association, called to say she was retiring soon and suggested Mark apply for her position.

With "some trepidation," Mark flew to Oregon for a full day of interviews and meetings spearheaded by Nora and then-Dean **Sharon Turner**. "Then I flew home," he said. "I figured: that was informational, interesting, and a bit scary. Then I got a call. It was quite an opportunity."

Mark officially joined the school on Aug. 1, 2003. "I want to be someone with whom students can talk," said Mark. "This is a safe zone with no judgments." In his 11 years, Mark has handled it all: eating disorders, learning disabilities, rocky relationships.

"At the end of the day, it comes down to relationships," he said. "Being able to build relationships and having a positive impact on people's life when they're in school is rewarding."

Mark and his team are beginning to receive applications for the Class of 2019. Mark said the dental student applicant pool has increased nearly every year since he started, despite the recent trend of a falling national applicant pool. In 2013, the OHSU School of Dentistry

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Sandee Valentine (seated far right) initiated a recent tour of the Skourtes Tower in the CLSB for former dental school employees including (front, left to right) Sharon Reams, Ginny Dunn, Kathy Pickwick, and Janice Rudge and (back row) John Derbyshire (second from left), Dana Lillie (third from left), Kay Simpson (fourth from left), Theresa Shorten (fifth from left), Barbara Lewis (sixth from left), and CharEll Melfi (seventh from left). The tour was led by Dean Emeritus Jack Clinton, D.M.D. '64 (back left) and Denice Stewart, D.D.S., M.H.S.A., senior associate dean for clinical affairs (back third from right) with coordination by Julie Hirai and Helen Franco (back right).



Fremont group leader Rose McPharlin, D.D.S. (front right) with her group practice's second year dental students on Sept. 12 at the Class of 2017's white coat ceremony. To view and order photos, go to: http://ohsuphotodesign.smugmug.com/Events/White-Coat-Ceremony-2014/44370397_gkMRrd#li=3540586248&k=dqXpjbz (Photo Aaron Bielek)



New dental faculty Prashant Poplaj, D.D.S., assistant professor of restorative dentistry (left) and Craig Robbins, D.M.D. '04, assistant professor of restorative dentistry (center), enjoy their first fall faculty conference, on Sept. 25. Steve Gold, D.D.S., Hawthorne group leader, is at right. (Photo Sydney Clevenger)

Reconnecting at the Sept. 25 fall faculty conference are Rita Patterson, D.M.D. '91, assistant professor of restorative dentistry (left) and Beata Cymorek, D.M.D., assistant professor of restorative dentistry. (Photo Sydney Clevenger)



Third-year dental students Darren Ng (left) and Daryl Khaw team in the simulation clinic on Sept. 17, for their last pediatric dentistry techniques course of the summer session. (Photo Sydney Clevenger)



Gary Nelson, D.D.S., assistant professor of pediatric dentistry (standing), shares a laugh with second-year pediatric dentistry resident Amanda Caswell-Burt (left) and first-year pediatric dentistry resident Clint Brodal, at the instructors' station in the simulation clinic, on Sept. 17. Michael Taylor, D.M.D., assistant professor of restorative dentistry and the director of the dental implant program and simulation lab, noted that the Skourtes Tower simulation clinic has more square footage and equipment than in the old building. Most appreciated, he said, is that there is a central vacuum system, which has improved time management, and there is a dental chair in the simulation clinic that can be used for work on mannequin heads, or real patients. (Photo Sydney Clevenger)



Welcome New SOD'ers

OHSU School of Dentistry welcomes the following new staff:

***Abby Byerly**, care coordinator for the Boradway group practice. Previously, Abby was a benefits and insurance specialist at Sundstrum Clinical Services.

***Ana Plesia**, M.A., assistant director of admissions. Ana has been the admissions counselor in OHSU's School of Nursing since September of 2008. She was educated at the University of Central Oklahoma in Edmond, receiving a master of arts in English—Traditional Studies, in 2005. In addition to English, she speaks Romanian.



***Danielle Roberts**, a PAS Specialist in oral and maxillofacial surgery. Most recently, Danielle worked in OHSU's ENT Voice Clinic.

***Marcel Wehrli**, Ph.D., is an associate professor in biomaterials and biomechanics, working in collaboration with Professor and Associate Dean for Research **David Morton**, Ph.D. Dr. Wehrli joined OHSU in its department of cell and developmental biology in 2001, and is a primary investigator at the Knight Cancer Institute. He received his doctoral degree in molecular biology from the University of Zurich, and completed postdoctoral fellowships at Columbia University and the University of Pennsylvania. Dr. Wehrli maintains dual citizenship, in the U.S. and Switzerland. The Wehrli lab includes research assistants **Veronica Cochrane** and **Karen Dewey**, as well as administrative assistant **Misha Naiman**. Dr. Wehrli's research is focused on Wnt signal pathways, a group of transducers made of proteins that enable communications from the outside to the inside of cells.



School Calendar

Oct. 9-12	American Dental Association Annual Session
Oct. 10	ADA Alumni Reception, 5:30 to 7 p.m. Please RSVP at (503) 552-0745. Find us at booth #2224.
Oct. 10	DS1 Welcome Dinner
Oct. 24	Dean's Seminar Series, noon
Oct. 31	PROH conference
Nov. 14	ASDA Vendor Fair

Andrea *(continued from page three)*

"Then I started making cakes for family and friends, and became the family baker by accident.

"I've learned that I have no desire to go into the cake decorating business. I want to keep decorating as a fun, creative outlet and not a job," she said. "I also don't cut my own cakes! After spending two-to-three days crafting the decorations and baking the cake, I can't bring myself to do it."

Andrea also enjoys paper crafts, genealogy, foreign films (especially Korean dramas) and camping with husband **Allan** (former Fremont group practice coordinator who is now Doernbecher administration for the PICU and the PANDA transport team) and son, **Matthew**, 13; soon-to-be-adopted son **Ryan**, 9; and foster son Ben, 12. The family lives in Beaverton.

"The new facility is beautiful," said Andrea. "When I started in 2002 there was a rumor that we would move in 2007. The undertaking of the move is massive; once all of the changes are ironed out I think we will realize that the wait was worth it."

Faculty Awards *(continued from page one)*

Fellowship Award to the Institute for Teaching and Learning in Health Professions. The award sponsors participation in the ADEA (American Dental Education Association) Academy for Academic Leadership Institute for Teaching and Learning.

State of OHSU School of Dentistry

There have been a number of achievements over the past year, according to School of Dentistry Dean **Phillip Marucha**, D.M.D., Ph.D., particularly in the areas of technology, faculty, research, curriculum, and leadership.

"I think we have accomplished a lot, starting with our move into the new facility," said Dr. Marucha. "I still can't believe we started moving June 26, and that our clinics were functional within two weeks, on July 7. The move was ahead of schedule, and we were well-prepared. Now, we are fine-tuning our operations to fit the new building—such as centralization of sterilization equipment and new simulation labs—and we are making good progress."

New technologies include CAD/CAM (a recent gift from Sirona Dental), a cone beam scanner (from Carestream), and electrical handpieces (from A-dec and partner/affiliate W&H). "We want to teach students to be great contemporary dentists and also provide them with the information they need to be dentists of the future," said Dr. Marucha. "These technologies are all part of what dentists will be doing down the line."

The school is starting to rebuild its faculty ranks, and to that end, 15 new faculty have joined the school at .5 FTE or more, with 13 additional faculty in the works, noted Dr. Marucha. The department of oral and maxillofacial surgery, in particular, was revamped, and alum **Daniel Petrisor**, D.M.D. '03, M.D., will join the faculty this fall. Pay equity amongst existing faculty was also a focus in 2014, said Dr. Marucha.

Research funding is on the upswing, said **David Morton**, Ph.D., associate dean for research and professor of integrative biosciences, despite a tough climate in which to gain grants. "Two years ago, it was looking grim for dental school research," said Dr. Morton. "We were on a downward trajectory, but we have made a remarkable comeback, with a number of new grants coming in, labs funded, and increased applications going out the door. This is a real achievement, given the dollars out there available for research programs."

Dr. Morton said with dental faculty labs located in four locales: the OHSU/OUS Collaborative Life Sciences Building (Ferracane, Hilton, Katancik, Marucha, Pfeifer), Richard Jones Hall (Balkowiec, Ferracane, Lampi), Medical Research Building (Merritt, Wehrli), and Biomedical Research Building (Danilchik, Machida, Matsumoto, Morton), it has been a challenge to keep the research team connected. One way to build and maintain the school's research community is through the Dean's Seminar Series, which has speakers lined up for Oct. 24 and Dec. 6 (for details see page four of the September 2014 *Dental Bites*), and several additional dates on the table.

Dental school faculty are very active within the university, said Dr. Marucha, which is also helpful to the dentistry mission. Notably, **Jeffery Stewart**, D.D.S., M.S., associate professor and interim chair of pathology and radiology, is chair of OHSU's Interprofessional Initiative Steering Committee. The dental school is also at the table for the university's Rural Health Initiative, which aims to improve access to care in Oregon's rural counties.

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State of School *(continued from page seven)*

"We have 96,000 square miles of land in Oregon, but most people live along the I-5 corridor," said Dr. Marucha. "There are a lot of people living in rural Oregon with little access to dental care. Three counties don't have a dentist at all. How do we get new health graduates to go out and function in those areas, and how do they gain the cultural skills needed to work and live in those communities?"

OHSU rural campuses will soon be located in remote portions of the state, likely Klamath Falls, Coos Bay, and either Hermiston or Baker City. "The idea is that all dental students will spend time at one of these three interprofessional practice sites, collaborating with their fellow OHSU students and caring for the underserved," said Dr. Marucha.

Legislation supporting student tuition will help with the Rural Health Initiative," said Dr. Marucha. This academic year, three dental students received full tuition support with the promise that they would work in rural communities upon graduation, said **Mark Mitchell**, M.A., associate dean for student affairs and admissions.

Dr. Marucha said that a number of dental faculty also participate in the Oregon Oral Health Coalition and on the Oregon Strategic Plan for Oral Health, which will be published this week.

Regarding curriculum, the dental school in 2014 had a DS1 approach requesting a DMD/Ph.D. track, and though there were no plans to start such a program at the time, staff is now on board to make it happen, and "the time was right to move forward," said Dr. Marucha. A second dental student conducting stem cell therapy has also expressed interest in a DMD/Ph.D. track.

Up next for the dental school? Continued adaptation to the new facility and advancements in curriculum, additional research strengthening, the addition of a faculty development program, and planning for the school's five-year accreditation, with a visit scheduled October 18-20, 2016.

"We are in good shape," said Dr. Marucha. "I'd like for us to be known for our education and research ... and a great place to live."

Mark Mitchell *(continued from page four)*

received 1,328 applications for 75 coveted spots. At press time, 1,040 applications for 2015-2016 had already been received.

The cycle of applications, new DS1s, white coating, and graduation goes fast, and Mark and his team are grateful for the addition of **Ana Plesia**, assistant director of admissions, who joined their office two weeks ago (see page five).

When not at OHSU, Mark plays the French horn (he was in a Chicago-based Drum and Bugle Corps while at USC), and he loves travel, particularly if it involves airplanes. Mark and **Bob**, his Great Dane/Mastiff adopted through **Karley Bedford**, D.M.D. '14, are familiar walking fixtures in Northwest Portland.

"Being successful every year is an accomplishment for me," said Mark. "The new facility is wonderful, with beautiful clinics and new technology. It gives us an advantage to collaborate with OHSU's other academic units.

"Dental school can be tough," he said. "I'm here for the students and support them as much as I can."

Machida Grant *(continued from page nine)*

"Dental caries is one of the most common chronic childhood diseases, and is a multi-factorial disease involving complex interactions of risk factors," said Dr. Machida. "With the mutans streptococci group as the most cariogenic microorganisms associated with dental caries, we propose to identify the microbial factors affecting the genetic diversity and potential selection of mutans streptococci strains following caries restorative therapy in children. Our study is innovative because of its potential to predict the outcome of caries preventive therapy based on the identification of the mutans streptococci strains."

In prior work, the Machida team has described genetic fingerprints of mutans streptococci isolates, before and after treatment in children exhibiting severe early childhood caries. The team also identified the dominant mutans streptococci genetic strains that occur within carious and non-carious sites within the oral cavity of individual patients, and have characterized strain cariogenicity properties.

"Our published studies have identified 39 strains of mutans streptococci and have found that caries restorative therapy in some patients results in population shifts to highly acidogenic or acid-tolerant mutans streptococci strains, with single dominant mutans streptococci strains appearing one year post therapy," said Dr. Machida. "The objectives of this current project are to initiate a new cohort of 240 patients where restorative and adjunctive therapy measures can be applied independently to ascertain selective effects, and develop a standardized genetic database of mutans streptococci strains with defined cariogenic phenotypes that may serve as predictive microbial identifiers for dental caries and treatment outcomes.

"We are hypothesizing that children with severe early childhood caries may possess distinct genetic strains of mutans streptococci, which undergo resistance and/or selection during specific aspects of caries restorative treatment, and this impacts the effectiveness and long-term outcome of the treatment."

Secondarily, Dr. Machida said his team believes that mutans streptococci strains that survive or are selected for survival within cariogenic lesions are highly aciduric and oxygen-tolerant compared to other strains found within the oral cavity of children with severe early childhood caries.

"The translational goal of this project will be to provide insight on the efficacy of restorative and adjunctive therapy practices in the elimination and/or reduction of certain mutans streptococci strains in caries-active children," he said. "Treatment in some patients with severe early childhood caries results in the appearance of dominant and highly cariogenic mutans streptococci genetic strains, which conceivably could place the patient at even higher risk for caries."

The Machida team includes: **John Engle**, D.D.S., co-investigator and assistant professor and chair of pediatric dentistry; **Dongseok Choi**, Ph.D., co-investigator and professor of public health and preventive medicine, School of Medicine, and professor of community dentistry, School of Dentistry; **Tom Maier**, Ph.D., assistant professor of integrative biosciences; **John Peterson**, D.D.S., professor of pediatric dentistry; **Elizabeth Palmer**, D.M.D. '08, Pediatric Dentistry '10, clinical assistant professor of pediatric dentistry at the University of Washington; and **Justin L. Merritt**, Ph.D., associate professor of restorative dentistry.