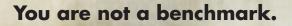
# Dentistry

The first generation of Implant Dentistry Ron Secor: 30 years of fiduciary fidelity

Volume 25, Number 1

Winter / Spring 2014



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# Loma Linda University Dentistry

Volume 25, Number 1 Winter /Spring 2014

Dean Ronald J. Dailey, PhD

**Editor emeritus** Leif K. Bakland, SD'63

**Managing editor** Douglas Hackleman, MA

**Contributing editor** Edna Maye Loveless, PhD

#### Proofreaders

Leigh Ann Evans Krista Juhl, MBA DonaJayne King, MBA Irmgart Mitchell Carole White

**Photographers** Joe Arnett, MSIT Carmen Fernandez Daryl Osborne

#### Alumni Association officers

PRESIDENT: Gary Chan, SD'89, MS'95 PRESIDENT-ELECT: Iris Choi, SD'10 Director: Kathleen Moore, MHIS

#### Mission

- Loma Linda University School of Dentistry seeks to further the healing and teaching ministry of Jesus Christ by providing an environment wherein:
- **Students** learn to provide high quality oral healthcare based on sound scientific principles
- **Patients** receive competent care, which is preventive in purpose, comprehensive in scope, and provided with compassion and respect
- *Faculty, students, and staff* value the patient relationship, respect diversity, and share responsibility by working together toward academic, professional, spiritual, and personal growth
- Scholarly activity and research provide a foundation for evidence-based learning and enhance whole person care
- The workplace environment attracts and retains a superior and diverse faculty and staff who motivate, educate, and serve
- *Our communities* (local, global, and professional) benefit from our service, stewardship, and commitment to lifelong learning.

### LOMA LINDA UNIVERSI



Dean Ron Dailey at CDA San Francisco with (L-R) LLUSD students Marianne Demirdji, D2, Jane Kim, D4, and Erica Becker, D3

#### Purpose

*Loma Linda University Dentistry* informs alumni, faculty, students, and other interested individuals about current School programs, events, and activities, as well as accomplishments of fellow alumni, faculty, and students. The journal is published twice each year by Loma Linda University School of Dentistry.

Address correspondence to:

Editor, LLU DENTISTRY School of Dentistry Loma Linda University Loma Linda, CA 92350 Phone: (909) 558-4984 Fax: (909) 558-0992

To reach the School of Dentistry Alumni Association, contact: Jeri Fowler, assistant director LLUSD Alumni Association 11245 Anderson Street Loma Linda, CA 92354 Phone: (909) 558-4399 Fax: (909) 558-4858 Direct ad inquiries to:

LLU DENTISTRY School of Dentistry 11245 Anderson Street Loma Linda University Loma Linda, CA 92354 Phone: (909) 558-4984

Admissions information: School of Dentistry Loma Linda University Office of Admissions Loma Linda, CA 92350 Admissions.sd@llu.edu Phone: (909) 558-4621

Cover: Cone beam computed tomography (CBCT) image of a patient's maxilla and mandible with two planned endosseous root form implants replacing mandibular left molars #18 and #19.

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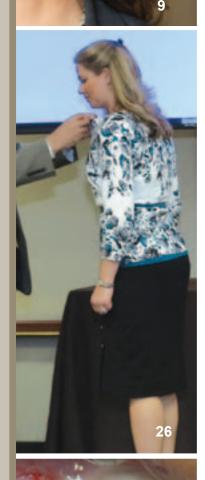
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### Dean's message: The power of mentoring

Throughout my career, I have benefitted from the guidance and advice of many people. During my years as a student in two graduate programs, advisors provided me with a lens on life that helped shape my career choices. Later, as a junior faculty member, more seasoned professors generously helped me navigate the complicated terrain of higher education and academic dentistry.

Now, as dean, it is probably fair to say I receive more advice than ever, all of which is welcome. We all can benefit from the wisdom gained by those who have traveled this road before us, and those of us in senior positions can also benefit from the energy, enthusiasm, and fresh perspectives of junior faculty and students. Even now, I strive to reimburse the "debt" I accrued from my mentors by mentoring those just getting started and by encouraging the development of new leaders for academic dentistry. One of my goals

for Loma Linda University School of Dentistry is to support, enhance, and formalize avenues for faculty members to receive advice and guidance they may desire/need as they

chart their own career path.

The changes in higher education, the profession of dentistry, and academic dentistry seem only to accelerate. As we strive to provide avenues of opportunity for our faculty that support a balance of life and work, that respond to health care reform, that incorporate technology advances, and that accommodate shifting funding priorities, it is evident that navigating a career in academic dentistry is both more exciting and more challenging than ever before.

Given this complex terrain, the School of Dentistry is structuring a program that will support faculty development, including mentoring resources and workshops. A core element of the new program will be to support "Educational Mentors" who will be responsible



for developing and implementing tailored mentoring programs and expanding mentoring capacity within or across departments.

A strategic investment in faculty development through on-campus mentoring is an investment in the School of Dentistry's long-term success. Each of us can learn

A strategic investment in faculty development through on-campus mentoring is an investment in the School of Dentistry's long-term success.

from one another, and even the most experienced among us can be inspired by the concerns and the ideas coming from junior faculty and students. I encourage everyone, veteran and junior

faculty alike, to take advantage of the faculty development offerings that will be planned over the next academic year, to participate in the program, and to help shape its development into a resource that best serves our needs.

Ultimately, when our faculty and students are successful at achieving their professional goals, the School, the University, and the dental profession reap the benefits of their success.

Ronald J. Dailey, PhD

# Alumni president's message: A ripple of kindness

I would like to tell you a true story about a hero who was color-blind. He made a simple choice. I don't know that he wrestled with his decision that day or whether it was a spontaneous response. I don't know if he gave much thought ever again about the choice he made or what he did—because heroes typically don't think in those terms... but I am getting ahead of myself.

Often, we are too immersed in our own lives to notice the needs of those around us. Time passes unnoticed. Not often enough we become reflective. If our self-assessment seems lacking, we ask ourselves, "What can I do to change things?" Seemingly small things can make a difference—like putting money in an expired parking meter for a stranger who is about to get a ticket, waiving the bill for a hard-working single parent, contributing to a charity, or volunteering at a free clinic. Acts of kindness can produce ripples that can generate change in the lives of those around us.

But, back to our story. An orphaned young man and his brother, by hard work, struggle, sacrifice, and the kindness of an aunt, had finally made it to the United States. They both applied and were accepted into the College of Medical Evangelists that eventually would become the Loma Linda University School of Medicine.

One of the brothers hitchhiked, which was not uncommon in those days, to the East coast to work for the summer. At summer's end, he started hitchhiking back to start school in Loma Linda, California, and enroll before the deadline. After several days, he reached a toll bridge in St. Louis. He did not have the fare to cross. He sat for some time on his suitcase at the toll crossing. Deep concern gave way to despair. He wondered if all his work and sacrifice would be for naught—all for the lack of a coin needed to pay the toll! As more time passed, he lamented, sadly realizing that his dream of becoming a doctor was fading. He knew he would be dropped from the class. But ... the tollbooth operator, as his shift was ending, silently walked over, and, with a quick smile and a nod, flipped him a coin with which he could pay the toll. He made it to Loma Linda on time!

Today, retired after a successful career as a physician, he still thinks of the kind man who was not too busy to notice his need. This unknown stranger started a "ripple effect" that continues to resonate to this day. He had no idea of the lasting ramifications of his small but meaningful act or that his story would appear in print.

The man in the tollbooth was a hero—he never expected recognition, nor was he the type of hero who risked life or limb. He simply saw a need and met it. He changed the outcome in a small but far reaching way. Heroes do what



they do, regardless of who is watching or not watching. Sometimes they save the day. Most of the time no one notices. Heroes are driven by the strength of their character and do things because it is the right thing to do—then just go their way. They are not so busy that they do not notice the needs of others. They quickly and quietly remedy the need they observe with little deliberation or expectation.

Who caught the tossed coin in the story and became a doctor? That man was my uncle. His brother was my dad.

I hope the story of "Mr. Ripple—the Tollbooth Operator" will be retold often. But, there is another thoughtful lesson to this story. The tollbooth operator was a "man of color." Rather than cursing the darkness of the times, he chose instead to be a light. His attitude was embodied in his actions. Before political correctness, prejudice, and racism were household words, this man of color . . . was color-blind. This "colored" man showed kindness to my uncle—a "china man," over 60 years ago, long before words such as "African American" and "Asian" came into correctness. Acts of kindness transcend all boundaries. If only a coin or a smile—a little effort can go a long way. How far, we may never know.

Acts based on convictions can evolve into habits and even start trends. Consider creating a ripple, or amplify and multiply the ripples of kindness that you have experienced by "repaying the debt" and "paying it forward." Practicing random acts of kindness can grow into habitual, spontaneous acts of kindness. Who knows? Your kind simple act could go viral! Your ripple of kindness could turn the tide, become a wave in the lives of others—and change the world!

Warmly, Clin

Gary Chan, SD'89, MS'95 President, Alumni Association



LOMA LINDA UNIVERSITY

School of Dentistry

# **Continuing Dental Education Courses 2014**

**Practice Management** 

Sunday, February 23, 2014 Naomi Rhode, RDH, CSP, CPAE Jim Rhode, BME, CSP

#### Hot Topics in Infection Control & CaliforniaLaw

Sunday, March 2, 2014 Nancy Andrews, RDH, BS Bette Robin, DDS, JD

CAMBRA--It's a Verb Sunday, March 9, 2014

Brian Novy, DDS Michelle Hurlbutt, RDH, MSDH

Modern Practice of Fixed Prosthodontics

Sunday, March 16, 2014 Steven M. Morgano, DMD

#### Are You Numb Yet? Sunday, March 30, 2014 Alan W. Budenz, MS, DDS, MBA

#### Dental Management of the Medically Compromised and Special Needs Patient

Sunday, April 6, 2014 Kevin N. Nakagaki, DDS

#### Esthetic Dentistry Keys to Success

April 27, 2014 Gerard Kugel, DDS, MS, PhD

#### Oral Surgery for the General Practitioner

June 1, 2014 Gregory K. Spackman, DDS, MBA

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LOMA LINDA UNIVERSITY

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# ALUMNI STUDENT CONVENTION

Orthodontics February 6, 2014 Neal C. Murphy, DDS, MS

Homecoming Banquet Honoring Class of 1964 and Dental Hygiene February 6, 2014

> Scientific Sessions February 6 - 7, 2014

February 6-9, 2014

**Treating and Managing** the Geriatric Patient February 7, 2014 Stephen K. Shuman, DDS, MS

> **Class Reunions** February 8, 2014

**34th Annual** Anesthesia Symposium February 9, 2014

**Restorative Materials** February 9, 2014 Charles W. Wakefield, DDS

For more information or to register, please contact Loma Linda University School of Dentistry Alumni Association at (909) 558-4685 or visit www.dentistry.llu.edu

### 30 years of fiduciary fidelity

#### Ronald Secor, MBA, associate dean for Financial Administration, retires

Wenty-nine years ago, LLUSD's patient business data—phone numbers, addresses, appointment times,

charges, payments, student progress—were retrieved by flipping through an enormous file of 3" x 5" cards.

This was a challenge faced by Ron Secor, MBA, LLUSD's chief financial officer for the past 14 years, when he joined LLUSD as director of the patient business office in 1984.

Putting his computer expertise to work, Mr. Secor oversaw development and implementation of the School's first computerized patient visit form (PVF). He and his team were soon in demand around the country to present the PVF computer system to other dental schools.

With the experience of operating his own construction business, Mr. Secor joined LLU's general accounting office in 1983 as senior accountant for student finances. Coming the next



Mr. Ronald Secor

year to LLUSD, he would see during his time at the School a growth in clinic revenues from \$1 million to \$18 million annually, constituting the largest budget of any school on the campus. On an average business day, the clinic revenues would come to generate approximately \$100,000.

The 3" x 5" card records were upgraded to a subsystem of the University's accounting system, and clinical software was introduced to LLU's business management. Displaying sensitivity to the oral health focus of his colleagues, Mr. Secor adeptly produced concise balance sheets at faculty forums, inviting further queries to be addressed in his office.

Anticipating retirement at the end of 2013, Mr. Secor spoke confidently and reassuringly. "The School is in a solvent state," he said. "Going forward we should be able to sustain ourselves."

He recalled other major advances during his 14 years of directing LLUSD's finances: upgrading 200 dental chairs, construction of Prince Hall's east wing, a two-story addition providing additional space in the main clinic (including new space for the pediatric clinic) on the upper level, and creating the Surgery Center for Dentistry for dental anesthesiology education and special care patient treatment on the lower level.

Having participated in two accreditation site visits, Mr. Secor expressed no regrets about being absent for the forthcoming one; but he spoke with optimism about a dozen construction projects planned for the future that he has been involved in prioritizing.

By the time those projects are under way, Mr. Secor will be spending more time with

his recently retired wife, Carolyn, daughter, Emily, who teaches special needs children in Moreno Valley and son, Lucas, a business development analyst at the LLUH Murrietta hospital.

Ronald Dailey, PhD, dean, School of Dentistry, honors Ron Secor as "an exemplary colleague who has provided strong leadership that has guided us through many financial challenges in recent years. In addition to being a very competent accountant, Ron has become a trusted friend and confidant to those of us who have worked closely with him over the past 29 years. To say he will be missed is an understatement; however, I know of no one who has earned a fulfilling and enjoyable retirement more then Ron! We wish him all the best in beginning this next chapter of life."

## Introducing Euni Cho

Eun-Hwi (Euni) Cho, DDS'93, has been appointed director of Educational Assessment and Curriculum Development for Loma Linda University School of

Dentistry. In her new role, Dr. Cho will represent the School on the University assessment committee, reporting assessment information between the School of Dentistry and the parent institution. Her primary responsibility will be to manage the assessment program at LLUSD and address both the CODA (2016) and the WASC (2020) and accreditations.

Upon graduating from Andrews University in 1988 with a Bachelor of Science degree in Biomedical Sciences, Dr. Cho took a year before beginning dentistry to serve as director of the Cardiothoracic Department at Oakwood Hospital in Dearborn, Michigan.

While in dental school, Dr. Cho funded her education by teaching piano, serving as a bookkeeper for a local business, and working as a



Dr. Euni Cho

clerical assistant at LLU finance. She received her Doctor of Dental Surgery in 1993.

She then served as an associate dentist for three years at the Redlands Dental Surgery Center before following her dream of helping to provide oral healthcare services to the underserved. From 1998 to 2002 she was dental director for Riverside-San Bernardino County Indian Health, Inc., where she was responsible for the operations of four dental clinics, two of which were built under her direction. She also conducted the first ever (and successful) dental JCAHO accreditation for the corporation, and implemented innovative community-based programs for the Indian community. From there, Dr. Cho served as an associate dentist with the Sonoma County Indian Health Project in Santa Rosa, California, where she was charged with establishing

a pediatric dental clinic in an existing medical center.

Cho then served Dr. а consultant/provider as for the First 5 grant in the service of which she established relationships at San Bernardino County's Arrowhead Regional Medical Center where she equipped an operating room, trained staff, and performed surgeries for the First 5 grant patients. She has been since 2005 an associate dentist with the School of Dentistry in its Department of Oral and Maxillofacial Surgery as well as an attending dentist in the Department of Surgery at Arrowhead Regional Medical Center in Colton, California, where she maintains a private practice treating children in the operating room.

Since 2010, Dr. Cho has been assistant professor for

Dental Educational Services (involved in the School's public health dentistry course), and more recently (beginning in 2012) she has been a lecturer and clinical instructor under the Ryan White HIV/AIDS grant at the SACHS Dental Clinic.

Dr. Cho is married to Richard Cho, DDS'97. The couple reside in Loma Linda with their 14-year-old daughter and two sons (11 and 8) who attend Loma Linda Academy. On any given Sunday, the Chos can be found at a football field, basketball court, baseball diamond or a volleyball gym watching their kids play. On any given Sabbath, you can find them at either the Calimesa SDA Church or the Crosswalk Church. Dr. Cho still enjoys playing the piano, and turns to Sudoku or the beach for relaxation.

### Biennial Medical/Dental/Health Professional CONVENTION



Welcome to the twenty-fifth consecutive biennial Medical/Dental/Health Professional Convention. We invite you to fellowship together in the beautiful Smoky Mountains. We know your participation in the weekend will refresh your faith, renew old friendships, and reconnect you with your family and loved ones. Other gifted speakers for physicians, pharmacists, dentists, nurses, and allied health professionals are part of this special weekend. Continuing Education credits and ACLS recertification continue to be offered for a nominal fee.



Conference

The theme for this weekend is "Beholding the Great Physician." It is our prayer that you will be inspired to carry Christ's medical ministry of healing to those you serve. You are of Seventh-day Adventists appreciated not only for the gift God gave you to help relieve the suffering and promote healing but for the support and leadership you give to the mission of God's church.



Karl Haffner has spoken extensively to health care organizations on topics ranging from leadership issues to soul fatigue. His humor and enthusiasm are infectious, delighting audiences around the world with his passion and perspectives. He is a prolific author with over a dozen books to his credit along with thousands of articles published in a wide variety of journals. His B.A. and Master's degrees in business administration, combined with his B.A. and Master's degrees in theology, along with a Ph.D. in leadership, make Karl a forceful and credible voice.

# Gatlinburg, Tennessee **OCTOBER** 9-12, 2014

#### DENTAL SPEAKER Leif K. Bakland, DDS

Dr. Leif K. Bakland is the Ronald E. Buell Professor of Edodontics at Loma Linda University School of Dentistry. He has served in numerous capacities in organized dentistry including the specialty of endodontics. He has been involved in dental education for over 40 years. He has received recognition for his devotion to the profession by several awards including the I.B. Bender Lifetime Educator Award. While his main specialty is endodontics, Dr. Bakland's strong interest in dental traumatology led to his receiving the Jens Ove Andreasen Lifetime Achievement Award in Dental Traumatology in 2013.

FOR MORE INFORMATION CONTACT, SOUTHERN UNION MEDICAL/DENTAL/HEALTH PROFESSIONAL DEPARTMENT

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#### **Tuesday, March 4**

- Community Impact of Health Policy
- Epigenetics: Maternal Pre-Natal Health & Disease Imprinting (CDE)
- Family & Poverty
- Childhood Obesity & the Built Environment (CDE)
- Health Impact of Community Design

#### Wednesday, March 5

- Nutrition Environment & Shaping Dietary Behavior (CDE)
- Air Quality & Asthma (CDE)
- Autism & Sensory Disorders
- Media Influence on Children's Health



#### LOMA LINDA UNIVERSITY

School of Public Health

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# Jessica Kim directs IDP

Jessica Kim, DDS'05, is the newly appointed director of the School of Dentistry's International Dentist program (IDP). In September she replaced Michael Fitzpatrick, DDS, who has served twice as director of IDP, beginning in 2006, for more than five years.

In January of 2013, Dr. Kim joined the IDP faculty and left for maternity leave after delivering a baby girl in March, who joined her three-year-old sister in the Kim household.

Dr. Kim graduated in 2000 from Loma Linda University School of Allied Health Professions with a Bachelor of Science degree in Clinical Laboratory Sciences. It was during her undergraduate

studies, while working as a clinic laboratory scientist at the LLU Medical Center, that Dr. Kim decided on dentistry for her career path.

After graduating with her DDS in 2005, Dr. Kim earned a certificate in Dental General Practice from the University of Nevada School of Dental Medicine in 2006. With certificate in hand, she returned to LLU as an assistant professor in



Dr. Jessica Kim

the Department of Restorative Dentistry, where she mentored junior and senior dental students in the School's clinic while working part time with a couple of nearby dental practices, before joining the LLU Faculty Dental Practice in 2008 and then the LLUSD Koppel Special Care Dentistry one day each week beginning in 2010.

Dr. Kim says she enjoys very much the cultural diversity and family atmosphere of the dentists and students who comprise the IDP program. She points with pleasure to the IDP clinic's east wall with its profuse display of flags that represent the 81 countries from which its 483 students have arrived to augment their dental education and clinical skills. This year she says IDP added flags for Moldova and Trinidad & Tobago to the

countries represented by the program's graduates since its inception in 1985.

Dr. Kim was born in South Korea and at the age of three moved to California with her parents and sister.

She is married to Michael Kim, DDS'11, who practices privately in the Inland Empire. For the time being, the directing of IDP and two small children take up most of her time.

## Bonnie Retamozo chairs Department of Endodontics

**B**onnie Retamozo, SD'05, MSD'09, has been appointed chair, Department of Endodontics, Loma Linda University School of Dentistry (LLUSD), effective July 1, 2013. Dr. Retamozo replaces Robert Handysides, SD'93, who recently was appointed LLUSD associate dean for academic affairs.

"Dr. Retamozo has earned the respect and endorsement of the faculty in the Department of Endodontics," said Dean Ronald J. Dailey, PhD, "and I am delighted that she has agreed to join the School's administrative team."

Dr. Retamozo earned a Bachelor of Arts degree in biology from Southwestern Adventist University, Keene, Texas, in 1995, and a Bachelor of Science degree in Medical Technology in 1996 at Tarleton State University, Stephenville, Texas.

From 1996 to 2001 she worked as a medical technologist at Texas Tech University Health Sciences Center, where her husband, Dr. Milton Retamozo, was in medical school, before she took dentistry.



Dr. Bonnie Retamozo

Dr. Retamozo remained at LLUSD as an instructor in the Department of Oral Diagnosis, Radiology, and Pathology until 2007 when she selected endodontics as her career choice. Dr. Retamozo completed her postdoctoral endodontic training at Loma Linda in September 2009 and joined the School's Department of Endodontics as an assistant professor and board eligible endodontist.

Dr. Retamozo is an associate at Loma Linda Faculty Endodontics and has been since 2010 a staff endodontist for the US Department of Veterans Affairs Dental Clinic at Jerry L. Pettis Memorial Veterans Medical Center. Her husband is a vascular surgeon affiliated with Arrowhead Regional Medical Center in Colton,

California. And what most of Dr. Retamozo's patients and colleagues may not know is that she is the owner of a horse named Karnival.

The Doctors Retamozo are the parents of a teenage daughter, Bianca.

# Edward Ko named Pierre Fauchard Academy Teacher of the Year

**E** dward Ko, DDS'85, associate professor, Department of Restorative Dentistry, was presented with the Pierre Fauchard Academy Teacher of the Year award by Dr. Ko's route to dentistry began at his birth in Hong Kong. He graduated from the island city's Sam Yuk Secondary School in [1968], earned a Bachelor of Arts degree

the Southern California Section of the Academy in April during the California Dental Association's Annual Recognition and Awards Luncheon in Anaheim.

Each year, the Academy presents Teacher of the Year awards to faculty in Southern California's Schools of Dentistry.

Candidates for the Pierre Fauchard Academy award are solicited from senior dental students of the three Southern California Dental Schools. Nominees are then rated for involvement in various aspects of student mentoring from lectures. research to advisement, to mission trips and community and service activities.

The Pierre Fauchard



Dr. Ko displays his Teacher of the Year award

Academy is an international dental honors organization named after Pierre Fauchard (1678-1761), considered to be the Father of Modern Dentistry. The Academy seeks to encourage, through annual awards, outstanding contributions to the art and science of dentistry and service to the profession; and to encourage dental students and foster advancement of their professional and scientific standards and continuing education for all members of the dental profession. heavenly father for "the privilege and opportunity to serve here for the last nine years." He and his wife Priscilla, a registered nurse, have two married adult sons and two grandchildren. Dr. Ko is the honorary president and founder of Hong Kong Sam Yuk Secondary School Alumni Association. His avocations include amateur classical harmonica soloing and singing in the New Stream Chinese Chorale and the Heralds of Hope Men's Chorale of Loma Linda University Church.

mathematics in and chemistry in 1973 from Walla Walla University, and, in 1975, a Bachelor of Science degree in medical technology from Walla Walla University before earning his Doctor of Dental Surgery degree from LLUSD in 1985. After a year's hospital dentistry residency at Loma Linda University Medical Center, Dr. Ko practiced dentistry privately in Bakersfield, California, for fifteen years before serving from 2000 to 2004 as director of the dental department at Hong Kong Adventist Hospital. He has been on the LLUSD faculty in the Department of Restorative Dentistry since September 2004.

Dr. Ko expresses gratefulness to his

# The Use of Patient's Own Natural Crown as Provisional Restoration on Immediately Placed Single Implants: A Clinical Report of 17 Consecutively Treated Patients

Jaime Lozada, DMD, Joseph Kan, DDS, MS, Antoanela Garbacea, DDS, MSD

#### Introduction

The restoration of traumatically or iatrogenically induced loss of an anterior tooth remains a therapeutic challenge.<sup>1-3</sup> Moreover, demands for harmony between the peri-implant gingival and adjacent dentition, especially in the esthetic zone, are increasing.<sup>4</sup> In cases of immediate insertion of a single implant, when bone quality and primary stability allow, it is essential to provide the patient with an adequate provisional crown.<sup>5, 6</sup> Soft-tissue recession must be avoided, whether it is due to a compression of the peri-implant soft-tissue caused by an over-contoured restoration in the cervical collar of the provisional crown or by a too small dimensioned sulcus former.<sup>7,8</sup> A duplication of the exact contours of the lost tooth, especially on the cervical part of the provisional restoration, is expected to preserve all the relevant information and allow the design of a natural looking emergence profile. Based on theoretical considerations and 17 consecutively treated cases, the authors intend to demonstrate that a near-natural dimensioned sealing of the dento-gingival soft-tissue collar may initiate a tissue-maintaining healing process. The natural dental crown, connected to an implant temporary abutment, is applied for a tight seal of the wound.<sup>8-10</sup> This article describes the use of immediate single implants placed in the aesthetic zone utilizing the same clinical crown of the extracted tooth.

#### Materials and Methods

The study subjects included patients with imminent loss of a single tooth in the anterior maxilla for which implants had been determined to be the treatment of choice following clinical and radiographic evaluation. The inclusion criteria consisted of patients with a failing single tooth while maintaining adequate gingival and bone architecture and intact clinical crown. In this study, the type of tooth failure included trauma, root resorption, or endodontic or periodontic failures, with no evidence of acute infection. All patients received standard treatment planning and diagnostic workup and consented to the treatment.

Seventeen consecutive men and women with a mean age of 38.5 years (range 29 to 67 years) underwent immediate implant placement and provisionalization procedures. A total of 17 tapered, threaded, SLA (Sandblasting with large grit and acid etching) surface and self-tapping implants (Dentium-Implantium System, Dentium, Cypress, CA, USA) were placed; of these, 13 occupied the central incisor position and four were placed in the lateral incisor position.

#### **Clinical Case Report**

The following is the description of a case report that exemplifies the manner in which all patients included in this study were treated. A 62-year-old otherwise healthy woman presented with a history of luxation injury and inflammatory external resorption process along the lingual aspect of the right maxillary central incisor. Radiographic and clinical evaluations demonstrated peri-radicular radiolucency, without signs or symptoms of active infection. From a frontal view, the only clinical sign was the slight discoloration of the crown; otherwise, the gingival contours were normal. She presented with the desire to have the tooth replaced with an implant in order to avoid preparation of the existing adjacent teeth. The pre-surgical data collection consisted of diagnostic impressions, occlusal records, intra and extra oral photographs, periapical radiographs, and cone beam computer tomography (CBCT) (Fig. 1).

Bone sounding demonstrated the presence of harmonious gingival architecture with the surrounding dentition and an appropriate gingiva-to-underlying bone dimension—facially 3mm and interproximally 4 to 6 mm. After administration of local anesthesia using infiltration technique with two carpules of Lidocaine 2% 1/100000 with epinephrine (Lidocaine Hydrochloride Injection, Dentsply, York PA, USA), a sulcular incision with transeptal fiberotomy was made. The Powertome 100s (Westport Medical Powertome<sup>™</sup> Periotome, Salem, Oregon, USA) was used to perform the extraction with minimal trauma and bone preservation on facial and proximal aspects (Fig. 2). The failing tooth showed a large erosive lesion on the lingual aspect extended below the alveolar crest and replaced with granulation tissue (Fig 3.)

After the tooth extraction, the socket was curetted and irrigated and the levels of the crestal bone were re-evaluated. Gingival biotype was measured with the tension-free caliper and categorized as normally scalloped. A tapered, threaded, SLA (Sandblasting with Large grit and Acid etching) surface and self tapping implant (Dentium-Implantium System, Dentium, Cypress, CA, USA), with 3.8 mm body diameter and 14mm length, was inserted in the prepared osteotomy site without flap reflection. The gap between the implant and labial bone in the anterior tooth socket was grafted with pre-hydrated allograft Osteon particle size 0.3-0.5mm (Osteon,<sup>TM</sup> Dentium, Cypress, CA, USA).

Since primary implant stability was achieved with a minimal insertion torque of 35N/cm, an immediate

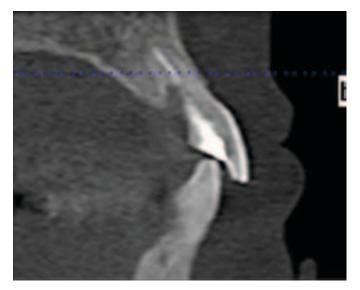


Figure 1. Initial CBCT cross section of tooth #8



Figure 2. Powertome 100S used for atraumatic extraction



Figure 3. Palatal erosion with granulation tissue due to external resorption process

restoration was prepared (Fig. 4,5). A non-hexed plastic temporary abutment was adjusted extra-orally for proper



Figure 4. Osteotomy preparation with Dentium Kit



Figure 5. Osteon alloplastic graft placement and Implantiun Implant insertion



Figure 6. Try-in Plastic Temporary Abutment (non-hex), passively seated and hand tightened

retention and resistance form and passively screwed into the implant and hand tightened (Fig. 6, 7). The extracted tooth was modified by root removal and pulp chamber enlargement (Fig. 8). The relining of the natural crown was performed in



Figure 7. Prepared Temporary Abutment.

the optimum position in relation to the adjacent and opposite teeth, intra-orally and extra-orally, with flowable light-curing resin material in order to improve the fitting accuracy on the plastic temporary abutment. The modified natural/ provisional crown was adjusted to remove all centric and eccentric contacts by selective grinding of the lingual surface of the restoration and cemented with temporary cement (Temp Bond, Kerr Manufacturing Company, Romulus, MI, USA); postoperative CBCT was taken (Fig. 9-11), and postsurgical care instructions given. Appropriate antibiotic (Amoxicillin, 500 mg or equivalent, taken orally three times daily for one week) and analgesic (Ibuprofen, 800 mg or equivalent, taken orally every four to six hours as needed for pain) regimes were prescribed.

The patient was advised to avoid brushing the surgical site, to rinse gently with 0.12% chlorhexidine gluconate (Peridex; Procter & Gamble, Cincinnati, OH, USA), to consume a liquid diet for two weeks, and to avoid function on the restoration for six months postoperatively. The patient was followed at monthly intervals for six months following implant placement at which time photographs were taken to monitor the status of soft tissue morphology.



Figure 8. Preparation of the extracted tooth was modified by root removal and pulp chamber enlargement with a highspeed handpiece under copious irrigation.

Once the six-month healing period had been completed, the implant was evaluated clinically and radiographically for stability and absence of soft tissue complications and final implant impressions were taken. For the final restoration, a gold, direct-custom abutment was fabricated and seated with a torque value of 25-30 N/cm (Dentium manufacturer's recommendations). The final metal-ceramic crown with custom porcelain shading was cemented with Improv<sup>®</sup> temporary implant cement (Improv<sup>®</sup>, Salvin Dental Specialties, Inc. Charlotte, NC, USA). Follow-up extends up to two years with excellent clinic outcomes in terms of gingival tissue levels and marginal bone levels. Additionally, the patient continues to express high acceptance from the esthetic results of this procedure (Fig. 12, 13).

Each patient was evaluated every three months during the first year. Sequential periapical radiographs were made every six months to evaluate peri-implant marginal bone changes. The marginal bone level was measured with periapical radiographs in relation to the implant radiographic reference point at the mesial and distal aspects of the implant neck and buccal-lingual aspects of the implant with CBCT.

The patients were asked verbally about any noticeable changes in the peri-implant gingival architecture and to rate the esthetic outcome of the treatment on a scale of 0 to 10 (0 = worst). Any complications throughout the treatment were also noted.

#### Results

All 17 implants were functioning at the time of the last follow-up examination, with a mean functioning time of 18.6 months (range 12 to 24 months). The dimensions of the implants placed were between 3.6 mm x 12 mm and 4.0 mm x 12 mm.

From the standardized periapical radiographs, no marginal bone changes greater than 1 mm were observed at the mesial and distal aspects of all implants. The CBCT images showed in all the cross-sectional images from the inserted implants that the facial bone plate remained stable. From each one of the images, the baseline cuts compared with the one-year postoperative cross-sectional cuts showed an average of .7mm facial bone remodeling and .5 mm of marginal bone change from the buccal aspect only, and no changes from the palatal aspect.

All patients were satisfied with the final esthetic outcome (range 9 to 10), and none reported any noticeable changes in the gingival level or architecture. Three complications were observed. In one patient a single provisional restoration became loose and was recemented. The other two complications involved the provisional natural crowns becoming discolored two months after implant placement.

#### Discussion

Long-term prognosis of avulsive dental injuries is poor because of the high percentage of external resorption seen



Figure 9. Temporary Abutment access hole sealed with Fit Checker (Fit Checker II NDS from GC America Inc. Dentalcompare, South San Francisco, CA)



Figure 10. Clinical view of natural tooth crown used as provisional restoration, relined with flowable composite and cleared from centric and eccentric movements with good gingival adaptation and emergence profile

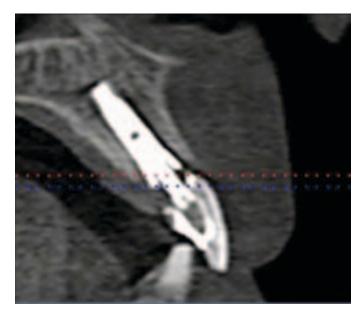


Figure 11. Postop CBCT implant #8

in the early months following the injury or as a development decades later. However, with appropriate treatment planning, dental implants can be successfully used to reconstruct these sites.<sup>1</sup> The concept of immediate implantation and provisionalization for replacing single teeth in the premaxilla comes with some obvious benefits, especially decreased treatment time.<sup>11</sup> It is suggested that when primary implant stability is achieved during surgery, and the provisional restoration is adjusted to clear all centric and eccentric



Figure 12. Clinical photograph at the two-year follow-up appointment



Figure 13. Periapical radiograph of tooth #8 at two-year follow up appointment

contacts, the procedure is not a variable that affects the implant success.<sup>12-15</sup>

The adaptation of the soft tissue around the patient's own tooth was considered precise. It is assumed that a near-natural dimensioned sealing of the dento-gingival soft tissue cuff initiates a healing process similar to a tooth replantation.<sup>16</sup> The use of the autogenous provisional crown allows a naturally dimensioned emergence profile around the original sized tooth. The roughness and biocompatibility of a natural tooth are favored over the surface topography of any long-term provisional crown due to the potential for development of a tight soft-tissue attachment.<sup>9</sup> In the present case report, the soft tissue levels correspond favorably to their preimplant status, maintaining their profile. A minimum of soft tissue alteration of less than 1 mm occurred facially, following the insertion of the permanent restoration. Upon comparison of pre and postoperative radiographs no periimplant radiolucency or bone loss of more than 1mm was observed. However, the presented treatment modality does not cover clinical long-term evaluations that could verify lasting dento-alveolar tissue maintenance.

The effect of gingival biotype on peri-implant tissue response seems to be limited to facial gingival recession and does not affect interproximal papilla or proximal bone levels.<sup>15</sup> In line with a previous investigation,<sup>6</sup> this case report showed that the soft tissue remodeling was observed not during the healing period but following the placement of the permanent restoration.

#### Conclusion

Based on the preliminary report of 17 consecutively treated patients, the feasibility of placing and provisionally restoring endosseous implants at the time of tooth extraction using the patient's own natural crown appears to be a predictable technique to help maintain the soft and hard tissue architecture in the aesthetic zone. Furthermore, this technique can provide an harmonious clinical appearance that increases patient acceptance and satisfaction.

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Jaime Lozada DMD, director and Joseph Kan DDS, MS, professor, Antoanela professor, Graduate Program in Graduate Program in Implant MSD, graduate student, Implant Implant Dentistry, Department of Dentistry Department Restorative Dentistry **Restorative Dentistry** 

Garbacea DDS. of Dentistry and Prosthodntics

# History of the Advanced Education Program in Implant Dentistry at Loma Linda University

In 1976, Robert A. James, DDS, then professor of Restorative Dentistry, founded the first university-based advanced education program in oral implantology at Loma Linda University School of Dentistry.

Dr. James, a pioneer in the field of oral implantology, and recognized worldwide as an educator and researcher in the new field of dental implants, had been active in this discipline for nearly a decade when he was invited to join the School's faculty in 1969 and earned a master's degree in Oral Pathology in 1972.

The Implant Dentistry program was based in the School's Faculty Dental Office on Taylor Street, and its first certificate candidate was Robert Capone, DDS, a Los Angeles dentist who attended the program as a part-time student. Its first full-time student was Phillip Lindley, DDS, who entered the program in 1982.

The year 1983 was an important year in the history of the implant dentistry program. One of its students, Phillip Truitt, DDS'76, initiated a research protocol that evolved

into a new method for the treatment of patients with subperiosteal dental implants. His research involved a technique that residents in the program. John Whittaker, DDS, relocated from New Zealand to Loma Linda and joined the program as part-time faculty.

In 1990, Dr. James, and former LLUSD Dean Judson Klooster, DDS, presented an application to the University's graduate school requesting the initiation of the master's in science track for the postgraduate program in implant dentistry, thereby lengthening it from two years to three. The application was accepted, and Silvio Emanuelli, DDS, MS'92, adjunct assistant professor, Restorative Dentistry, and the first student enrolled in the program, successfully defended his thesis. Since then, several important research protocols have been completed with topics that varied from microbiological concepts to retrospective data analysis of implants placed at LLU.

Another significant year in the history of the program was 1991. The increasing interest in implant dentistry, and the growth in student applications to the program, made obvious the inadequacy of the physical facility for the number of

Robert James, DDS, founded at LLUSD the first, university-based advanced education program in oral implantology. students wanting to enroll. Dr. James presented a proposal to the administration requesting the construction of a state-of-the-art

generated a tri-dimensional model utilizing CAD CAMlike technology based on a medical CT scan of a patient's maxillofacial complex. The morphological reproduction was an exact replica of the patient's jaw, which eliminated the need for a direct bone impression—the first step in the design of the subperiosteal implant. Truitt's technique revolutionized the manner in which patients were treated with that particular dental implant modality.

Blades and subperiosteal implants were the primary types of implants that were used at that time. It was around 1985 that root form implants first were used in the implant program. Dr. Jaime L. Lozada, the program's fifth resident, and Sascha A. Jovanovic, DDS, its first intern, under the supervision of Dr. James, placed the first root form implants on a completely edentulous patient.

Dr. Robert James was the only instructor of the program in 1987; but after the completion of a certificate in oral implantology, Dr. Lozada became the first additional fulltime instructor, supporting Dr. James in the instruction of clinic and the relocation of the program from the Faculty Dental Offices to the dental school building.

The move to the northeast corner of Prince Hall's second floor was celebrated with a ribbon cutting ceremony on March 15, 1993, officiated by Dean Judson Klooster, DDS, Lyn Behrens, MD, then president of Loma Linda University, Dr. James, and Dr. Lozada.

Soon a new educational opportunity became available for students interested in the field of implant dentistry. Drs. James and Lozada instituted a preceptorship program that later was named an internship program in implant dentistry. Short internship stays of three to 12 months were made available to students interested in this developing field of dentistry.

On February 19, 1994, Dr. James suffered a heart attack and died. A memorial service with more than 300 people in attendance highlighted the program's founder as a devoted husband and father, tireless clinician and researcher, and an exemplary Christian. Even today, friends and colleagues remember him as one of the most influential dentists of the time.

Dr. Lozada replaced Dr. James as director in 1994, even as the title of the program was changed from "Oral Implantology" to "Implant Dentistry," to reflect the national trend for the discipline.

During the last part of 1995, the program initiated one more educational opportunity: a fellowship in implant dentistry designed to enroll graduate students from the recognized dentistry specialties. Practitioners of prosthodontics, oral and maxillofacial surgery, periodontics, and endodontics have participated in this program that requires one year of full-time residency, permitting the matriculated students to obtain a higher level of training in implant dentistry.

In the fall of 2000, then School of Dentistry dean, Charles Goodacre, DDS'71, MSD, and Dr. Lozada initiated a project to provide learning through the first CD-ROM-based education program in implant dentistry. Under the leader-

ship of Drs. Goodacre and Lozada, multiple authors participated in the project. Topics including the history of implant dentistry, diagnosis and treatment planning, sinus graft surgery, dental implant materials, and

complications in implant dentistry were among the subjects covered on this CD-ROM. An educational grant from Nobel Biocare<sup>\*</sup> made it possible to distribute the CD-ROM free to every dental student in the country.

Since early 2000, several implant dentistry program faculty have had scientific articles published, and Dr. Lozada and Joseph Kan, DDS'90, MS'99, professor, Restorative Dentistry, were inducted into the LLUSD Society of Scholars, an honor society of faculty who have published 50 or more articles in peer-reviewed dental publications.

In 2003, the American Academy of Implant Dentistry hosted the first Consensus Conference in Implant Dentistry in America. A number of clinicians and researchers were invited to a workship to develop guidelines that today are used as recommendations for the various forms of treatment for patients scheduled for implants with immediate loading indications. Among the clinicians and researchers invited were Carl Misch, DDS, MDS, PhD, clinical professor Department of Periodontology and Oral Implantology, School of Dentistry, Temple University; Dr. Lozada; William Becker, DDS, MSD, clinical professor of periodontology, University of Southern California School of Dentistry; and Maurice Salama, DMD, assistant professor of periodontics, University of Pennsylvania and the Medical College of Georgia. After three days of deliberation, they presented a position paper recommending the clinical guidelines for immediate loading of dental implants.

For the period of 2007-2008, Dr. Lozada was named president of the American Academy of Implant Dentistry, and in October of 2010 he was presented with the Isaiah Lew Memorial Research Award from the Research Foundation of the American Academy of Implant Dentistry.

In 2010, a two-year, non-degree program for general dentists who wish to acquire more training in implant dentistry was created. The program was named the Implant Dentistry Practicum Program, and its curriculum consisted of one year of didactic courses and a second year that includes surgical placement of dental implants. Practicum

In the fall of 2000, Drs. Goodacre and Lozada initiated a project to provide learning through the first CD-ROM-based education program in implant dentistry.

students learn and perform many of the required laboratory procedures for the cases that involve restoration of implants for patients with a wide range of treatment needs. The program was

developed with the assistance of William P. Naylor, DDS, MPH, MS, recently retired LLUSD associate dean for Advanced Specialty Education.

December 2012, the implant dental laboratory that is used by LLUSD graduate students and fellows was moved to the second floor of Prince Hall closer to the graduate clinic. This facility has been outfitted with state-of-the-art laboratory furnishings and technology.

"The Robert A. James Loma Linda University Implant Dentistry Society" was launched March 25, 2013, as an organization to which graduates and friends of the threeyear program, fellowship program, as well as all externs and interns former and present are invited. The primary goal of this society is to support advancement in the field of implant dentistry at Loma Linda University.

Through generous contributions from dental implant companies, three new awards have been established for scholarships: Nobel Biocare Scholar Award, Straumann Scholar Award, and Dentium Clinician Award. These awards are given to students in recognition of their achievements, and the scholarship monies are applied to their tuition.

# Implant Dentistry: the quiz

Circle the letters of the correct answers.

- 1. One of the most important factors in order to place a provisional crown on an immediately placed single implant is
  - a. Grafting the alveolus
  - b. Stable implant
  - c. Splinting to natural dentition
  - d. Longer implant
- 2. What is the emergence profile on an implant restoration?
  - a. The osseous section
  - b. The coronal area
  - c. The subgingival area
  - d. The palatal area
- 3. An immediate implant restoration in the esthetic area should be constructed in
  - a. Full occlusal contact
  - b. Only contacting in protrusive movements
  - c. Only contacting during chewing cycles
  - d. Completely out of occlusion
- 4. What part of thin gingival biotypes is affected around implant restorations?
  - a. Palatal
  - b. Mesial
  - c. Distal
  - d. Facial
- 5. Immediate provisional implant restorations offer the following benefits except for
  - a. Esthetics
  - b. Gingival support
  - c. Function
  - d. Patient satisfaction

- 6. An implant placed in an extraction site often presents a gap between the implant and the alveolus. That area should be treated by
  - a. Grafting
  - b. Placing collagen
  - c. Placing a periodontal dressing
  - d. Doing nothing
- 7. An implant placed in the most ideal position in an extraction site should be restored with
  - a. A cement-retained restoration
  - b. A screw-retained restoration
  - c. A custom abutment and cemented restoration
  - d. A stock abutment and cemented restoration
- 8. Most single implants placed in the premaxilla obtain their primary stability from the bone located
  - a. Apical to the extraction site
  - b. Buccal to the extraction site
  - c. Palatal to the extraction site
  - d. Distal to the extraction site
- 9. The main benefit of a natural crown used in a provisional restoration on an immediately placed implant is
  - a. Esthetics
  - b. Strength
  - c. Shade stability
  - d. Less pain
- 10. The most ideal time to permanently restore an implant placed in an extraction site is

- a. Immediately
- b. One month after placement
- c. Two months after placement
- d. Three to five months after placement

#### Name\_\_\_\_\_ DDS/DH Lic.#

Date	Mailing address			1	/		_
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After answering the questions and completing this form, mail the entire sheet (or photocoy) to:

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For questions please call: (909) 558-4685

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Note: Loma Linda University School of Dentistry is authorized to confer 2 hours of California continuing dental education credit for this home study course.



# Sterilization Assurance Service (SAS) & Dental Unit Waterlines Testing Service (DUWLs)



*Sterilization Assurance Service (SAS)* was established in 1998 and provides biological monitoring of sterilizers for more than 700 dental offices, community colleges, and other institutions in more than 30 states.

# What are some of the advantages of using LLU School of Dentistry's SAS?

- More than 15 years of experience
- Choice of Basic, BasicPlus, and Intensive spore testing services to help you meet infection control requirements within your budget
- Courtesy envelopes or prepaid return envelopes are included
- Option of weekly or monthly reports (Certificate of Participation is available)
- Online test results will be available soon.
- Failure notification by phone

**Dental Unit Waterlines Testing Service (DUWLs)** opened in 2000 and evaluates microbial contamination of dental unit waterlines. Over 500 dental offices, a number of universities, Veterans hospitals, and other agencies use this service.

# What are the advantages of using LLU School of Dentistry's DUWLs service?

- More than 12 years experience
- Consultations by our experienced staff members
- Detailed instructions, sample tubes, a foam container, and ice packs in each test package
- We use the heterotrophic plate count by membrane filtration (Method 9215D), the gold standard for examining microorganism effluent, as published by the American Public Health Association.
- Multiple dilutions to detect heterotrophic bacteria counts up to 20,000 CFU/mL
- Test reports sent after the seven day incubation period
- Local customers may deliver samples directly to our laboratory.

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# Nicholas Caplanis elected president American Academy of Implant Dentistry

Nicholas Caplanis, DMD, MS'96, of Mission Viejo, California, was installed as president of the

4,500-member American Academy of Implant Dentistry (AAID) October, 2012, during the Academy's 61st annual meeting in Washington, D.C. He has been a member of the Academy's board of trustees since 2004 and a member of its executive committee since 2008.

Dr. Caplanis' road to AAID leadership runs through Loma Linda University's School of Dentistry, the first dental school to develop, under the direction of Robert A. James, DDS, MS'72, in 1976, an advanced specialty education program in implant dentistry.

Beyond the private practice limited to periodontics and dental implant surgery he has maintained in Mission Viejo, California, since 1997, Dr. Caplanis is an assistant professor and

part-time faculty with the Advanced Education Program in Implant Dentistry at Loma Linda. He completed the School's three-year residency in implant surgery and prosthodontics in 1995, earned a master of science degree in oral implantology in 1996, and a specialty certificate in periodontics in 1997.

Dr. Caplanis says he "fell into implant dentistry entirely by accident." While still fourth-year dental students at the University of Medicine and Dentistry of New Jersey in 1991, Dr. Caplanis and a classmate attended the MaxiCourse<sup>®</sup> directed by Norman Cranin, DDS, DEng, at the Brookdale University Hospital and Medical Center in New York, who "was gracious enough to discount the tuition for us."

"When I finished the MaxiCourse," I decided that I wanted to devote my entire professional career to implant dentistry and sought out post-graduate programs in the field," says Dr. Caplanis.At the time there were only two such programs besides the one at Loma Linda: the program at Brookdale, and another directed by Carl Misch, DDS, MSD, PhD, then at the University of Pittsburgh School of Dental Medicine.



Dr. Nicholas Caplanis

During a one-year hospital-based general practice residency following dental school at Englewood Hospital in

New Jersey, Dr. Caplanis' fiancé (now his wife of 20 years) insisted that if they were going to move away from their families to pursue postgraduate training, they weren't going to live in the cold climate of the Bronx or Pittsburgh. In a fall 2012 interview with AAID News, Dr. Caplanis described his path into implant dentistry:

"That same year [1991] I attended my first AAID meeting and the decision where to go was firmly made after meeting Dr. James. I approached him as he was coming off the podium to ask him about his training program. He was in a rush to catch a flight home, but was gracious enough to invite me to his hotel room where we chatted while he packed his

suitcase. He was a warm and compassionate human being and seemed to know everything about implant dentistry. I was very fortunate to be accepted to Loma Linda's program and train under Dr. James the very next year in 1992.

"As a Loma Linda implant resident, the AAID was an integral part of our education. We became involved with the national as well as the district meetings, doing poster as well as oral research presentations. The three-year program was intense, and many of our faculty members were AAID members. We were usually in the clinic all day and in the lab until late at night, with graduate courses in between. We became proficient in all the common implant types used today, but also subperiosteals, ramus frames, and blades. We designed our own subs, and even cast a few custom blades along the way.

"During my second year [at Loma Linda], Dr. James passed away, but the program was in good hands with Dr. Jaime Lozada, who took over as director. Dr. Lozada and I developed a close friendship that persists to this day. I give credit to Dr. Lozada for getting me politically involved with the Academy.

"When I finished the implant residency, I realized that, in the eyes of the ADA, I was still a general dentist. I didn't think it would be possible to establish an exclusive dental implant practice. I also realized that placing implants at that time as a general dentist would make me a target for every malicious surgeon or periodontist in the community. So as the saying goes, if you can't beat them, join them; I decided to further my education and applied for a residency in oral and maxillofacial surgery. While I was waiting to find out if I was accepted to a surgery program, my master's thesis director, Dr. Ulf Wikesjö [DDS, DMD, PhD], who was the program director of periodontics at Loma Linda [1990-1996], asked if I would join his faculty to teach implant surgery to the periodontal residents. The only problem was he didn't have enough money in his budget to pay me. So instead, he offered to let me go through the periodontal residency without paying tuition. I thought it was a great deal and took him up on his offer. That's how I became a

periodontist. I no longer provide definitive prostheses for my patients, but I still consider myself an implantologist and do provide restorative care to friends and family."

Dr. Caplanis is board certified and a diplomate of the American Board of Periodontology, as well as of the American Board of Oral Implantology. He is an honored fellow of the American Academy of Implant Dentistry and a fellow of the American College of Dentists. He is also past president of the AAID's Western District and of the Orange County Dental Society.

Dr. Caplanis is senior associate editor of the *Journal* of Oral Implantology, author of more than a dozen clinical technique and research papers, and is co-author of textbook chapters with a focus on periodontal and peri-implant bone regeneration and soft tissue esthetics around single tooth implants. He lectures nationally as well as internationally on the inter-related topics of periodontal reconstructive surgery and implant dentistry.

# FDA recommends status upgrade to alumnus' implant invention

It is both of historical interest and newsworthy that after many years of persistence in the production and application of his dental implant devices, LLU School of Dentistry alumnus Ralph A. Roberts, DDS'65, looks forward to seeing his bladeform endosseous dental implants being upgraded to Class II clearance from the Food and Drug Administration. On July 18, 2013, he presented information to the Dental Products Panel of the Medical Devices Advisory Committee in support of the FDA's proposed order to reclassify his blade-form endosseous dental implants. Following Dr. Roberts' appearance before its members, the Dental Products Panel Meeting summary stated, "The panelists concluded that the device should be regulated as Class II (Special Controls)."

By the time Dr. Roberts graduated from LLUSD, he had designed the first plate-form implants. Since then, he has designed and patented several types of implants, including the Ramus Frame, designed for the completely edentulous mandible; the Ramus Blade, for the mandibular free-end saddle; STR (Single Tooth Replacement) for single or multiple missing teeth; and several varying designs of the plate-form for the sinus area of the maxillary. Some of his implants have been in service as long as 43 years.

Dr. Roberts taught surgical principles for ten years (1988 to 1999) at LLU School of Dentistry's International Dentist Program. He now practices general dentistry and implantology in Rio Dell, California.



Dr. Ralph Roberts

# RAD in Los Angeles

The Loma Linda University School of Dentistry was well represented at the week-long 64<sup>th</sup> Annual Session of The American Academy of Oral and Maxillofacial Radiology (AAOMR), held recently at the Beverly Hilton Hotel in Beverly Hills, California.

Edwin L. Christiansen, DDS'75A, PhD, professor, School of Dentistry, Adjunct Professor, Department of Radiology, School of Medicine, was the invited speaker for the ABOMR Recognition Lunch and Oration ceremony at which Heidi Kohltfarber, DDS'03, MS'12, assistant professor, Oral Diagnosis, Radiology, and Pathology, was inducted as a diplomate, having successfully challenged the board's rigorous certification examination process.

Attending the ceremony and witnessing Dr. Kohltfarber's induction were Ronald Dailey, PhD, dean, LLUSD; Heidi Christensen, DDS'83, MS, chair, Department of Oral Diagnosis, Radiology and Pathology; Kenneth Abramovitch, DDS, MS, professor, Department of Oral Diagnosis, Radiology and Pathology, director, Radiology and Imaging Services, and president-elect of the ABOMR; and Dwight Rice, DDS'96, associate professor, Department of Oral Diagnosis, Radiology and Pathology. Dr. Kohltfarber will be returning to LLUSD in July of 2014 from study leave at the University of North Carolina.

Dr. Christiansen's address at the ABOMR Recognition Lunch and Oration was entitled, "BCT ET cet." He underscored the accomplishment of the AAOMR for its persistence in urging advanced training in the science and art of maxillofacial radiology in dentistry and its importance to the advancement of dental arts and sciences. He also recognized the long and productive relationship between the LLU Schools of Dentistry and Medicine through the Department of Radiology chaired by David B. Hinshaw, Jr., MD. In conclusion, Dr. Christiansen noted that the first application of advanced medical imaging (Computed Tomography) for a uniquely dental problem (the temporomandibular joint) occurred in March of 1981, thirty-two years ago.

Three research studies representing collaboration between LLUSD personnel, the LLU School of Medicine faculty and other researchers were presented during the week by LLUSD researchers. Summaries of the studies are printed below:

### Effect of CBCT Training Sessions in Detecting Apical Bone Defects

#### Rice D, Luikham V, Christensen H, Torabinejad M, Oyoyo U.

There are no evidence-based guidelines for training to determine competency in identifying pathosis with CBCT. As a consequence, this study measured the effect that multiple small group and individual CBCT training sessions would have on the ability of fourth year dental students to interpret artificially created periapical lesions in human mandibles.



Dr. Ed Christiansen, DDS'75A, delivers keynote address "BCT ET cet" at the ABOMR recognition lunch.



Dr. Heidi Kohltfarber, LLUSD '03, received her diplomate pin from ABOMR President Dr. Mansur Ahmad.

Using receiver operating characteristics (ROC) analysis, post training detection rates more accurately predicted the presence of lesions at a statistically significant level.

#### The Asymmetry Index (AI)

Abramovitch K, Huynh CP, Owen H, Bailey JR, Zhang WZ, Spira M.

This study was sparked by the absence of a standardized methodology for measuring skull symmetry, despite the fact that CBCT provides excellent 2D and 3D anatomic visualization.

Using CBCT scans of 15 Caucasian females (ages 19-29), this preliminary study showed that 3D-AF measurements are reliably reproducible, with mandibular structures (i.e., lingual foramen, mental foramen, lateral condylar pole) demonstrating the greatest degree of facial asymmetry (AI>3.0).

Study findings suggest an asymmetry index of 3.0 as a threshold for notable asymmetry, and mandibular structures demonstrate more asymmetry than maxillary structures. Replication of this study on a larger sample size has the potential to validate the current findings.

#### Evaluation of Bacterial Contamination on Photostimulable Phosphor Plates

Christensen H, Rice D, Cross J, Ordelheide E, Roquiz D, Aprecio R.

This study set out to discover whether bacterial crosscontamination occurs between patients when PSP places and barrier envelopes are used as directed in the pre-doctoral and dental hygiene clinics at Loma Linda University School of Dentistry.

Based on the study, barriers appear to adequately prevent PSP-plate cross-contamination between patients. However, the possibility of cross-contamination is still a concern; so universal precautions and strict adherence to radiology infection control procedures are essential for protecting patients.

# Coachella Valley attends A.S. degree open house

The LLU School of Dentistry held an early evening November 13 open house for prospective students to its Associate of Science degree program in Dental Hygiene at the School's new Dental Hygiene Program and Clinic in Palm Desert, California.

Enhanced by catered Mexican food, a free raffle, and perfect weather, the open house provided an opportunity for prospective dental hygiene students to meet LLUSD's new dean, Ronald Dailey, PhD, and other School administrators and faculty, including Robert Handysides, DDS'93, associate dean for the Office of Academic Affairs; Kris Wilkins, DH'80, chair, Department of Dental Hygiene; Graham Stacy, PhD, associate dean, Office of Student Affairs; Steven Morrow, DDS'60, MS, director, Patient Care Services and Clinical Quality Assurance; and Fred Kasischke, PhD, associate dean, Office of Admissions and Service Learning.

Sixteen students currently enrolled in the two-year program provided guests with guided tours of the consummate clinical teaching facility.

Approximately sixty interested members of the desert community attended the event, and Esther Valenzuela, MBA, MA, director, Admissions and Recruiting, and Marlise Perry, assistant director, Admissions and Recruiting, administered ten matriculation consults that the School's admissions team was there to provide.



Krista Juhl watches visitors sign in for consultations.



Dr. Dailey and Kris Wilkins

# Networking at CDA by the Bay

LU School of Dentistry Dean Ronald Dailey, PhD, Marlise Perry, assistant director, Admissions and Recruiting; Krista Juhl, MBA, director, marketing; and Brian Novy, DDS'06, associate professor of Restorative Dentistry, and many others represented the School at the California Dental Association's "The Art and Science of Dentistry" meetings held August 15-17 in San Francisco's Moscone South Convention Center.

The School's representatives may not have left their hearts in San Francisco, but three of the four shook approximately 2,000 hands and distributed nearly a ton of the School's Dentistry alumni journals, Biennial Reports, "Facts Highlights and Firsts" brochures, and admissions materials from a 10' by 10' booth on the floor of the Center.

Dean Dailey was pleased to visit for most of two days with the continuous congenial traffic of prospective students, alumni, and colleagues.

Also attending were three of the School's CDA dental

student representatives: Marianne Demirdji, D2, Erica Becker, D3, and Jane Kim, D4.

Dr. Novy made three presentations on two topics. In "The Plaque Monologues," he argued, "Dental professionals are convinced plaque is their nemesis, yet the scientific evidence indicates that some forms of plaque can provide colonization resistance against cariogenic bacteria. What can we do for our patients," he asks rhetorically, "to help them grow this beneficial plaque?"

In his two-part in-service, "I Can Hear the Odontoblasts Screaming," Dr. Novy acknowledged, "Controlling the environment and organisms of the mouth is always a challenge." But "recent caries research," he said, "has provided the dental profession with an array of diagnostic aids and a myriad of treatment modalities, many of which are not well publicized." Dr. Novy provided participants the knowledge and tools to identify caries infection and to treat the disease using a medical model.

Interestingly, the School of Dentistry has a number of alumni who are playing significant roles in the operation of the CDA. The Association's conventions are made possible

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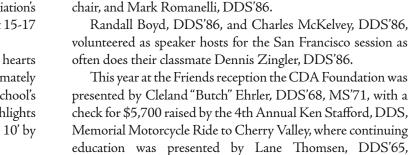
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A view from the convention center floor and Dean Dailey posing with alumni from the dental class of 2011 (L-R): Thomas Szutz, Emmett Tetz, and Shamir Sevilla-Perez.

Foundation scholarship committee; and Kenneth G. Wallis, DDS'86, is secretary of the CDA executive committee and a member of the CDA Foundation Board of Directors.

CDA Presents The Art and Science of Dentistry attracted more than 15,000 people, featured more than 100 lectures and workshops and highlighted 375 companies exhibiting the latest in oral healthcare products and services.

In decompression mode, Krista Juhl said, "It was great to meet so many prospective students," and she expressed satisfaction that LLUSD's presence at the CDA meetings was "both a networking and academic success."



through the hard work of 15 CDA Presents Board of Managers

who make certain that all attendees have the opportunity to

learn from the most successful names in dentistry. Two of those

managers are LLUSD alumni: Gary Ackerman, DDS'86, vice

MS'74, former chair of Oral Diagnosis, Radiology and Pathology at Loma Linda School of Dentistry, and a legislative update was provided by California State Senator Bill Emmerson, DDS'80, MS'82. Ron Mead, DDS'73, driving force and co-founder of the event, Mark Romanelli, DDS'86, Gary Ackerman, DDS'86, and Dr. Ehrler organized the

ride. In four events, biking dentists have raised roughly \$13,000 for the foundation.

More deeply into the workings of the CDA, Dr. Ehrler is treasurer of the CDA Executive Committee; Janice Scott, DDS'86, a trustee for the CDA, is on the CDA Foundation Board of Directors where she sits as designated director, and chairs the

# **OMFS** hosts annual Philip J. Boyne grand rounds

ay P. Malmquist, DMD, an internationally-renowned oral and maxillofacial surgeon with advanced training and experience in dental implants, bone regeneration,

and bone grafting, was the featured speaker as the Department of Oral Maxillofacial Surgery hosted 8 its 6th annual Philip J. Boyne and Peter Geistlich Professorship Endowed Lecture at the Wong Kerlee International Conference Center, September 25, 2013.

The endowed lecture series began in 2008 as an annual day of continuing education but has segued into a grand rounds format during which LLUSD residents and faculty present cases that are reviewed with the visiting expert.

patient. Indications for treatment options, along with the complications associated with poor tissue platforms, are considerations facing many clinicians. The advent of implant



Dr. Malmquist lectures.

Fellow surgeons, including residents and faculty, joined with Dr. Malmquist to consider the treatment of the congenitally missing tooth, a complex dilemma that plagues many aspects of dental care for the adolescent and adult therapy some 45 years ago has increased the ability of clinicians to develop outcomes that are now relatively routine. considerations Growth in conjunction with treatment options allow for a predictable course in designing the plan for younger patients. Combination therapy, including orthodontics, orthognathic surgery, and reconstructive dentistry, creates excellent long-term outcomes for patients with congenitally missing teeth. Discussion

focused on the congenitally missing tooth syndrome, esthetic outcomes, and functional rehabilitation in patients with compromised dentition.

Dr. Malmquist is an oral and maxillofacial surgeon

who has authored numerous articles and several chapters in textbooks on implants, bone grafting, and bone regeneration. He lectures nationally and internationally on implant surgery and bone grafting. He pursued extensive research on bone physiology and regeneration at Emory University in Atlanta, Georgia, and is now actively engaged in research protocols in the evolution of bone proteins and bone grafting techniques. Dr. Malmquist traveled to Sweden early in his career to train with the original founder of the concepts of osseointegration and implant reconstruction. He is a Diplomate of the American Board of Oral and Maxillofacial Surgery and served for seven years as an examiner for the American Board of Oral and Maxillofacial Surgery. He is a Fellow of the American College of Dentists and the International College of Dentists.

The Philip J. Boyne and Peter Geistlich Endowed Professorship



Back row (L-R): Mohammed L. Al-Mana, DDS – intern, OMFS, Ryan R. Falke, DDS – 3rd year resident, OMFS, Rahul Tandon, DMD – research intern, OMFS, Nicholas A. Breig, DDS, MD – 6th year resident, OMFS/MD, Glenn T. Green, DMD – 1st year resident, OMFS, Justin M. Weaver, DDS, MD – 4th year resident, OMFS/MD; Second row (L-R): Chad N. Allen, DDS – 4th year resident, OMFS, Murray K. Jacobs, DDS – assistant professor, OMFS, Wayne K. Tanaka, DDS – associate professor, OMFS, Nathan J. Latimer, DDS, MD – 5th year resident, OMFS/MD, Trevor Griffitts, DMD – 4th year resident, OMFS; Front row (L-R): Andre V. Guerrero, DDS, MD – 5th year resident, OMFS/MD, Alan S. Herford, DDS, MD - chair and program director, OMFS, Jay P. Malmquist, DMD – 7th guest lecturer, OMFS Grand Rounds, Jayini S. Thakker, DDS, MD – assistant professor, OMFS, Anh N. Nguyen, DMD – 1st year resident, OMFS/MD

was founded by Dr. Boyne and his colleague, Dr. Peter Geistlich, a biomaterials research scientist in Zurich, Switzerland, shortly before Dr. Boyne's death in June of 2008. The LLU board approved establishment of the fully funded (\$1.2 million) position later that year.

During the School's 2008 commencement, Alan Herford, DDS'94, MD, director, Advanced Specialty Education Program in Oral and Maxillofacial Surgery and chair, Department of Oral and Maxillofacial Surgery, was presented as the first Philip Boyne-Peter Geistlich professor.

The annual Philip J. Boyne and Peter Geistlich Professorship Endowed Lecture represents an extension of the endowment's generosity.

The

purpose

of

# Intramural grant awarded Mathew Kattadiyil and Susan Hall

athew Kattadiyil, BDS, MDS, MS. professor and director, Advanced Specialty Program in Prosthodontics, School of Dentistry, and Susan Hall, MD, PhD, MPH, associate professor of School medicine, of Medicine, have received a \$50.000 Grants for Research and School Partnerships (GRASP) award. Their research poses the question, "Are bone turnover markers associated with frequency of complete denture relines?"

Also participting in this project are Shweta Puri, DDS, a thirdyear resident in the Advanced Specialty Education Program in Prosthodontics, and Nishant Puri, MBBS, instructor, LLUSM. The study is also expected to



Dr. Mathew Kattadiyil



Dr. Susan Hall



Dr. Shweta Puri

serve as Dr. Shweta Puri's Master of Science degree research project.

The LLU Health office of research affairs announced on September 3 the seven winners of GRASP awards from among twenty-four applications received from 43 different coinvestigators that were reviewed by a panel of senior researchers.

Dr. Nishant Puri

could decrease their relining frequency and dental care costs through Vitamin D supplementation.

"Our goal is to encourage collaborative research between various parts of the institution," says Anthony Zuccarelli, PhD, associate vice president for research.

the research that Drs. Kattadiyil and Hall have proposed is to determine whether there is a correlation between the frequency of relines for complete denture patients and serum resorption markers and Vitamin D blood levels. Following a retrospective review complete denture of patients the researchers expect to enroll and follow 100 patients. If a significant correlation between exists the frequency of relines and bone resorption markers levels, resorption levels could serve to determine the best candidates for complete dentures versus dental implants, identify patients at risk for osteoporosis/ osteopenia, and identify those patients who

# Robert Meister elected president CAO

**R**obert E. Meister, DDS'78, MS'84, has been elected president of the California Association of Orthodontists (CAO). For the past six years, Dr. Meister has served as a director on the board of CAO and two years ago joined the executive committee as secretary-treasurer. His tenure as president runs from October, 2013 to October, 2014.

Dr. Meister is an active member of the California Association of Orthodontists, the Pacific Coast Society of Orthodontists, and the American Association of Orthodontists. He also serves as a director from the state of California on the board for the PCSO and recently accepted a position as a PCSO delegate to the AAO House of Delegates. For the past ten years he has served as president of the Academy for Orthodontic Excellence, an orthodontic study club in Newport Beach.

Most recently, Dr. Meister accepted a position with the LLU School of Dentistry as assistant professor of orthodontics with the Advanced Specialty Education Program in Orthodontics and Dentofacial Orthopedics, beginning his teaching duties with the new resident class in July 2013.

Dr. Meister lives in Laguna Niguel with his wife Carolyn and maintains offices in Laguna Hills and Rancho Santa Margarita. Their sons, Dustin and Blake, reside in southern California, and their daughter, Alyssa, is in the LLUSD dentistry class of 2017.



Dr. Robert Meister

# ALUMNI, save the date for supper and CE credits. 2014 Student Research Symposium

Earn continuing education credits as you watch future alumni use digital media to present their research in Clinical, Laboratory, and Educational categories.

WHEN: February 18-19, 5:30 pm. WHERE: Damazo Ampitheater in the Centennial Complex

Come early, because dinner will be provided between 5:00 and 5:30 to the first 200 guests.

Three (3) hours of CE credit for each evening you attend.

# LLUSD mission team serves Belize

**E**(June 14-28, 2013) to the town of San Pedro on the island of Ambergris Caye just off the Caribbean coast of Belize. David Brodeur, DDS'71, MPA, recently retired assistant professor of Restorative Dentistry, led the group with assistance from Scott Smith, DDS'09, assistant professor, Oral Diagnosis, Radiology and Pathology, and Clark Bassham, DDS'11, a private practitioner in Anchorage, Alaska.

It was Dr. Brodeur's eighth such student-mentoring visit to Belize. The *San Pedro Sun*, one of the local newspapers, said "Dr. David Brodeur [is] known on the island as 'Dr. B." Dr. Brodeur explained to *Sun* readers the nature of the services the Loma Linda team was providing. "We do fillings



At the Caye Caulker community center, waiting room and operatory are one. Elijab Wang and Ella Chen (left) collaborate while Sun Choi sits with a patient in the foreground.

and screenings, [but] we don't do, for instance, things like root canals; we refer them to local dentists here in Belize. This time we have two senior dental hygiene students who are cleaning teeth as well. We also do some extractions, but we try not to do it in places that it will be a problem to their health since we are not on the island long enough to do follow ups."

For this most recent trip, Dr. Smith specified the services provided:

"We did four days of free dentistry for children and adults at the New Horizon's SDA School in San Pedro and then took a water taxi to [the nearby island of] Caye Caulker for two days of dentistry there. We also worshipped with the local SDAs on the two Sabbaths we were in San Pedro. Our trip was a little different than most LLUSD mission trips in that we did more restorative work than extractions. San Pedro has three or four dentists on the island, so urgent dental treatments (extractions mostly) are taken care of. We focused more on amalgam and composite fillings. In fact, several of the dental students had the opportunity to do anterior esthetic composite cases, which is a bit unusual for a mission trip."

The various procedures accomplished totaled as follows:

- Screenings: 181
- + Amalgam restorations: 66
- Prophylaxes: 58
- + Composite restorations: 43
- + Extractions: 37
- Scaling and root planing: 6
- Pulpotomies: 2

It appears from the photos taken that this service-learning trip had its perks. The students participating included six dental students from the class of 2014—Elijah Wang, Daniel Yang, Sun Choi, Janelle Bedford, Ella Chen, Jeremy Heldt and two dental hygiene students from the class of 2014: Rose Chkeiban and Samira Chinichian.

According to Dr. Scott, "over the past 15 years Dr. Brodeur has established connections with the dental board of Belize, the local SDA school/church and the local people to make these trips successful."

Dr. Brodeur told the *Sun* that the service learning trips are "a great experience for our students at Loma Linda University. We try to influence their lives at this point to be of service to people around them. . . . We want to show them that Jesus Christ is the center of our University, and we want to show them that it makes one feel really good to do things for other people just as He did."



LLUSD healthcare team plus two (back row L-R): Jeremy Heldt, Elijah Wang, Danny Yang, Dr. Scott Smith, Dr. David Brodeur, Miguel Hernandez, principal, New Horizons SDA School, Dr. Clark Bassham; (front row (L-R): Samira Chinichian, Ella Chen, Janelle Bedford, Sun Choi, Rose Chkeiban, church girl

# Student Vendor Fair

The Loma Linda chapter of the American Student Dental Association (ASDA) held its 2013 Vendor Fair on the evening of November 6 in the Wong Kerlee International Conference Center.



Tina Saw, D4, Lawryn Ask, D3, Robert Perry, D2, Doug Baasch, D4, and Urie Lee, D2, consider the possibilities.

Approximately 400 interested dental students swarmed thirty-one vendor tables manned by representatives of products or services ranging from dental materials to loupes to practice management and loan support. Including Platinum sponsor, Medical Protective, and Gold sponsor, Procter and Gamble, the fair proved useful for students at any level of their dental education.



ASDA officers (L-R): Michael Siy, D1, Miranda Kore, D1, Jeremy Haines, D4, Amanda Zenthoefer, D4, Doug Baasch, D4, BreeAnn Christiansen, D4, Jeffery Pascal, D2, Kari Mann, D2, Thomas Schaffer, D3, Urie Lee, D2, Robert Perry, D2

The fair provided first-year students the opportunity to speak with representatives from all of the loupes companies and to organize a group of classmates to negotiate lower prices. Different representatives from programs offering scholarships and student loan repayment were available.

Second-year students were able to appreciate the different materials being presented as well as the scholarship information; and even though first- and second-year students are not quite ready to think about loan management, the opportunity was provided to know what is available.

Third- and fourth-year students perhaps benefitted most from the cross section of vendors who made it possible to upgrade loupes, peruse a variety of dental materials, explore postgraduate options, meet practice management providers, or consider a military dental career.

There were refreshments and awesome prizes, including \$200 visa gift cards, loupes lights, wireless curing lights, iPads and more. LLU ASDA President Tom Schaffer and his intrepid fellow officers deemed the evening a success.

The LLUSD chapter of American Student Dental Association (ASDA) is growing but needs many more leaders. Its current slate of officers include:

- Douglas Baasch, D4, ASDA District 11 (California) Communications Liaison
- + BreeAnn Christiansen, D4, outgoing legislative officer
- Jeremy Haines, D4, representative and advisor
- Amanda Zenthoefer, D4, outgoing chief editor, The Explorer
- + Tom Schaffer, D3, president and 1st delegate
- Urie Lee, D2, vice president and 2nd delegate
- Kari Mann, D2, ASDA secretary
- + Jeffery Pascal, D2, social chair
- + Robert Perry, D2, incoming legislative liaison
- Miranda Kore, D1, representative
- · Michael Siy, cD1, incoming chief editor, The Explorer

Former LLU ASDA president Jeremy Haines says the local chapter "will help you bridge the gap between the daily grind and the bigger picture that is the profession of dentistry."



Dr. Chun-Xiao Sun

### Chun-Xiao Sun receives 2013 AAP Award for Outstanding Teaching and Mentoring in Periodontics

Chun-Xiao Sun, DMD, MS, MSD'09, PhD, associate professor, Department of Periodontics, is the Loma Linda University School of Dentistry's 2013 recipient of the American Academy of Periodontics Award for Outstanding Teaching and Mentoring in Periodontics.

This award is given at each dental school to the periodontal educator who has demonstrated a commitment to excellence in providing education in the full scope of clinical periodontics and relays that enthusiasm to students.

To receive this award, an educator must be an AAP member and can be a pre- or postdoctoral educator and a full- or part-time faculty member.

# LLUSD participates in 2013 LLU Family Health Fair

The LLU School of Dentistry contributed significantly Sunday, October 27, to the success of the 2013 Loma Linda University Family Health Fair.

Approximately 2,000 Inland Empire neighbors attended the half-day event at the University's Drayson Center, the 100,000-square-foot, state-of-the-art wellness complex that serves as the focal point for out-of-class campus life.

The Family Health Fair began with a 5K run through the streets of Loma Linda concluding at the Drayson Center where 40 health-related vendors, stilt walkers, therapy dogs, cooking demonstrations, games, and healthcare professionals offered a mix of products, education, and entertainment, not to mention free flu immunizations and health screenings.

Krista Juhl, MBA, director of marketing for the School of Dentistry, along with multimedia specialist Sam Sadanala, and Tina Malmberg, manager Faculty Practices, staffed a booth representing the faculty practices that distributed collapsible water bottles, toothpaste, and oral health print matter to fair attendees.

Meanwhile, Gary Kerstetter, DDS, assistant professor, Dental Educational Services, with dental students and residents from the School's advanced specialty education programs, provided free dental screenings in the School's Crest Oral-B Mobile Clinic.



Dr. Kerstetter monitors the dental screening work of Laura Sherwin, D3, as Penhan Li, D1, observes.



The School of Dentistry booth was popular.

# Saipan's first orthodontist LLUSD graduate

A ccording to the *Saipan Times*, Loma Linda University School of Dentistry graduate Warren Creed, DDS'86, MS'94, has just become the island's first resident orthodontist.

"We're really thrilled that Dr. Creed is here. It's wonderful that he and his wife Eileen can join our team. We now have



Dr. Warren Creed in 1986

Following his specialty training, Dr. Creed established an orthodontic practice for the Adventist Medical Center in Okinawa where he served as director and chief orthodontist until 2010. Most recently, he was the chief dental officer of Davis Memorial Hospital in Georgetown, Guyana, where he also was an instructor in orthodontics at the University of Guyana and Texilla-American University.

an actual specialist on Saipan and it doesn't have to come from Guam," Saipan SDA Clinic director Kenneth D. Pierson told the *Times*.

After receiving his doctor of dental surgery in 1986, Dr. Creed practiced dentistry general for six years at the Adventist Medical Center in Okinawa, Japan, before returning to Loma Linda for specialty training in orthodontics.



Saipan SDA Clinic main entrance

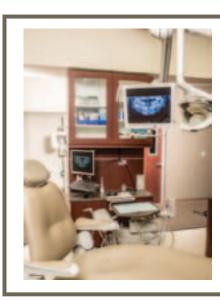
According to the *Times,* Creed and his wife arrived on Saipan last September 30, 2013 and really liked what they've seen. "The people here are extremely friendly and we like the nice island life. It seems more relaxed. I'm looking forward to working here," said Dr. Creed.



Clinic waiting room

Dr. Creed's wife, Eileen, will be volunteering at the Saipan SDA School. The couple have three adult daughters: Mishaela, Ashley, and Keila who live on the U.S. mainland.

Located 120 miles north of Guam, Saipan became a territory of the United States at the conclusion of World War II.



# **Employment Opportunities Postings**

# Find or post employment opportunities through the LLUSD Alumni web page

www.llu.edu/dentistry/alumni

Anyone who wishes to sell a practice, lease space, or seek associates or staff members is invited to post those opportunities on our newly revised "Employment Opportunities" area accessible through the LLUSD Alumni Web Page.

# School of Dentistry contingent attends ADA in New Orleans

A hardy contingent of Loma Linda School of Dentistry students, staff, faculty and administration traveled to the capitol of Dixieland Jazz at the end of October to attend the American Student Dental Association (ASDA) and American Dental Association (ADA) conventions.

#### Matthew Enns awarded

Perhaps of greatest interest to the School family was the presentation to Matthew Enns (class of 2014) of the Academy of Dentistry International (ADI) Terry Tanaka Award, given to one senior dental student in the United States each year during ASDA meetings.

The award was created in honor of its namesake, a past president of ADI, whose outstanding and magnanimous contributions to educational and humanitarian projects locally and in developing countries have been exemplary of the dental fraternity and the Academy. The award is conferred on a dental student who best exemplifies the charitable and humanitarian spirit of Dr. Tanaka. Each dental school in the country may submit the name of one student to be considered for the award. This is the second consecutive year that an LLUSD student was recognized with the award and the fifth over the past twelve years: Jason Mashni, DDS'13, Vincent Drouin, DDS'09, Bradley Szutz, DDS'05, and Dean Brewer, DDS'04.

Matthew's proactive and focused concern for others has been manifest since he began dental school.

At the start of his freshman year, Matt helped reorganize and run "The Homeless Clinic Riverside" at the Calvary Presbyterian Church Dental Clinic in Riverside, California, that utilizes the School's Mobile Clinic and now treats well over 40 patients per quarter.

Matt helped to reorganize the Compassion Clinic at the Blessing Center, a non-profit charitable aid organization in Redlands, California, that was treating indigent patients two to three times each quarter. Under Matthew's direction, the Compassion Clinic now typically treats 20 patients on Thursday evenings, 12-15 patients each Tuesday evening who have more urgent needs, and has a waiting list of 950. Matt continues to coordinate the other student volunteers and has been able to get another clinic open for more urgent needs requiring oral surgery. He was especially pleased to recruit a rough dozen faculty members to rotate through the Compassion Clinic and provide root canal treatment.

Matt drove home to British Columbia during summer break and returned to school with his family's van to be used as a service vehicle for community service projects. On weekends, he uses the van to transport supplies for



Former President Bill Clinton addresses the annual ADA convention.



Matt Enns receives the Terry Tanaka Award from Dr. Terry Tankaka.



Dean Dailey receives a toast from (L-R) Dr. Novy, Matt Enns, Joey Park, DDS'08, and Skyler Liatti, D4.

the clinic on Saturday nights and returns them on Sunday nights.

His first international mission trip was a ten-day service learning trip to Nicaragua in the summer of 2011. Since then, as a student representative, he has helped to plan and organize the trips each year and acquire supplies for those efforts.

Matt is quick to point out that "everything I've done has been in cooperation with other student volunteers and leadership in the Service Learning Department, especially faculty like Dr. Mark Carpenter, Dr. Matt Streelman, Dr. Zegar Zegar, and Dr. Kevin Jetton who are regulars at the



Dr. Chen holds official documentation of her induction as a fellow into the American College of Dentists.

Compassion Clinic. Without these faculty members, the clinic would not run in the successful way that it does.

"Eric Chen, my classmate, has been working with me since our D1 year and also received a service leadership award. Kyle Poulsen, Jason Joo, and Michael Cho are D3s who have taken leadership in the upcoming class, while Robert Perry and Michael Cervantes from the D2 class are already taking on leadership opportunities to help these clinics grow and improve."

Matt has been accepted into the graduate program in Advanced Education for Implant Dentistry beginning July 2014.

#### Jung-Wei Chen

Jung Wei Chen, DDS, MS, PhD was inducted as a fellow of the American College of Dentists (ACD) at its annual convocation on October 31, 2013. Her membership was nominated and seconded by Wayne Tanaka, DDS, and Alan Herford, DDS'94, MD, both Department of Oral and Maxillofacial Surgery faculty members. The ACD was founded in 1920, and membership is by invitation only. Approximately 3.5 percent of dentists are fellows in the ACD, which totals approximately 7,400 members. Fellows are selected based on their contributions to organized dentistry, oral health care, dental research, dental education, the profession, and society. ACD members exemplify excellence through outstanding leadership and exceptional contributions to dentistry and society.

#### Brian Novy lectures

Under the title, "The Plaque Monologues," Brian Novy, DDS, associate professor, Restorative Dentistry, and a 2012 fellow of the ADI presented a continuing education course in the use of basic salivary diagnostics to prolong the life of restorations. Dr. Novy subsequently has taken a position with Delta Dental in Boston, Massachusetts.

#### **Dean's Reception**

Given the season, New Orleans was the ideal venue for the annual American Dental Association meetings during which former President Bill Clinton put some bite into the keynote address.

Nevertheless, the highlight of ADA was the dean's reception for alumni and friends. At the Hilton Riverside Hotel, thirty-eight attendees enjoyed hor d'oeuvres, candlelit tables, and a pictorial slide show featuring highlights from the School's recent year. Most importantly, the event provided an opportunity for guests to visit with newly appointed School of Dentistry dean, Ronald Dailey, PhD, and reunite with classmates, colleagues, and friends.

Appreciation to Rachel Terwillegar, director of Development, and Ronaldo Fritz, DDS'72, for photos from New Orleans.

#### Craig Andreiko



Dr. Craig Andreiko

Born November 19, 1949, in Glendale, California, **Craig Andreiko**, DDS, '88, MS'91, completed predental courses at La Sierra University before entering LLUSD's class of 1988. Upon graduation at LLUSD, he became director of research at ORMCO, an orthodontic appliance and supplies company. There he was responsible for developing more than 70 patented items.

During a part-time Department of Orthodontics and Dentofacial Orthopedics appointment, which

began October 26, 1992, he was regarded as an outstanding member of the faculty.

Notably supportive of youth sports events, Dr. Andreiko also pursued interests in cars, motorcycles, and building radiocontrolled airplanes.

Mourning his death, which occurred in Upland, California, on August 26, 2013, are his many colleagues and family members: wife, Jean of Alta Loma, California, and children, Sarah of Alta Loma and David of Cucamonga, California.

#### Vann Cockrell



Dr. Vann Cockrell

Diagnosed with Crohn's disease more than 40 years ago, Vann Cockrell, SD'70, nevertheless practiced dentistry in spite of his condition until days before his death on September 26, 2013.

Born October 8, 1944, in Birmingham, Alabama, Dr. Cockrell completed predental studies at Southern Missionary College (now Southern Adventist University) in 1966. Entering LLUSD's class of 1970, he found both academic and spiritual strength in the environment. His commitment

to his Christian faith, his family, and his patients was notable.

Dr. Cockrell joined his father's dental practice in 1970 and together with his youngest brother practiced dentistry at Cockrell Dental Office in Mobile, Alabama, for 43 years.

Dr. Cockrell is survived by his best friend and devoted wife of 47 years, Lynda Cockrell; two daughters and their husbands, Terra (Paul) Mavrakos of Mobile and Windy (Toby) Bitzer, also of Mobile, and four grandchildren.

The family suggests that memorial donations be made to the Crohn's and Colitis Foundation of America at www.ccfa.org.

#### James East



Dr. James East

In spite of a 26-year bout with Parkinson's disease, **James East**, DDS'64, posed the question before his third brain surgery: "Why would they ask me if I've ever suffered depression?" His family affirms that his faith and good humor remained until he died in Wewoka, Oklahoma, on January 5, 2014. He had elected to undergo the first outpatient thalamotomy and later directed that his brain go to McKnight Brain Institute at University of Florida. Dr. East was born in Tulsa, Oklahoma,

on January 26, 1935. Prior to dental education, he attended then Southwestern College, Keene, Texas, and Union College, Lincoln, Nebraska, completed an X-ray technician's course, and served in the U.S. Army. Establishing a dental practice in Bristow, Oklahoma, he provided dental care for 35 years. At the Bristow Seventh-day Adventist Church, he devoted notable energy to the Pathfinder program.

Dr. East's survivors include his wife of 56 years, Gayle, of Bristow; his sons—Rodney (wife Stephanie) of Bolingbrook, Illinois; Robin (wife Lisa) of Wewoka; and Randall (wife Crystal) of Wewoka—and five grandchildren. Donations in Dr. East's memory can be made to the Bristow Stars Pathfinder Club at Bristow SDA Church.

#### Jan Egelberg



Jan Egelberg, LDS, Dr. Odont., a former director of LLUSD's Advanced Program in Periodontics, died in Lund, Sweden, on September 6, 2013. Born October 31, 1936, in Karlskrona, Sweden, Dr. Egelberg completed dentistry at the School of Dentistry, Lund University, Malmo, Sweden, in 1960. His significant research and mentoring of students and colleagues is reflected in his record of 91 publications, and collaboration with 75 co-authors, 1975-1991.

Dr. Jan Egelberg

Dr. Egelberg's research on non-

surgical periodontal treatment and periodontal tissue regeneration caught worldwide attention. Also very interested in the didactic process and the development of learning, he responded to an invitation to direct LLUSD's periodontics program initially in 1975-76, and returned to complete another term as director (1978-87). He also directed the newly established Division of Research (now Center for Dental Research). During his time at LLUSD he influenced many Swedish and Scandinavian colleagues to join him as researchers and teachers.

Two sons, Peter and Magnus, and four grandchildren join his many colleagues and friends in mourning Dr. Egelberg's death.

#### Robert French



Dr. Robert French

A valued part-time faculty member in the Department of Orthodontics and Dentofacial Orthopedics, School of Dentistry, since February 2003, **Robert French**, DDS, MS'64, died October 12, 2013, in Laguna Beach, California.

Born May 7, 1930, in St. Louis, Missouri, Dr. French moved with his family eight years later to Laguna Beach, which would become the site of his 50-year dental practice. He had pursued dentistry at Loyola University, Chicago, Illinois (1954), and served as a dental officer in the

Air Force before completing a master's in orthodontics at LLUSD (1964).

Notably active as a researcher, educator, mentor, and community volunteer, Dr. French became the recipient in 2001 of the California Association of Orthodontics' Distinguished Service Award.

Dr. French died of complications from a degenerative lung condition and is survived by Marcia, his wife of 38 years; his sons Peter French and Jeff Spurlock; his daughters Paula Scotland, Judy Scholl, and Dawn Spurlock; and 13 grandchildren.

The family suggests that those wishing to honor Dr. French's memory donate to the Laguna Beach High School Scholarship Foundation in his name.

#### George Gamboa



Dr. George Gamboa

A former chair of oral surgery (1961-64) who served LLUSD as part-time faculty 1958-61 and 1964-1998, **George Gamboa**, DDS, MS, EdD, died October 22, 2013, in Glendale, California.

Born in King City, California, Dr. Gamboa pursued predental studies at Pacific Union College, Angwin, California, before entering an accelerated dental program with the U.S. Army's Medical Administrative Corps. Called to active duty, he joined the U.S. Navy where he became manager and playing coach of the

Naval Training Center baseball team, which he led to 13 Naval District championships while completing the University of the Pacific dental program at the age of 22 in 1946.

After practicing dentistry in Rosemead, California, he completed an MS in oral and maxillofacial surgery at the University of Minnesota Mayo Clinic. Later he earned a doctorate in higher education at the University of Southern California.

His interest in academic dentistry took Dr. Gamboa to USC's dental faculty, where he taught for 45 years while practicing in San Gabriel, California. He was honored in 2012 as the first president of the Southern California Orofacial Academy.

Mourning Dr. Gamboa's death are his wife Winona, and his children—Cheryl, John, and Judy.

#### Alfred Gorton



Dr. Alfred Gorton

Alfred Winfield Gorton, DDS'63, was born on October 23, 1934. He worked as an X-ray technician to put himself through undergraduate school. In 1963, Alfred graduated from LLU School of Dentistry and moved with his family to Colorado to set up practice.

In 1967 the Gortons returned to Loma Linda and worked in a practice in Highland before buying his own practice in Banning. One of his great joys was playing clarinet in a jazz band, Group Therapy, which he did for 40 years.

The last 15 years of his dental career were spent at the state prison outside of Blythe, California. It was here that Alfred experienced a profound sense of meaning in his work. He used every opportunity he had to witness to the inmates that found themselves in his dental chair. Alfred retired at age 74.

In January of 2013 he was diagnosed with stage three multiple myeloma and moved to Georgia with Nadine to be near his daughter and her family. The cancer proved to be too aggressive to battle and he finally succumbed on July 3, 2013.

Dr. Gorton is survived by his wife Nadine, his children Craig, Ronald, Sandra, and Lance, as well as 10 grandchildren, including me, Paul-Erik.

#### Dan Hall



A dentist who began a 31-year career at LLUSD in 1982, **B. Daniel Hall**, DDS, was born in Glendale, California, on October 24, 1937. He had completed dentistry at the University of California, San Francisco, in 1961, when he entered the U.S. Army Dental Corps for a two-year term of service. Thereafter he spent nearly 20 years in an Oceanside, California, practice.

While serving as a voluntary

faculty at LLUSD, Dr. Hall earned a

Dr. Dan Hall

prosthodontic certificate at LLUSD (1995) and subsequently accepted full-time employment at the School. He served as chief in Removable Prosthodontics and then directed the Faculty Dental Office 1997-2000. Climaxing his service as director of the International Dentist Program 2004 to 2007, Dr. Hall received the School of Dentistry Distinguished Service Award in 2007.

Surviving Dr. Hall, who died in Loma Linda, California, on September 20, 2013, are his wife of 49 years, Carole of Redlands; his daughters—Kendra (husband Chris) Brooks of Oceanside, Margaret (husband Mark) deGuilil of Palm Springs, California, and Katie (husband Kevin) Bresnahan of Fallbrook, California and four grandchildren.

The family suggests that gifts honoring Dr. Hall be submitted to any of the School's prosthodontic funds through the Office of Development.

#### Wilton Hartwick



Dr. Wilton Hartwick

The plans of **Wilton A. Hartwick**, DDS'64, to celebrate with LLUSD class members at their 50<sup>th</sup> class reunion were thwarted when he lost a long-term battle with illness on December 28, 2013, in Lodi, California.

Born in Maui, Hawaii, on June 13, 1933, Dr. Hartwick grew up in Camino, California, where he grew pears and apples and helped establish what became known as "Apple Hill."

After serving his country in the Korean War, Dr. Hartwick graduated as president of his class at

LLUSD in 1964. During his years of practicing in Lodi, California, he served as president of the San Joaquin Dental Society and was a member of the California Board of Dental Examiners. He also served as first chair violinist in several orchestras. Upon retirement Dr. Hartwick returned to working in the family orchard.

Mourning his death are Dr. Hartwick's wife of 60 years, Betty Rae; his children—David, DDS'81 (wife Kim), of Redding, California, Frank, LLUSM'81 (wife Roxie), of Acampo, California, and Millie Hartwick Nightwalker of Fort Collins, Colorado—his nine grandchildren, and his four great-grandsons.

#### Curt Mathisen



Dr. Curt Mathisen

A native of Sacramento, California, where he was born on December 31, 1950, Dr. Mathisen

> attended Pacific Union College, Angwin, California, before he com-

Following a heart attack in the Lima,

Peru, airport, W. Curtis Mathisen,

DDS '75B, was on the way to a

hospital when he suffered a second and fatal heart attack on June 12,

2013. Dr. Mathisen had been enroute

to a dental clinic in the Amazon jungle to provide dental care to an

under-served population.

pleted dentistry at LLUSD in 1975.

After practicing in Palm Springs, California, and Portland, Oregon, Dr. Mathisen established a practice in White Salmon, Washington. For 33 years he was active in the community and in the local church, which utilized his organizational and leadership skills. He was the recipient of the Business Person of the Year Award granted by the Chamber of Commerce. Dr. Mathisen also kept a calendar full of events such as backpacking, skiing, church group hikes, windsurfing, camping, and mission trips.

Mourning his death are his wife, Elaina of White Salmon, WA; his sons, Justin of White Salmon, Washington, and Jeffrey (wife Dani) of Washougal, Washington; and five grandchildren.

#### **Everett** Lawson



A member of LLUSD's first graduating class, **Everett Lawson**, DDS'57, was born on May 2, 1920, in Delta, Colorado. He had served in the U.S. Army in the Pacific theater before completing predental studies at Pacific Union College in 1953. When he received his dental degree, a trio of physicians recruited Dr. Lawson to join them in a new dental suite they had created at their offices in Cortez, Colorado.

Dr. Everett Lawson

Soon, interspersed with his dental practice in Cortez was a weekly trip

to Monument Valley, where he treated members of the Navajo tribe on the reservation. Taking his family with him, he made many friends with his weekend patients. Upon retirement in 1991, Dr. Lawson and his wife made several trips to Malawi, offering dental care to patients who came to the Malamulo Hospital where his son Kenneth was the medical director.

Just months after moving to Paradise, California, Dr. Lawson died on November 9, 2013. His is survived by his wife of 64 years, Virginia of Paradise; his son Kenneth, LLUSM '78 (wife Cindy LLUSN) of Seal Rock, Oregon; his daughter Linda Pendleton, LLUPA'80 (husband Reid, LLUAH) of Paradise, and two grandchildren.

#### **Donald Jeffries**



Dr. Donald Jeffries

Born in Galena, Kansas, on October 31, 1932, **Donald Dean Jeffries**, DDS'64 began a two-year service in the US Occupation Force in Germany in 1953. After completing predental studies at then Walla Walla College, in College Place, Washington, Dr. Jeffries joined LLUSD's class of 1964.

Upon graduation, he moved to Bakersfield, California, where he practiced dentistry for 33 years. Soon he joined eleven other dentists who at the time were California's

only specialists in forensic investigation. He would present expert witness testimony in many court cases. His personal passions included photography, painting, reading, and travel.

Dr. Jeffries, who died June 25, 2013, is survived by his wife of 59 years, Virginia, his daughter Angela of Bakersfield, and his son Todd (wife, Rise) of Bakersfield, and two grandchildren. Donations in his honor may be made to Bakersfield Adventist Academy Worthy Student Fund or Optimal Hospice Foundation of Bakersfield.



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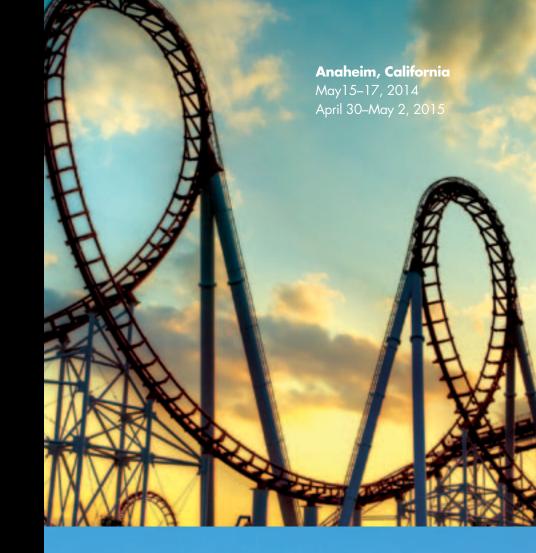
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