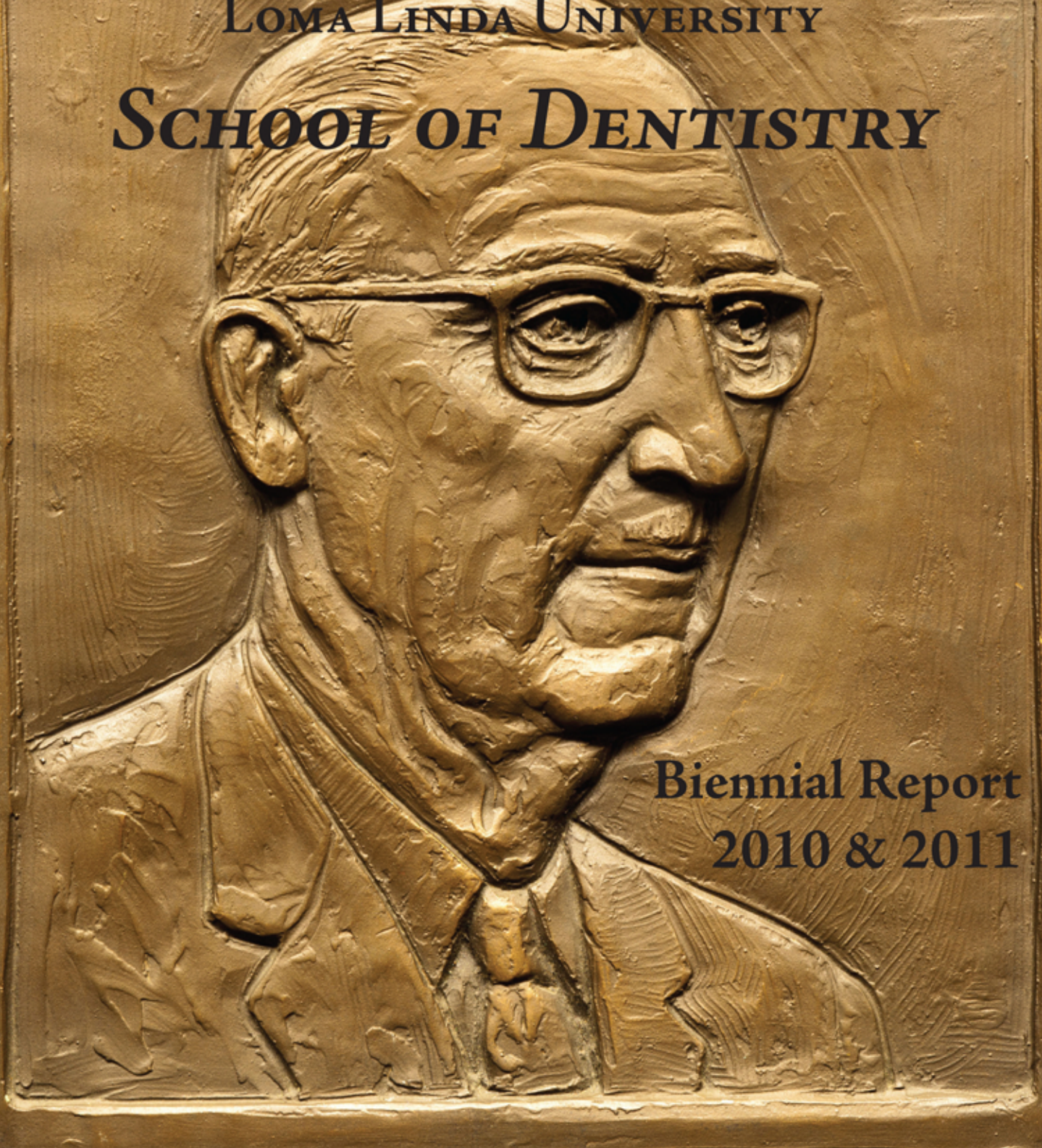


LOMA LINDA UNIVERSITY

SCHOOL OF DENTISTRY



Biennial Report  
2010 & 2011

M. WEBSTER PRINCE, D.D.S.



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Cover photo is of a 19.2 pound, 13 3/4- by 17 1/2- by 3/4-inch bronze relief bust of the School of Dentistry's founding dean, M. Webster Prince, DDS, created in the 1960s by the A. J. Bayer Company, a manufacturer of hand chased bronze that went out of business some years ago.

M. WEBSTER PRINCE, D.D.S.





## ADMINISTRATIVE TEAM

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Loma Linda University School of Dentistry administrative team (L-R): **Paul L. Richardson**, DDS, MEd, associate dean, Clinic Administration; **Kathleen Moore**, MHIS, associate dean, Dental Educational Support Services; **Joseph Caruso**, DDS, MS, MPH, associate dean, Strategic Initiatives and Faculty Practices; **Ronald Secor**, MBA, associate dean, Financial Administration; **Charles J. Goodacre**, DDS, MSD, dean; **Ronald J. Dailey**, PhD, executive associate dean; **W. Patrick Naylor**, DDS, MPH, MS, associate dean, Advanced Education; **Fred Kasischke**, DMin, associate dean, Admissions and Service Learning; **D. Graham Stacey**, PhD, associate dean, Student Affairs





LOMA LINDA  
UNIVERSITY

School of Dentistry

Office of the Dean

If it takes a village to raise a child, it takes a well-rounded and competent faculty to grow a dentist or dental hygienist. In the pages of this report, you will be introduced to the variables contributing to LLUSD students' academic and personal development.

The return of alumni to the campus, as well as their dispersion around the world, suggests both professional and humanitarian commitments that are twin objectives at our School. Without genuine caring, professionalism lacks authenticity. Caring can be exhibited in many ways: through excellent treatment, activity in professional organizations, negotiation with legislators and health care providers, as well as essential, concerned attention to restoring patient wholeness.

LLUSD exists for students—and in a very happy extension, it also exists for patients. Making the circle complete, it also exists to provide a setting for inquiry. We have notably diverse faculty, student, and patient populations—in age, life experience, ethnicity, and personal/professional goals.

The interaction of mentors and students in research activity is extensive and successful. Our educators are co-learning with the students, as well as pursuing their own research. A cadre of faculty researchers are asking questions about procedures, materials, and patient practices that they address in public presentations and papers; in turn, they ignite student inquiry.

At the end of the current biennium (2010/2011), we pause to ask, What have we accomplished? The answers come from students, patients, accrediting agencies, and citations of honor. We are learning from each other. The biennial report you hold in your hands celebrates the diversity of expertise at LLUSD.

We still have questions: What areas do we need to address to stay abreast of dental treatment advances? What is the optimum balance we can achieve between research and educational pursuits? What innovations can we generate at our School? How can we assure the world that our graduates are responsible and competent? What are the distinctive contributions of our faith-based educational structure?

The ensuing pages describe our efforts.

Sincerely,

Charles J. Goodacre, SD'71, MSD  
Dean

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Charles J. Goodacre, DDS, MSD  
Dean

Office of the Dean

Biennium highlights

These highlights from the 2010-2011 biennium identify significant School of Dentistry progress:

New facilities and equipment

- + Opening the Center for Dentistry and Orthodontics
- + Establishing an associate degree program in dental hygiene in Coachella Valley, California
- + Receipt of C.R.E.T. grant funding approval to develop an innovation center with equipment supplied by the manufacturers
- + Obtaining corporate support provided for installation of two additional cone beam CT units
- + Creating a new endodontic graduate student laboratory with seven fully equipped work stations
- + Acquiring multiple Cerec CAD/CAM units for the instruction of predoctoral and postdoctoral students
- + Moving the International Dentist Program's facilities to the East Clinic to achieve maximum interaction with, and access to, all clinical faculty
- + Moving dental hygiene clinical activities to the former IDP Clinic site
- + Installing an electronic patient check-in system in the School of Dentistry lobby

Didactic innovations

- + Implementing a surgical implant placement clinical rotation as part of the preclinical implant dentistry course for D3 students

- + Adding a pre-session to the D1 curriculum with courses in biochemical foundation of physiology and introduction to the dental profession, interspersed with a series of orientation activities
- + Obtaining approval of a dual DDS/MA major in bioethics
- + Enriching the service learning requirement with a didactic component
- + Receiving approval of a three-year combined endodontic/implant program

Emeritus dean remembered

Alumni and colleagues celebrated the life of Charles T. Smith, DDS, LLUSD's dean from 1960 to 1971 and the School's dean emeritus until his death at the age of 97 in April 2011. During his deanship, the School added advanced dental programs: advanced dental materials, 1959-62; endodontics and periodontics, 1967; oral and maxillofacial surgery, 1968; oral radiology and pathology, 1969-74; pediatric dentistry pilot program, 1966-69; advanced restorative dentistry, 1969-72; and advanced gnathology, 1969-72; and established the Department of Dental Hygiene, and expanded Prince Hall facilities. Dr. Smith maintained active participation in many of the School's activities.

Professional participation and honors

In addition to his part-time practice limited to prosthodontics, Dean Charles Goodacre interspersed administrative tasks with teaching, research, development of electronic education resources, lecturing, and writing.

Dr. Goodacre maintains membership in 16 professional dental organizations. He serves as a reviewer for the *Journal of Prosthetic Dentistry*. Additionally, he completed his term as president of the Academy of Prosthodontics, overseeing the organization's annual conference in Santa Ana Pueblo, New Mexico, May 12-16, 2010.

As a member of the FAIR Foundation's board of directors, the dean participates in that organization's promotion of fair and equitable distribution of the National Institute of Health's research funds.

The dean's professional affiliations have prompted a number of honors that were bestowed on him during the biennium:

- + American Prosthodontic Society's gold medallion, February 25, 2010
- + 2010 Alumnus of the Year at Washington Adventist University

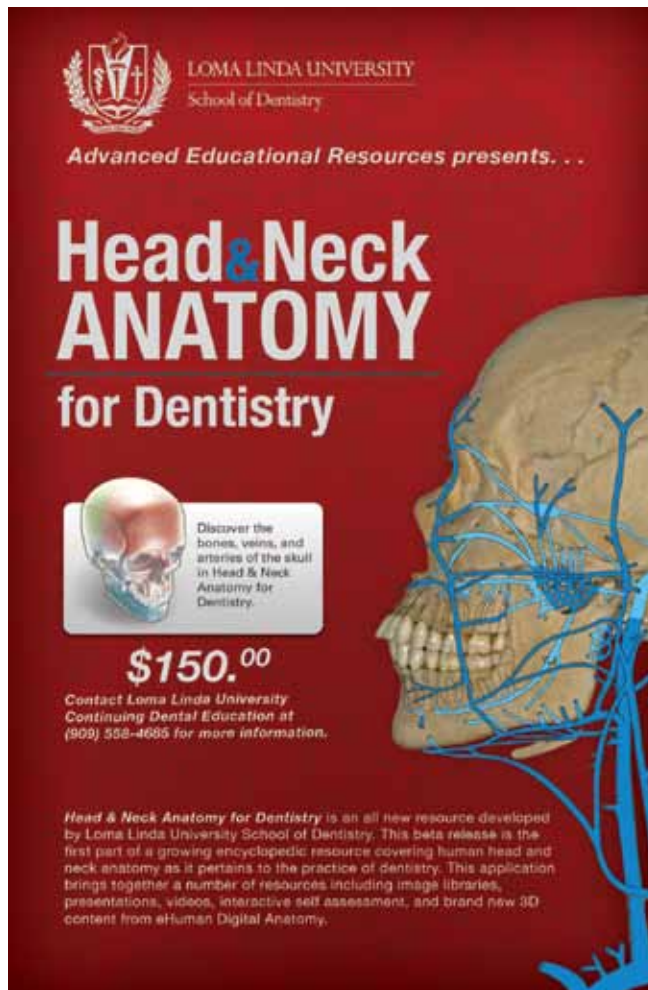


- ✦ Honorary fellowship of the Faculty of Dentistry, Royal College of Surgeons in Ireland (2011)
- ✦ Distinguished Service Award, American College of Prosthodontists (2011)

**Electronic educational resources**

Continuing his pioneering creation of electronic resources for broader utilization, the dean developed these programs during the biennium:

- ✦ Online course  
Dental Esthetics in Practice, Part 3: Understanding Color and Shade Selection—Procter and Gamble
- ✦ Web applications  
Head and Neck Anatomy for Dentistry, and 3D Tooth Arrangement Program
- ✦ iPhone application  
3D Cranial Nerves
- ✦ iPad application  
3D Brain Stem



**Teaching and lecturing**

Students met Dean Goodacre in the classroom frequently. His schedule during the biennium found him lecturing in more than 20 courses spread across the curriculum that included anatomy, endodontics, prosthodontics, research, biomaterials, and implant dentistry.

**Research grants and investigations**

Dean Goodacre became the principal investigator as recipient of a California Endowment of \$735,000 to support Pipeline Profession and Practice Phase II (2007-2010), a community-based dental education program.

As principal investigator granted \$51,427 by Nobel Biocare, Dr. Goodacre oversaw A Clinical Evaluation of Hand-Veneered, Porcelain-Fused Nobel Procera Crown Shaded Zirconia and Nobel Procera Full Contour Crown IPS e.max CAD on Molars. Event Based-Clinical Trial in 2010 and 2011.

**Research abstract**

Paravina RD, O'Neill P, Swift EJ, Nathanson D, Goodacre CJ. Teaching of color in predoctoral dental education: US and Germany. Continental European Division of the International Association of Dental Research with the Scandinavian Division. Budapest, Hungary, August-September, 2011 (Abstract #151216).

**Presentations 2010**

Optimizing success with dental implants. Taipei Congress of Oral Implantologists. Taipei, Taiwan, January 10, 2010.

Electronic education resources in dentistry: Benefits, formats, and application. American Prosthodontic Society. Chicago, Illinois, February 25, 2010.



Fixed prosthodontic update. The Australian Prosthodontic Society. Brisbane, Queensland, March 23, 2010; Melbourne, Victoria, March 26, 2010; Perth, Western Australia, March 29, 2010.

Evidence-based decision making in restorative and prosthodontic treatment plan. Odontic Seminar. San Diego, California, April 7, 2010.

Implant or root canal: Which treatment is best? American Association of Endodontists. San Diego, California, April 16, 2010.

Restoration of endodontically treated teeth. American Association of Endodontists. San Diego, California, April 16, 2010.

Fixed prosthodontics: Key factors and clinical tips that enhance success in diagnosis and treatment planning. Loma Linda University School of Dentistry Continuing Dental Education. Loma Linda, California, April 25, 2010.

Clinical complications with conventional and implant prosthodontics: Causes and prevention. Anchorage Dental Society. Anchorage, Alaska, April 30, 2010.

Should a tooth have root canal treatment or be extracted and an implant placed? Gary Wuchenich Dental Office. Redlands, California, May 6, 2010.

Clinical complications with conventional and implant prosthodontics: Causes and prevention. Allen A. Brewer Upstate New York Prosthodontic Conference. Rochester, New York, June 4, 2010.

A triumvirate of enhanced learning in the digital era. John F. Johnston Refresher Course. Indianapolis, Indiana, June 11, 2010.

A contemporary approach to fixed prosthodontics. Australian Dental Association Victorian Branch Convention. Melbourne, Australia, July 30, 2010.

Complications in implant dentistry: Getting to the root of the problem. Australian Dental Association Victorian Branch Convention. Melbourne, Australia, July 30, 2010.

Dental education in a new era: Challenges and opportunities. Shanghai Jiao Tong University College of Stomatology. Shanghai, China, September 9, 2010; Kunming University School of Stomatology. Kunming, China, September 13, 2010.

Learner-focused electronic education programs in dentistry Society for Color and Appearance in Dentistry. Newport Beach, California, September 24, 2010.

Clinical complications with conventional and implant prostheses: Causes and prevention. Southern Union Conference. Gatlinburg, Tennessee, October 14, 2010.

Optimizing success with implant single crowns and fixed partial dentures. Southern Union Conference. Gatlinburg, Tennessee, October 15, 2010.

ACP pro bono services survey results: Service to patients, public & profession American College of Prosthodontists Annual Session. Orlando, Florida, November 4, 2010.

Clinical complications with conventional and implant prostheses: How to minimize them and how to manage them when they do occur. James P. Hollers Memorial Lectureship. San Antonio, Texas, November 12, 2010.

Tooth retention through root canal treatment or tooth replacement using implants or fixed partial dentures: Which one is best? The USC 9th International Endodontic



Pictured (L-R): Shelley Console, academic assistant 2, Marjorie Arnett, MS, assistant professor, Dental Education Services, and Dean Goodacre

Symposium. Los Angeles, California, November 19, 2010.

Implant versus root canal treatment: Which one is best? Santa Barbara Ventura County Dental Society. Santa Barbara, California, December 2, 2010.

The most critical factors related to the restoration of endodontically treated teeth. Santa Barbara Ventura County Dental Society. Santa Barbara, California, December 2, 2010.

Clinical complications with conventional and implant prosthodontics: Causes and prevention. Toronto Crown and Bridge Study Club. Toronto, Ontario, Canada, December 10, 2010.

Optimizing success with implant single crowns and fixed partial dentures. Toronto Crown and Bridge Study Club. Toronto, Ontario, Canada, December 10, 2010.

#### Presentations 2011

Clinical complications with dental implants. Riverside Corona Dental Study Club. Corona, California, January 12, 2011.

New guidelines in dental practice. Annenberg Center for Health Sciences. Rancho Mirage, California, February 2, 2011.

Digital education: No longer a new era. American Prosthodontic Society. Chicago, Illinois, February 25, 2011.

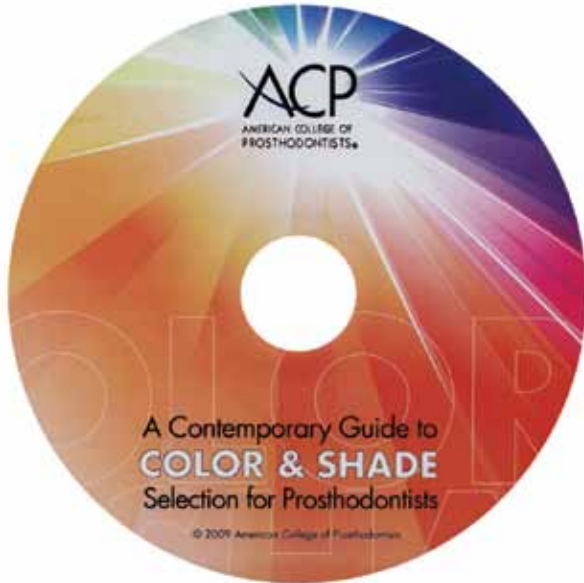
Top 10 ethical issues in dentistry: A conversation. Indiana University School of Dentistry graduate prosthodontics. Indianapolis, Indiana, April 14, 2011.

Implant versus root canal treatment: Which one is best? American College of Dentists Indiana Section. Indianapolis, Indiana, April 15, 2011.

Clinical complications in fixed prosthodontics. Fort Gordon Prosthodontic Residency Program. Fort Gordon, Georgia, April 22, 2011.

Clinical complications with dental implants: The key factors related to successful restoration of endodontically treated teeth. Isfahan University of Medical Sciences. Isfahan, Iran, April 24, 2011.

CAD/CAM fabricated complete dentures: Concept and method of obtaining required morphologic data. Academy of Prosthodontics 93rd Annual Scientific Session. Hilton Head, South Carolina, May 6, 2011.



Clinical complications with conventional and implant prosthodontics: Causes and prevention. California Dental Association Spring Session. Anaheim, California, May 12, 2011.

All ceramic restorations. Endodontic treatment or dental implant? Patient treatment. Prevention of implant overload. Cementation of conventional versus implant crowns. 10th Annual Loma Linda Friends and Family CE Cruise. Mediterranean Sea, July 11 - 17, 2011.

Implant versus root canal treatment: Which is best? Academy of General Dentistry. San Diego, California, July 28, 2011.

Prosthesis design for implants. Loma Linda University Advanced Course in Implant Dentistry and Prosthodontics. Loma Linda, California, August 9, 2011.

Enhancing dental education through digital technology: An 11-year progress report. Wenzhou Medical College School of Stomatology. Wenzhou, China, September 4, 2011; Zhejiang University School of Stomatology. Hangzhou, China, September 6, 2011.

The most important principles of tooth preparation; The most critical factors relating to restoration of endodontically treated teeth. ACP Comprehensive Prosthodontic Review Course. Chicago, Illinois, September 23, 2011.

New restorative applications for CAD/CAM technology: Success and failure in restorative treatment. The Faculty of Dentistry Royal College of Surgeons in Ireland. Dublin, Ireland, October 28, 2011.

The effective development and use of digital and 3D education resources in dentistry: Benefits, formats, and applications that enhance implant dentistry. The 5th International Symposium IAOI 2011. Eilat, Israel, November 10, 2011.

Clinical complications in implant dentistry. The 5th International Symposium IAOI 2011. Eilat, Israel, November 11, 2011.

Clinical complications with conventional and implant prostheses: How to minimize them and how to manage them when they do occur. Toledo Dental Society. Toledo, Ohio, November 18, 2011.

How to optimize success during the diagnosis, treatment planning, and designing of single crowns and fixed partial dentures that attach to the dental implants. Indiana Oral & Maxillofacial Surgery Associates. Indianapolis, Indiana, November 30, 2011.

**Publications 2010 / 2011**

**Goodacre CJ.** Carbon fiber posts may have fewer failures than metal posts. *J Evid Bas Dent Pract* 2010;10:32-34.

Sadowsky SJ, Pfeifer DL, **Goodacre CJ.** 2008 Survey of pro bono services provided by practicing prosthodontists. *J Prosthodont* 2010;19:553-556.

Paravina RD, O'Neill PN, Swift EJ, Nathanson D, **Goodacre, CJ.** Teaching of color in predoctoral and postdoctoral dental education in 2009. *J Dent* 2010;38 Suppl 2:e34-40.

Liao KY, **Kan JY, Rungcharassaeng K, Lozada JL, Herford AS, Goodacre CJ.** Immediate loading of two freestanding implants retaining a mandibular overdenture : 1-year pilot prospective study. *Int J Oral Maxillofac Implants* 2010;25:784-790.

Roe P, **Kan JY, Rungcharassaeng K, Lozada JL, Kleinman AS, Goodacre CJ,** Chen JW. Immediate loading of unsplinted implants in the anterior mandible for overdentures: A case series. *Int J Oral Maxillofac Implants* 2010;25:1028-1035.

Patel, RD, **Kattadiyil MT, Goodacre CJ,** Winer MS. An in vitro investigation into the physical properties of irreversible hydrocolloid alternatives. *J Prosthet Dent* 2010;104:325-332.

Chatriyanuyoke P, Lu CI, Suzuki Y, **Lozada JL, Rungcharassaeng K, Kan JY, Goodacre CJ.** Nasopalatine canal position relative to the maxillary central incisors : A cone beam computed tomography assessment. *J Oral Implantol* 2010 [Epub ahead of print]

**Lozada JL, Goodacre CJ,** Al-Ardah AJ, Garbacea A. Lateral and crestal bone planing antrostomy: A simplified surgical procedure to reduce the incidence of membrane perforation during maxillary sinus augmentation procedures. *J Prosthet Dent* 2011;105:147-153.

**Nonrefereed publications 2010 / 2011** (invited papers, textbook chapters, textbooks, DVD chapters)

**Goodacre CJ, Kattadiyil MT:** Prosthetic-related dental implant complications: Etiology, prevention, and treatment. In From SJ: *Dental Implant Complications: Etiology, Prevention, and Treatment*, Oxford, United Kingdom, Wiley-Blackwell, 2010, Chapter 10, pp.172-196.

**Goodacre CJ.** Ethics and implants: The ethical challenge of needs, desires and focus. *J Indiana Dent Assoc* 88:25, 2010.

**Goodacre CJ,** Cooper LF. *Prosthopedia*. Markham, ONT: Palmeri Publishing, Inc. 2010.

**Baba NZ, Goodacre CJ.** Key principles that enhance success when restoring endodontically treated teeth. *Roots Int Mag of Endodont* 7:2, 2010, pp.30-35.

Cronin RJ, Brown DT, **Goodacre CJ:** Prosthodontic treatment of the adolescent patient. In McDonald RE, Avery DR: *Dentistry for the child and adolescent*, 9<sup>th</sup> ed, Maryland Heights, Mosby Elsevier, 2011, Chapter 22, pp. 443-459.

**Goodacre CJ.** *Atlas of the human dentition*. Traditional Chinese, 2<sup>nd</sup> ed., Taipei, Taiwan Ho-Chi Book Publishing Co., 2011.





**Ronald J. Dailey, PhD**  
Executive Associate Dean

**Academic Affairs**

The central role of the Office of Academic Affairs is to maintain an inward vigilance toward the fulfillment of the School of Dentistry’s educational mission. The office is specifically charged with the oversight of the School’s dental hygiene and dental programs. It fulfills this responsibility by working in concert with University leaders, School administrators, faculty, and staff to develop, implement, review and evaluate the academic and clinical programs. The office monitors the academic standing of all School of Dentistry students and oversees matters of registration, enrollment in and withdrawal from courses, management of the various curricula, and graduation.

**Dental student academic awards**

The Academic Excellence awards are based on scores that are at least one standard deviation above the national mean. The Gold Award is reserved for those who exceeded the national mean on National Board Part I and Part II.

**Class of 2010 Silver awardees**

Elbert Choi, Hyunjoo (Iris) Choi, Jonathan Garcia, Michael Guadiz, Brent Hiebert, Hyun June (Ryan) Kim, Soh Yeun Kim, Young (Joseph) Lee, James Rho, Ryan Waring, Joo-Youn (Julie) Yi

**Class of 2010 Gold awardees**

Chad Allen, Bradley Field, Lisa Gortari, Lauren Gutenberg, Emily Herndon, Erin Stephens, Janelle (Peterson) Tonn, Justin Weaver, Timothy Wieg

**Class of 2011 Silver awardees**

Michael Knutson, Jeffrey Lam, Shaun Lee, Jessicah McGraw, Carrie (Roosenberg) Carman, Mohammed Tabel, Emmett Tetz

**Class of 2011 Gold awardees**

Scott Arceneaux, Adam Burr, Chris Chang, Andrew Corbett, Michael Hiersche, Joanne Oh, Christy Pogue, Thomas Szutz, Ralitzza Varlakova, Kirollos Zakhary

**National Board pass rates**

	<b>Part I</b>	<b>Part II</b>
2010	98%	91%
2011	96%	TBD

**Dental hygiene student academic awards**

Scores returned April 2011 from the Joint Commission on National Dental Examination indicate that for a fourth consecutive year all graduating LLUSD dental hygiene students passed their National Board exams. The School of Dentistry gives academic excellence awards to dental hygiene students whose National Board scores are at least one standard deviation above the national average.

**Class of 2010 Awardees**

Berenice Briseno, Karissa Clark, Katieanne George, Kayla Knutson, Lisa Kwon, Angelina Llopis, Cassandra Pace, Lindsay Richards, Katie Savage, Rebekah Schomburg, Stacy Stroup, Larysa Volynets, Kristen Willard

For a third consecutive year, all Department of Dental Hygiene graduates passed their national board exams on the first try.

**Class of 2011 Awardees**

Raylin Dahlke, Danae Davis, Ashley Egetter, Merissa Garcia, Cynthia Gutierrez, Erika Nelson, Caroline Schneider, Brooke Shibata, BeauJames Snyder, Angela Wakefield

**Clinical honors program completion**

The clinical honors program is designed to provide dental students opportunities to learn and perform more advanced clinical procedures in a given discipline. In addition, the Dental Education honors program is designed to foster interest in an academic dental career in teaching and research. Students accepted into the program do not receive additional clinic points for their

advanced learning and must complete all competency clinic requirements. Successful honor students must maintain a class rank in the upper third of their class both academically and clinically. These are the elite dental students in the School of Dentistry. The following students achieved the honors distinction:

**Class of 2010**

James Rho	Dental Education
Nicholas Wilson	Dental Education
Nicholas Marongiu	Implant Dentistry
Lauren Gutenberg	Pediatric Dentistry
Brent Hiebert	Pediatric Dentistry
Sarah Jane (Harebottle) Shearer	Pediatric Dentistry
Janelle Tonn	Dental Anesthesia
Lisa Gortari	Dental Anesthesia
Bryan Horgan	Dental Anesthesia
Stuart Scheult	Endodontics
Weston Spencer	Orthodontic Dentistry
Jerhet Ask	Orthodontic Dentistry
Iris Choi	

**Class of 2011**

Ralitza Varlakova	Pediatric Dentistry
Scott Arceneaux	Implant Dentistry
Jeri Bullock	Implant Dentistry
Devin Rentz	Implant Dentistry
Adam Burr	Dental Anesthesia
Larina Chu	Dental Anesthesia
Andrew Corbett	Dental Anesthesia
Adam Burr	Conscious Sedation
Michael Gardner	Dental Education
Scott Arceneaux	Oral & Maxillofacial Surgery
Andrew Corbett	Orthodontic Dentistry
Jessicah McGraw	Orthodontic Dentistry

**Teacher of the Year awards**

The Teacher of the Year Award was established to recognize and honor School of Dentistry faculty members whose accomplishments have made an extraordinary impact on students, peers, and the School family. Each year a full-time faculty member is chosen by



Dr. Dailey sits with his administrative team (L-R): Lisa Nelsen, project development assistant; Carole White, assistant to the executive associate dean; and Linda Hill, director of records.

students, faculty, and staff for this award based on having demonstrated an outstanding reputation as a teacher, and having contributed to the quality of the School, the community, and the church.

**2010**

**Susan D. Richards, DDS, Associate Professor, Department of Oral Diagnosis, Radiology & Pathology**

**Student Comments**

*Dr. Richards definitely knows her material. Very knowledgeable and extremely intelligent when it comes to pathology!*

*Dr. Richards is a very thorough and detailed all-around teacher, something I haven't seen in such capacity before.*

*Love your organization, love the notes! Expectations are very clear and that makes this an EXCELLENT course, Thank you!*

**2011**

**Lane C. Thomsen, DDS, MS, Professor, Department of Oral Diagnosis, Radiology & Pathology**

**Student Comments:**

*Awesome teaching!! I had a lot of fun learning this material although it was tough!*

*Dr. Thomsen has a sense of humor—he works to engage students in diagnosis discussions and keeps students awake and alert!*

*He is a great instructor. He applies concepts to real life situations which helps us really understand the material. Always is willing to answer questions and help students if needed.*



**Distinguished Service Award****2010****Quint P. Nicola**, DDS, Assistant Professor, Dental Educational Service

Dr. Quint Nicola has been a member of the faculty for 26 years with a current rank of assistant professor in the Department of Dental Educational Service. In addition to service as director of the Seventh-day Adventist Dental Services in Karachi, Pakistan for four years and as a clinician and teacher at Monument Valley Dental Clinic for five years (1975-1980), he served in the Department of Oral Diagnosis, Radiology and Pathology from 1995 until 2002 when he accepted the position of director of International Affairs for Loma Linda University School of Dentistry and associate director for Dental Affairs, Health Ministries Department in the Seventh-day Adventist Church world headquarters. In spite of his busy schedule, Dr. Nicola has remained a committed Christian dentist who has carefully balanced family, church, department administration, and teaching.

**2011****R. Leslie Arnett, Jr.**, DDS, MS, Professor, Department of Periodontics

Dr. Arnett has been a member of the faculty for 37 years with a current rank of professor in the Department of Periodontics. After completing the advanced education program in periodontics at Loma Linda University with an earned MS degree, he accepted a faculty appointment in the Department of Periodontics. During his career he has served many organizations including the American College of Dentists, International College of Dentists and the American College of Forensic Examiners. He is also a diplomate in the American Board of Forensic Dentistry, and he has served as a conscious sedation on-site examiner for the Dental Board of California since 1994. As an exemplary teacher and clinician, Dr. Arnett is known through the School of Dentistry for his ready smile, buoyant personality, and abundant energy.

**Distinguished Research Award****2010****Lloyd Baum**, DMD, MS, Professor Emeritus, Department of Restorative Dentistry | International Dentist Program

The late Dr. Baum (July 25, 2011) was one of the earliest clinical faculty recruited to the School of Dentistry. In the nearly six decades that Dr. Baum was associated with the

School of Dentistry, he was one of the most active figures in dental research during his early years and began a pattern of contributions to the dental literature which has culminated in an authorship of more than 100 articles in refereed scientific journals and six textbooks. In 1982 Dr. Baum initiated the International Dentist Program at Loma Linda University and has exercised leadership in international outreach programs. On November 19, 2004, the University of Montemorelos held opening ceremonies for the Dr. Lloyd Baum School of Dentistry. He has received numerous awards from his research developments including operative materials, instruments, and techniques.

**2011****Jonelle A. Stephens**, MS, EdS, Professor, Department of Dental Hygiene

Joni Stephens has dedicated over 40 years to the dental hygiene and predoctoral research curricula. She created the Introduction to Research course in 1983 for the dental hygiene program, one of the first research courses in dental hygiene education in the United States. As director of the Research Methods course in the predoctoral program from 1995 to 2008, Ms. Stephens devoted hundreds of hours evaluating student research projects, sought funding support and hosted table clinic judges during alumni-student conventions. She has earned the respect of national organizations, Loma Linda University, and the School of Dentistry colleagues throughout her academic career. She has received numerous awards and been nominated to honor societies in the dental and dental hygiene professions.

**Curricular and academic innovations**

- Implemented new associate degree program in dental hygiene. First class admitted in September 2011
- Approved the development of department-based Teaching/Learning Committees to evaluate course syllabi, evaluation procedures and grading standards for each course in the curriculum
- Developed and implemented didactic component for service learning experiences
- Increased the D1 pre-session from three to four weeks.
- Approved a new D4 clinic attendance policy that provides students more flexibility to participate in externships
- Approved combining RESD 822/822L (Operative Dentistry I) and RESD 823/823L (Operative

Dentistry II) into one 2-quarter course (Operative Dentistry)

- Approved ODRP clinic requirement that students must complete a minimum of 10 Treatment Complete Examinations
- Approved changes as outlined in the DHBS degree completion program
- Replaced the periodontal surgery assist requirement with a new Periodontics Practicum Seminar
- Replaced “Fixed Prosthodontics III” with a “Prosthodontics Seminar” in the International Dentist Program
- Approved a new IDP course “Partial Coverage Castings”
- Approved a new IDP course “Advanced Treatment Planning Seminar”

**Faculty statistics**

	FT	PT	Vol
Professors	19	11	5
Associate professors	33	23	17
Assistant professors	61	184	115
<b>Total:</b>	<b>113</b>	<b>218</b>	<b>137</b>

**Dental Education Textbook publication book chapters**

**Goodacre CJ, Kattadiyil MT.** Prosthetic-related dental implant complications: Etiology, prevention, and treatment. In Froum SJ, ed. Dental implant complications: Etiology, prevention, and treatment. Oxford, United Kingdom, Wiley-Blackwell, 2010, Chapter 10, 172-196.

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**Esther Valenzuela, MBA, MA**  
Director, Admissions

**Office of Admissions**

**Admissions criteria**

As one of a select few faith-based dental schools in the nation, LLUSD recruiters look for a very specific person to admit into its programs.

Accepted candidates will enter the only dental school in the nation that includes all three of these components:

- + Required chapel attendance
- + Religion courses
- + Service learning requirements (120 hours for dental students, 75 hours for dental hygiene students)

To be compatible with the School’s objectives, student selection seeks evidence of distinctive attributes:

- + Altruism as a focus
- + A desire to grow spiritually, mentally, and ethically
- + Comfortable accommodation to an ethnically diverse campus population

Looking at a student profile, the admissions committee members want to know . . .

- + Does the student have active involvement in their church and community?
- + Has the student been involved in any outreach activities?
- + Has the student had extensive exposure to the dental profession?

These distinctive admissions dimensions are designed to enhance student experience and ultimate commitment.

When Tiffany Beale, class of 2013, visited the LLU campus during her senior year at Oakwood University,

her undergraduate performance had already prompted scholarship offers at several dental schools. “Somehow,” she says, “none of the schools felt right. Something was missing at those schools. When I came to Loma Linda, the atmosphere, the facilities, and the people felt right.” She cites the words of admissions officer, Marlise Perry, “We want you here because you can contribute to the School.” With several schools to choose from, Tiffany chose Loma Linda University School of Dentistry.

**Class profiles**

For the past five years, LLUSD has averaged 2,062 DDS applicants and 102 DH applicants per year. Of the DDS applicants accepted, 70 percent were SDA; and of the DH applicants accepted, 50 percent were Adventists. A significant, positive personal influence on many applicants was their contact with LLUSD alumni through church, employment, dental mission trips, or patient care. The School’s alumni consistently create within applicants the desire to learn more about their alma mater.

Doctor of Dental Surgery	Class of	
	2012	2013
Total applicants	2139	1955
Total accepted	100	99
Females	38	32
Males	66	67
Average age	25.7	26.6
Asian	52	44
Caucasian	42	32
Hispanic	6	6
African-American	4	4
Average entering science GPA	3.4	3.4
Average entering DAT AA	19.77	19.8

Dental Hygiene	Class of	
	2012	2013
Total applicants	79	65
Total accepted	42	40
Females	38	1
Males	4	23.9
Average age	23	20
Caucasian	26	10
Asian	5	9
Hispanic	8	1.4
African-American	3	4.8
Average entering science GPA	3.2	3.1



Fred Kasischke, DMin, Associate Dean,  
Admissions and Service Learning

### Service Learning

LLUSD's service learning experiences are designed to foster a desire to provide dental care for those less fortunate and develop an altruistic spirit in both students and faculty.

Approximately 8,000 people receive free dental treatment yearly in LLUSD's service learning program. The impact of service learning experiences exhibits itself in various settings.

#### Honors bestowed for establishing a dental clinic for the homeless

**Brian Novy**, SD'06, assistant professor, Department of Restorative Dentistry, was honored at a recognition ceremony at the Calvary Presbyterian Church in Riverside, California, in September 2011. The church has a long history of providing food and medical care for the homeless in the Riverside area. Five years earlier Dr. Novy had begun a dental service with the LLUSD Mobile Clinic. Records indicate that the dentistry and dental hygiene students accompanying Dr. Novy have treated 344 patients and performed 858 procedures during five years of dental care.

#### A different twist on service learning

An unexpected response arose when dentistry and dental hygiene students affiliated with students from Loma Linda's schools of Medicine and Pharmacy to treat patients at a hospital in Honduras. Returning several times to the site, members of the class of 2014 ultimately "adopted" the hospital and instituted a plan: all the class members will go to Honduras during their school experience, and they expect to continue their commitment with a long-range plan.

#### Student reports clarify service learning impact

*Going to Meeting All Needs with Dignity (MEND) is a highlight in my dental school career thus far. The way service is carried out is unparalleled to anything I have seen or heard of in my research and visitation to nearly a dozen dental schools on both East and West coasts. I realize we don't have to subscribe to a certain life style just because it is available. Our opportunity is to be good stewards and bless the poor with our all—even if it is counter-societal.*

*This experience is also one that came full circle for me personally. I was once a pediatric patient in community clinics, living for a time in a single-parent home on welfare, and also for a while in foster care.*

#### After a trip to Ethiopia during Christmas break

*Exiting the aircraft into the heat of Gambella, I noted military men with AK-47s to my left. On my right, several small children were playing. During a three-hour bumpy ride to Dembidillo we were surrounded by greenery, majestically tall trees, women balancing woven baskets on their heads, herds of goats, and a host of donkeys, cattle, and baboons. I had arrived in Africa.*

*For seven days we provided treatment, instructing patients to lie on a wooden bench propped up on a cement block. Working 9 a.m. to 5 or 6 p.m., we were able to serve over 500 patients in more than 700 procedures. Many of the patients had been in pain for years. They were so thankful for the services provided. As a clinician, I gained invaluable experience and priceless reward. We helped change people's perceptions of themselves and affirmed a higher quality of life. Mission is what Christ's life was all about. I've often asked what it means to know Christ. Well, I found my answer. The act of knowing Christ should be manifested in our actions. I consider it an honor to have been able to serve*

#### A La Vida, New Mexico, reflection

*Setting up a clinic at the end of a dirt road, we transformed a two-dental chair clinic into a six-chair fully working clinic, unpacking compressors, ShopVacs for suction, constructing plumbing, and organizing tools, equipment, and restorative materials onto tables lining the hallway. A major case I got to work on was with a 23-year-old woman who was missing most of #19 and exhibiting lesions on the root tips. She desperately wanted to save the tooth, so I [a D1] worked with a D4 to access the canals and then clean and shape them. The canals were hard to locate and had some severe curves in them, so cleaning and shaping took a long time. The patient came back the next day for us to finish the job. After the procedure, she gave us both a hug.*



*It was a great feeling to have given service to someone we knew could repay only with their thanks.*

**Bangladesh provides a new perspective**

*Dhaka, capital of Bangladesh, where we landed, provided a kaleidoscope of poverty, pollution, and crowds of people. During a six-hour bus trip we drove past many agriculture fields, shantytowns, brick-making factories, and rickshaws. Lacking traffic lights, traffic was managed by considerable honking. At an orphanage in southern Bangladesh, we were welcomed with a generous meal of rice, potato curry, sweet rice, homemade peanut butter, and plantains. This menu would comprise our meals three times a day for a week. I loved it!*

*Most of the dental patients were there for cleanings. With only five hygienists on our team, we limited our services to ten minutes per patient, in spite of the immense calculus and beetlenut stains. One day we went by boat to a little village where members of our team presented the gospel of following Jesus and taking care of their health. With a colleague I did oral health instruction using a typodont on stage with an interpreter. One of my patients, submitting to my oral health instruction, told me she had wanted to clean her teeth all these years but couldn't because she didn't have anything for the task. We had very few tooth brushes with us, but I managed to get one for her. Her eyes watered with thanks. I found myself speechless as my heart ached. This trip gave me a new outlook and meaning on life.*

**Roatan, Honduras, a mission trip with benefits**

*Three dental students, four dentists, one hygienist, and one dental manager packed their dental instruments and traveled to the Island of Roatan, Honduras, partnering with a team from Calimesa Seventh-day Adventist Church doing community development projects such as installing water filters. Our dental office, on an outdoor deck, contained pipe and cloth chairs. With our portable x-ray machine, we could do more extensive diagnosis, and Dr. Stephen Morrow, endodontist, helped us save teeth that otherwise would need extraction. Saving front teeth on young people with root canal procedures and placing composite restorations was an exceptional practice usually unavailable to traveling dentists.*

*One of my colleagues commented: "My favorite case was restoring teeth #7 and #9 on a 20-year-old girl whose teeth were necrotic and otherwise would have been extracted. I also enjoyed getting to know my professors in a different setting; it is such a blessing to have mentors who are willing and enthusiastic to help us learn."*

**Overseas dental mission trips**

International service trips attracted approximately 80 students each school year, who treated approximately 4,000 patients annually, performing 6,000-7,000 procedures during international trips. Supervised by professors and cooperating with local agencies, students conducted clinics for underserved populations, often in makeshift school and church settings, working 12-14 hours a day. With variable access to electricity, they arrived with their own equipment. Battery operated items were in high demand as dental teams participated in mission trips to these countries:

- Bangladesh
- Belize
- Brazil
- Ethiopia
- Guatamala
- Grenada
- Honduras
- Nicaragua
- Peru
- St. Vincent

**Domestic dental care**

Clinic With a Heart, LLUSD's signature program for low income patients, has attracted families with an annual free clinic day for the past 22 years. More than 400 volunteers (faculty, students, and staff) processed more than 300 patients in a rigorous Sunday program each January during 2010 and 2011 that provided more than \$40,000 worth of procedures. The director of the program estimated that the dollar value of free dental care rendered to patients from 1989 to 2011, has totaled \$450,000, or approximately \$750,000 if performed in a typical dental office.

Dental care at nearby domestic sites involved approximately 50 students monthly and 60 students weekly. Each year they treated nearly 3,000 patients, and performed 4,500 procedures during domestic service learning trips.

**Off-site block locations:**

- Assistance League of Redlands
- SACHS dental clinic
- Baldy View Regional Occupation Program

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## SERVICE LEARNING

### Community Involvement by LLUSD

The School's mobile clinic (an RV equipped with two dental chairs, an x-ray station, and a sanitizer) offered students in area schools free dental screenings and cleanings at these sites:

	Students	Patients	Procedures
Lugonia Elementary School	43	36	119
Victoria Elementary School	56	254	328
Calvary Presbyterian Homeless Clinic	23	54	144
Thirteen health fairs	92	2,573	2,573
<b>Totals:</b>	<b>214</b>	<b>2,917</b>	<b>3,164</b>

### Monthly

Location	Time spent	No. of students
Compassion Clinic (Old Norton AFB)	3 Quarters	15-20
Share Our Selves (SOS) Clinic	4 Quarters	4

### Every 3 Weeks

Calvary Presbyterian (Homeless)	4 Quarters	8-10
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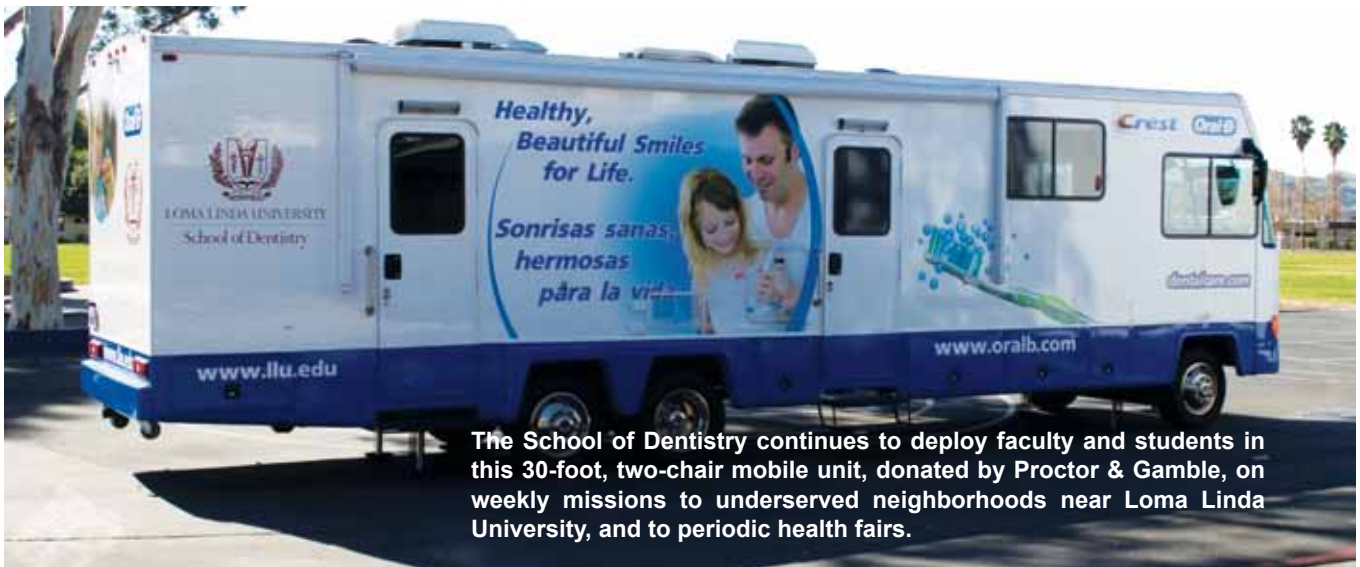
### Weekly

Assistance League-Redlands	4 Quarters	4
Lugonia Elementary School	3 Quarters	4
Baldy View ROP	3 Quarters	4
Victoria Elementary School	3 Quarters	4
MEND (Meet Each Need with Dignity)	1 Quarter	5-6 IDP

### Bi-Weekly

SACHS Dental Clinic*	2 Quarters	6-7
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\* SACHS (Social Action Community Health System) is a low-cost primary care facility at the former site of Norton Air Force Base operated by LLU personnel and volunteers, who provide low-cost primary care, regarded by public and private community representatives as vital to health care in the San Bernardino area. The clinic serves 10,000 patients annually, many of them in the dental care clinic.



The School of Dentistry continues to deploy faculty and students in this 30-foot, two-chair mobile unit, donated by Proctor & Gamble, on weekly missions to underserved neighborhoods near Loma Linda University, and to periodic health fairs.





**Paul L. Richardson, DDS, MEd**  
Associate Dean, Clinic Administration

**Clinic Administration**

Patients have kept the School's clinics busy over the past two years despite the current economic challenges. Both physical and operational changes created a different clinic environment.

**Check-in kiosks**

The summer of 2011 brought a major change in patient intake from the front lobby area. Installation of patient check-in kiosks tied to axiUm made it possible for patients to check themselves in. Students receive electronic notification via their computer, thus reducing limitations of staff availability during peak clinical sessions. This implementation has heightened the level of efficiency and service to the patients.

**Patient business office**

The patient business office now operates under the management of Clinic Administration. With the assistance of axiUm software under the direction of Ms. Marina Moore, the management of patient accounts and ability to access relevant financial reports have been streamlined.

A remodel of the patient business office is now under way, with the goal to increase patient privacy and create a more professional environment for those in consultation with a patient business office representative. A business

center was also created on the first floor which is occupied by some patient business office staff, dental records staff, and record auditors whose positions do not require direct patient access.

**New clinic sites**

The International Dentistry Clinic has moved from the south clinic area to the east clinic, and the Dental Hygiene Clinic now occupies the south clinic. The international students are now in much closer proximity to the pre-doctoral clinic and faculty.

**Certification of data collection with axiUm and HITECH**

Working with consultants from axiUm, the clinic aligned with the Health and Information Technology for Economic and Clinical Health (HITECH) Act of 2009. As of January 2012, the dental school's electronic patient record system was certified and has met the federal standards for standardization and data collection of patient's health information for future incentives in healthcare funding.

**Quality assurance**

Equipment and personnel contributed to the clinic's quality assurance measures.

**Patient satisfaction**

A patient satisfaction survey developed by Steven Morrow, SD'60, clinic professor, provided evaluation of the patient's experience at LLUSD. To maximize efficient use of the survey, it is emailed to patients, and the survey responses are electronically sent to a database for review. The patient satisfaction survey provides meaningful feedback from patients while providing the dental school a footprint for future growth in patient care services.

**Quality assurance auditor for electronic patient records**

In spring of 2011, the School of Dentistry reviewed its internal audit controls for the electronic patient record and financial reporting. Paul Richardson, SD'72, MEd, associate dean, clinic administration, and Ron Secor, MBA, associate dean, financial administration, and their administration team reviewed and updated the existing policies and procedures for the patient business office and clinical operations. Recommended changes produced by the internal audit process were implemented, which included the formation of the new section, quality assurance auditors.

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**Faculty transitions**

Modifications in the group practice model include changes in the oversight of clinical faculty. Gregory Mitchell, SD'84, assistant professor, has been appointed as director of Clinical Management Systems and is actively involved, along with department chairs, in planning and implementing these modifications. The management of clinical faculty has been taken over by the Department of Restorative Dentistry, creating integration, cohesiveness, and calibration among a larger number of clinical faculty. This change has also expedited the addition of many additional faculty participants in clinic instruction and in group leadership roles. With the reappointment of Dr. Greg Mitchell, Michael Fitzpatrick, SD'87, professor, became the IDP director.

**Student awards**

The Group Clinical Achievement Award recognizes those students who best exemplify the characteristics of a dentist that rise above the standard expectations. These would include:

- Above average clinical performance
- Individual growth
- Organized efficiency
- Accomplishing requirements while helping others
- Demonstration of grace and caring toward patients

**These D4 students received the awards in 2010**

- Iris Choi
- Emily Herndon
- Kai Steele
- Jerhet Ask
- Lisa Gortari
- Eddie Yoo
- Soh-Yeun (Eileen) Kim
- Nicholas Marongiu
- Timothy Wieg
- Scott Peterson

**These D4 students received the awards in 2011**

- Ralitza Varlakova
- Brooklin Pruehs
- Michael Hiersche
- Klara Palhegyi
- Michael Kim
- Adam Burr
- Landon Libby
- Jeri Bullock
- Donavon Yapshing
- Larina Chu

One student in each class exhibiting superior skills received the annual Overall Clinic Achievement Award. The 2010 award went to Weston Spencer. The 2011 award recognized Nathan Leiske.



Mary Hartwell, dental clinics manager, with her administrative assistants, Robin Fierro-Navarro, Miriam Yanez, and Lydia Perez.



Letters from the dean's mailbox

It is particularly gratifying to peruse patient letters from the dean's mailbox that comment on the dental care they have received at the hands of students and faculty in the School's dental clinics.

*Without doubt, the post-graduate student in orthodontics who cared for me is the most professional and caring individual I have encountered in the dental field.*

*Having spent considerable time in dental chairs, from the East Coast to the Midwest and finally California, I have only once received the outstanding care I enjoyed at the capable hands of an LLUSD student.*

*It was at this place I came upon "my angel." He helped me through the most difficult procedures and brought back my smile. I'm very close to getting my second chance with my teeth.*

*Thank you very much to each of the fine dentists for the outstanding treatment and support they all performed for our children at Needles Headstart Pre-School. We have parents who were amazed that you would go to such great lengths to help their children. Many of them will not write thank you notes, not because they are not grateful but because they do not know what to say or how to say it.*

*It is worth our two-hour drive to receive the care and kindness from your instructors and students.*

*Recently my children went to your dental school on the free "dental care day" for low income families. We into this category and received the best of care.*

*I have been a Loma Linda dental patient off and on for more than ten years. For a time during that time my economic situation was so bleak that I was unable to continue with regular dental visits, resulting in all sorts of problems. I knew it would take a miracle to restore the condition of my mouth. Then God sent a student whose efforts I cannot praise enough.*

*When the student dentist read my records, he phoned my doctor, who confirmed that because of my heart murmur I should always take Amoxicillin prior to certain dental work. The student was so dedicated and concerned. His actions could have saved my life and I am so grateful.*

*The student [dentist] exceeded even my expectations in three important ways: I felt from the beginning that I was more than just a body to practice techniques on—that he was genuinely committed to doing the best he could to improve my dental health. As we progressed, I realized that his best was more than adequate for the task, and that whatever new skills came to be required he was able to master "on the job." He kept me fully informed of all the options at each step in the program.*

*My dentures are very comfortable and beautiful. People cannot stop staring in awe at my teeth. They are calling me Cinderella.*



**Kathleen Moore, MHIS**  
Associate Dean

### Educational Support Services

#### Marketing services

With the expansion of academic and clinical services such as the Dental Hygiene Associate of Science degree program in Palm Desert, the November 10, 2010, move of the Faculty Dental Associates to Hospitality Lane to become part of the Center for Dentistry and Orthodontics, and the economic challenges of the specialty clinics, it became necessary to formalize the marketing efforts at the School of Dentistry. Krista Juhl, MBA, was hired as the director of marketing in 2011 and is now working with the professional staff already



Marketing team (L-R): Ben Palaniuk, administrative assistant; Leigh Ann Evans, web editor; Doug Hackleman, MA, director of publications; Krista Juhl, MBA, director of marketing

in place: Doug Hackleman, director of publications, and Leigh Ann Evans, web editor. This team is positioned to develop a data-driven marketing strategy that will include the use of print, television, radio, web, and social media. Surrounding dental practices will be invited to partner with the School's various clinics and services that provide inter-disciplinary treatment for difficult or unusual cases. Referral workflows assure that patients will be retained, as appropriate, by the original care provider. During the biennium, media reports triggered by the School's activities generated 373 mentions in general media outlets with an advertising value of \$133,510.

Digital signage throughout the School continues to market to current patients and families in the various clinics by introducing care providers and scrolling information on services provided by Loma Linda University School of Dentistry. Patients continue to give consent for their photographs taken by the instructional media staff to be featured on digital signage monitors.

#### Instructional media

Ellis Jones, director of instructional media, who died in December 2010, spent much of his career at Loma Linda University School of Dentistry (1968-2000), and his influence on what was formerly the Graphics Studio remains. The current staff continues to deliver graphical support for numerous scientific posters that are presented around the world, create lettering and signage throughout the School and the Center for Dentistry and Orthodontics, and provide photography and video services for faculty and students. A sampling of Ellis Jones' artwork and cartoons is on display for the viewing enjoyment of the patients, students, faculty, and staff to see in the School of Dentistry lobby.

The *Implant Dentistry DVD Program* has been completely updated and is now available on the web, bringing this information to dental students and dentists around the world in an updated electronic format. This information provides some of the foundation for the AAID Maxicourse®, a ten-month implant study club that utilizes the expertise of the instructional media staff to stream live surgical demonstrations and monthly on-line study sessions.

The *Head and Neck Anatomy* program is now available for purchase. This encyclopedic resource covers human head and neck anatomy as it pertains to the practice of dentistry. This learning tool brings together a number of





*Facts Highlights and Firsts* is a handsome, 24-page historical overview of the School of Dentistry's fifty years of growth and service.

resources including image libraries, presentations, videos, an interactive self-assessment, and brand new 3-D content from eHuman's Digital Anatomy.

**Alumni Association**

The tradition of hosting the 50-year class continues, with members attending all activities during the Alumni Student Convention at no charge. The homecoming banquet features documentary-style videos of class members that highlight interviews with alumni reminiscing about their time as School of Dentistry students.

The 2010 homecoming banquet drew the orthodontic alumni as Loma Linda University School of Dentistry



One of more than 150 thin client computers installed throughout the School's clinical operatories during the recent biennium

celebrated the program's 50<sup>th</sup> anniversary. More than 100 International Dentist Program alumni from around the world attended the 2011 homecoming banquet.

With the death of Dr. Lloyd Baum in July 2011, the School of Dentistry honored him and his accomplishments. A video of his personal and professional life was developed that included interviews with alumni who were inspired and motivated by his teaching and high clinical standards, and chronicled his leadership in developing the International Dentist Program.

LLUSD Alumni Gear is now available on the dentistry.llu.edu website by clicking the square LLUSD gear icon. Gear items include: Citizen watches with the School of Dentistry insignia engraved on them, thumb drives, wallets, laptop cases, and more.

An electronic alumni directory will be available in 2012, with security features that allow the information to



The Prince Hall patient lobby display includes a sculpture by Irene Longfellow, wife of the late Rodney Longfellow, SD'60, who sculpted the bronze work entitled, *Service to the World*, and donated it to the School of Dentistry.

remain appropriately protected. Demographic data will be kept current with alumni responses and postal service updates, as managed by the Loma Linda University Records Department.

**Dental Computer Services**

Over 300 additional computers were installed in the School of Dentistry during 2010, with 150 installed throughout the clinical operatories, 26 going into the Center for Dentistry and Orthodontics, and another 130 replacing systems that required improved security to meet HIPAA standards. Students, faculty, and staff



Joseph Caruso, DDS, MS, MPH, associate dean, strategic initiatives and faculty practices; Richard Hart, MD, DrPH, president, Loma Linda University; and Warren Libby, SD'05, MS'11, enjoy the digital signage display in the entryway to the new Center for Dentistry and Orthodontics.

now interact with patient information on computers that interface with servers in such a way that no data resides on the clinical computers.

Dozens of security cameras are now digital and store temporary data on servers in the School of Dentistry. These systems have enabled the School to provide heightened protection for students working in laboratories and clinics, and have provided valuable data to the LLU Security Department and the Loma Linda sheriff's office when suspicious activities have occurred.

The computer network and infrastructure continue to be updated as budgets permit, creating a system of virtual servers that balance the data transmission load and interface with the local and remote clinics of the School.

Future plans include creating one network to serve both Loma Linda University and Loma Linda University



Charles Dugaduga, systems analyst, oversees the security systems for the School of Dentistry.

Medical Center that will provide increased monitoring and auditing of clinical data transmissions while maintaining appropriate autonomy for academic systems.

### Continuing Dental Education

Despite the current economic climate, continuing education continues to generate a small profit from its activities. Many university-based continuing dental education programs are subsidized by the parent organization; however, the Loma Linda University School of Dentistry Division of Continuing Dental Education is self-sufficient.

While many attendees are alumni of Loma Linda University, over half of the registrants only experience the School of Dentistry during their continuing education programs. Many of these oral health professionals have become loyal and regular attendees, seeing the School as their adopted alma mater. One such attendee, Dr. Stephen Lockwood, has taken several hundred hours of CE at Loma Linda, including the AAID MaxiCourse® implant study club. "I chose Loma Linda University because it is a formal university setting and I respect the faculty," says Dr. Lockwood. "They have been leaders in the continuing education courses I have taken throughout my career. Dr. Jaime Lozada has great surgical knowledge and experience with implant dentistry and Dr. Mathew Kattadiyil has demonstrated his knowledge and experience in prosthodontics. Coordinating these two disciplines, with Dr. Lozada and Dr. Kattadiyil in the classroom at the same time while the surgical demonstrations are shown, gives the attendees the opportunity to hear their comments for complete treatment options for the patient."

The Division of Continuing Dental Education sponsors numerous programs, both complementary lectures for faculty and programs geared toward the paying oral health professional. Dr. Lockwood explains his loyalty to the continuing education program: "I have found that the continuing education seminars are given very responsibly; they are not advertisements for companies and are non-commercial. I appreciate that – it shows a lot of integrity. Over the years I have developed an affinity toward Loma Linda University. The programs they put on are first class and they include a good representation of the various disciplines. I appreciate that."

More information on future continuing education courses is available at: [dentistry.llu.edu](http://dentistry.llu.edu) Then navigate to the continuing education page.





Richard H. Hart, MD, DrPH  
President



Charles J. Goodacre, DDS, MSD  
Dean

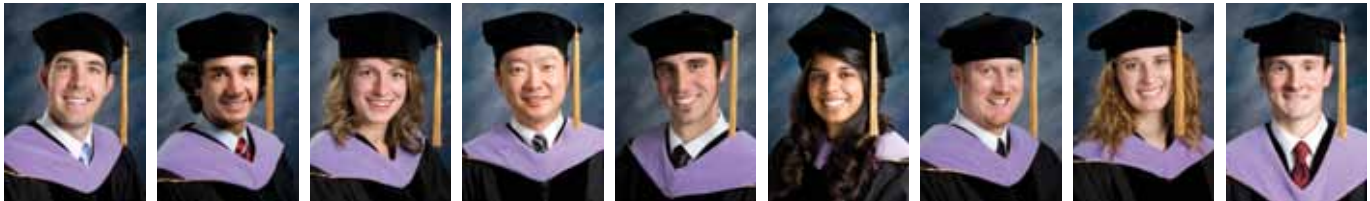
# Loma Linda University School of Dentistry Doctor of Dental Surgery Class of 2010

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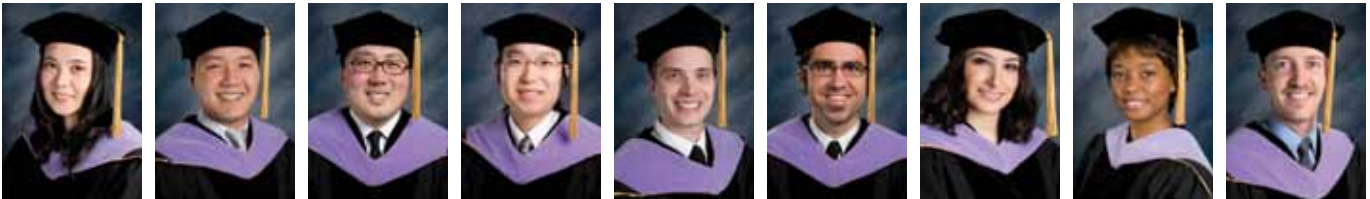


Weston Spencer President	Stuart Seheult Vice President	Vitalia Borishkevich Secretary	Gene J. Pak Treasurer	Jerhet R. Ask Social Vice President	Sherin Johnson Social Vice President	Kai B. Steele Chaplain	Emily S. Herndon Historian	Brent M. Hiebert Historian
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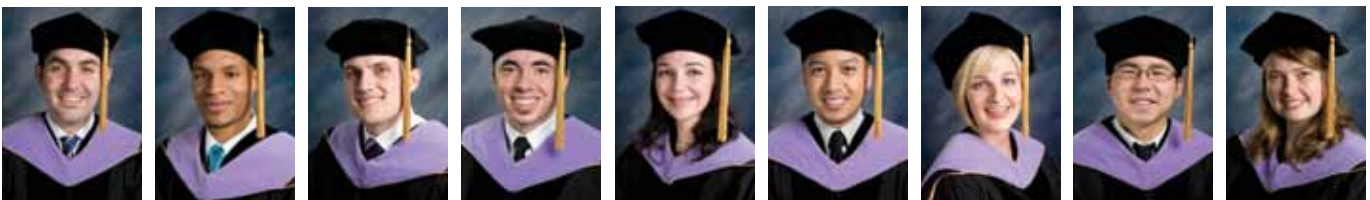
**CLASS OFFICERS**



Nathan J. Adams Sports Coordinator	Lance Alder	Chad Allen	Jamie Atiga	Jessica Bong	Monleudy Keo Bracken	Carah Burrill	Elbert Choi	Hyunsuk Choi
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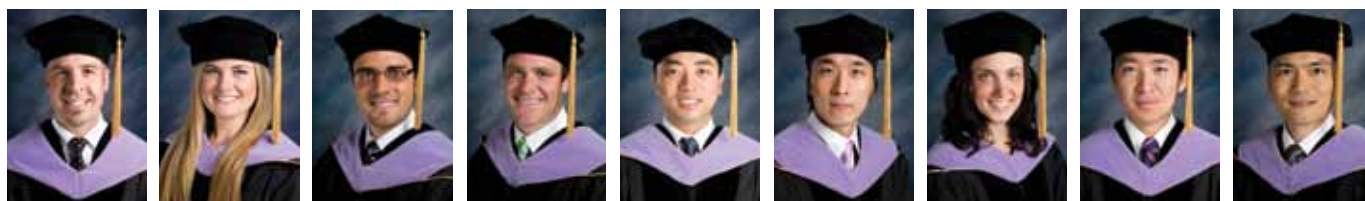
Iris Choi	Steven Y. Chon	Bobby Chun	Henry Chung	Luke Cockerham	Ivan Colón	Ankin Deragobian	Nomuhle S. Dewa-Dube	Denver Eslinger
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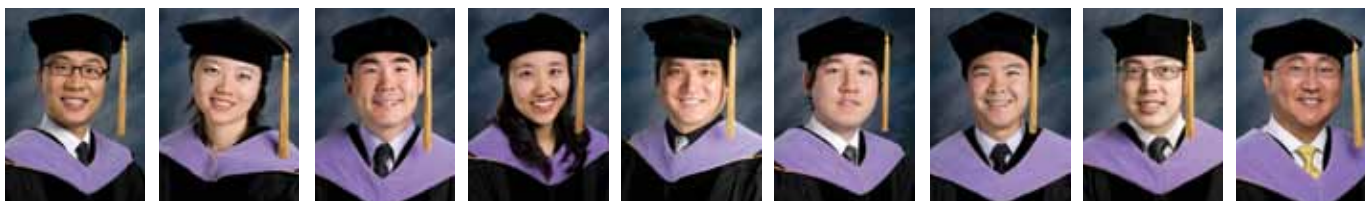
Brad Field	Colin Forde	Damien Garcia	Johnathan Garcia	Lisa Gortari Clinic Representative	Michael Guadiz	Lauren Gutenberg Public Relations VP	Joon Ha	Sarah-Jane Harebottle Shearer Community Service Rep
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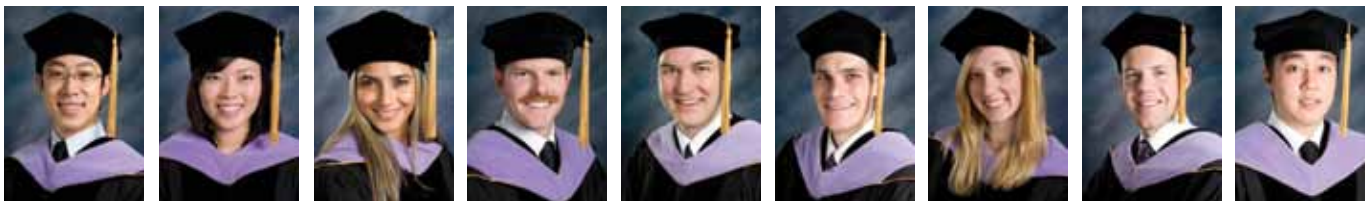
## DENTAL EDUCATIONAL SUPPORT SERVICES



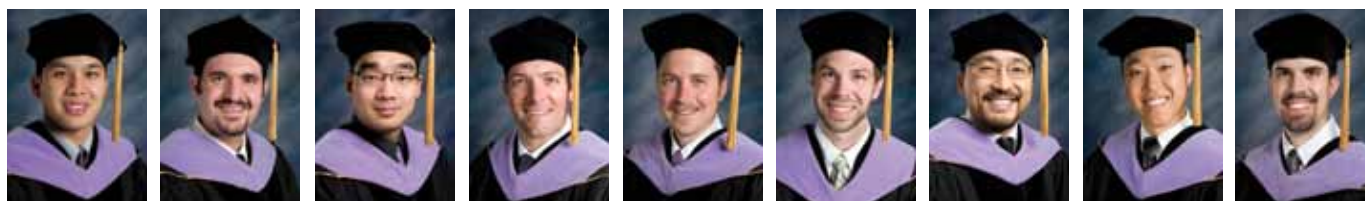
Brian Harward   Annalise Hilliard   Jeremy Hoff   Bryan Horgan   Wook Jeong   Dustin Ukjae Jung   Darcy Kasner   Chad Kim   Chan Bae Kim



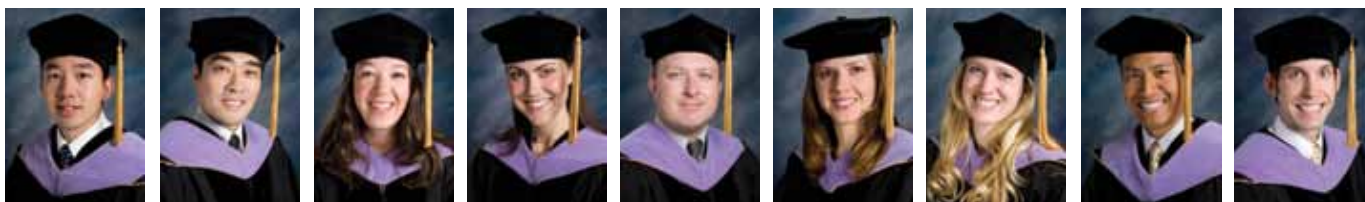
Hyun June Kim   Na Young Kim   Robert Kim   Soh Yeun Kim   Young Rae Kim   Jahyun Koo   Donald Lee   Donghoon Lee   James H. Lee



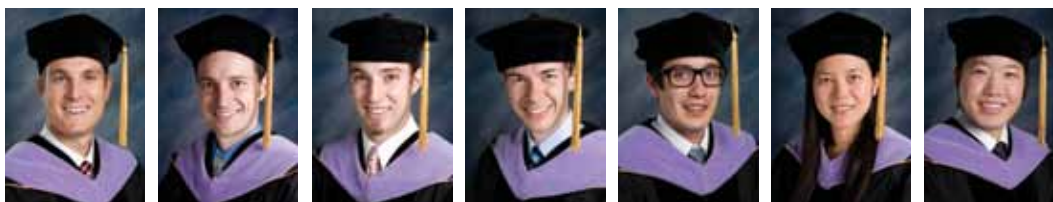
Joseph Lee   Susan J. Lee   Maryam Seirafi Looee   Paul Luczynski   Todd Ludden   Nicholas Marongiu   Karin McCloskey Wilson   Justin Mercer   Jihun Moon



Jerome Ocampo   Adam Panos   Jonathon Park   Ryan T. Payne   Brent Peeke   Scott G. Peterson   Scott Pyo   James H. Rho  
Technology VP   David Royer



Sam Saesim   Sang Gyu Shin   Jenelle Silvers   Erin E.A. Stephens   Ian Stewart   Ekaterina Yurievna Tomenko Di Pinto  
SIMS Representative   Janelle Tonn Sports Coordinator   Christopher Oscar Torres   Ryan Waring



Justin Weaver  
Clinic Representative   Jesse R. Whitely   Timothy Wieg   Nick Wilson   Josef Wollmann   Joo-Youn Julie Yi   Suk Chan Yoo

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Eric Hull



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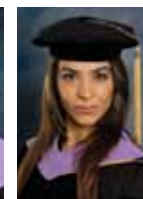
Kenneth Eun-  
Gu Jang



Eric Joo



Albert B. Kang



Sheida Khazai-  
Tabari



Andy Kim



Estella Unyong Kim



Michael Kim



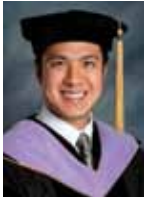
Ashley Kitto



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Jeffrey Lam



Alexis LaRose



Bryan Kwang  
Jae Lee



Joseph W. Lee



Keijin Jenny Lee



Shaun Lee  
Sports Coordinator



Nathan Leiske



Justin Libby



Landon Libby



Hyo Jin Mun



Steve Nelson



Albert Oh



Joanne Jieun Oh



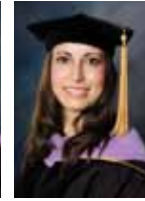
Joohee Oh



Soojin Oh



Filip E. Orban



Klara Palhegyi



Woojung Park



Isaac Peñalba



Chris Poe



Christy Pogue



Derek Potts



Brooks Pruehs



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Sheryleen  
Sampayan



Justin Schmidt



Sophia Sellas



Shamir Sevilla



Kevin Shearer  
Technology VP



Matthew Streelman



Annie Suh



Kristen Sylvers



Thomas R. Szutz  
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Jacktone Ombayo



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Miguel Pappaterra  
Leon



Ewa Parciak



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Georgina  
Quintero-Muniz



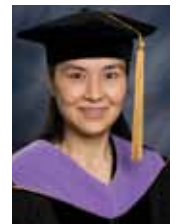
Samuel Rivera



Rana Skaf



Siddharth Talsania



Lu Zou

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Waleed Al-Hassan



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Historian

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Samantha D. Bushnell



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Sydnee Helton  
Social VP/SADHA Representative



Angela Wakefield  
Chaplain



Florie Vanessa Mancilla  
Historian

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Trisha-Loray Aprecio  
Sports Coordinator



Yasaman Aryaee



Julianne Asbury



Alex Chapman  
Community Service  
Representative



Emily Clawson



Danae Natalie Davis



Heather Dunn



Ashley Egetter



Suzanne Finch



Merissa Garcia



Jordyn Gascay



Mimi Gemanaru



Cynthia Gutierrez



Jessica Kubrock



Rebecca McCluskey



Michele Mercer



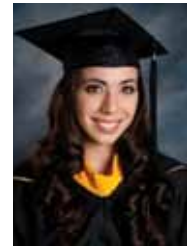
Jasmin Miranda



Erika Nelson



Jinwoo Pak



Sara Turk Proulx



Soyoon Asia Rhee  
Birthday Secretary



Michelle Rich



Rebecca-Ann Roquiz



Rubilhyn Ampon Santos



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Caroline Schneider



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BeauJames Snyder



Noelle Snyder



Jessica Szutz



Dulce Zavala



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Jinsoo Kim



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Hasan M. Dbouk



Ruben R. Santana

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Juan Escalas Mesquida



Yun-Chi Wang



Shuji Yoshino



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Director and Chair  
Philip Boyne – Peter Geistlich Professor of  
Oral and Maxillofacial Surgery



Lee H. Akin



Yong David J. Park

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Director and Chair  
Philip Boyne – Peter Geistlich Professor of  
Oral and Maxillofacial Surgery



Jeffrey Dean, DDS, MD,  
Associate Director



Young Joon Jun



Chan Muk Park

## Advanced Education Program in Orthodontics and Dentofacial Orthopedics, Class of 2010

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Director



Joseph M. Caruso, DDS, MS  
Associate Dean, Strategic Initiatives and  
Faculty Practices and Chair



Sherry A. Caraveo



Jeffrey M. Hwang



Joanne S. Kim



Ryan M. Pulfer



Tye A. Roylance



Matthew A. Sanders

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Director



Joseph M. Caruso, DDS, MS  
Associate Dean, Strategic Initiatives and  
Faculty Practices and Chair



Melina Adamian



Vanessa Jenee Kaplan



Warren David Libby



Gregory William Olson



Brent J. Tingey



Todd Erik Wesslen

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Director



Bonnie Nelson, DDS  
Chair



Sameh Alzayat



Bryan Fletcher



Raelene Fulford



Samah Omar

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Noha Abdel-Salam



Monserrat Jordan



Meghanne Elizabeth Kruienza



Laura Annabella McCormack



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Director



Craig Ririe, DDS, MS  
Interim Chair



Myung Soo Choi



Michael A. Wasemiller

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Pedram Fakheri



Elham Javadi



Erik Frank Sahl



Wesam Salha



Elisa Sook Sin

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Interim Program Director



Douglass Roberts, DDS  
Chair



Bethany I. Kronberg



Montry S. Suprono

# Advanced Specialty Education Program in Prosthodontics, Class of 2011



Wendy Christina Gregorius



John Rezaei

CE - Regular 2010

March 14	Ethics in Every Day Practice - Case-based Ethics for Dental Professionals	Robert Kiger, DDS
April 11	Infection Control	W. Eugene Rathbun, DDS, PhD
April 18	Third Annual Periodontal Symposium - Moderator	Craig M. Ririe, DDS, MS
	Implantology: An Overview of the Science	Jeffrey Henkin, DDS, MS
	Tissue Management 101 for Implant Surgery	Yoon Kim, DDS, MS
	Regeneration of Intraosseous Defects	Oliver Hoffmann, DDS, MS
	Developing Optimal Gingival Form Around Implant Crowns	Dennis Smith, DDS, MS
	Gum Bugs	R. Leslie Arnett, DDS, MS
	Crown Lengthening: Considerations and Techniques	Albert Weissman, DDS, MS
	Dealing with Recession: Clinical Aspects of Predictable Root Coverage	Nikola Angelov, DDS, MS, PhD

CE - ASC 2010

February 04	Earl's Pearls	Earl Johnson, DDS
	Gerald's Interdisciplinary Treatment Plans	Gerald Nelson, DDS
February 05	Framework for Positive and Effective Interactions	Luke Iwata, DDS
		David J. Weiss, Esq.
	Framework for Positive and Effective Interactions	David J. Weiss, Esq.
February 07	<b>Temporomandibular Disorders: Sense and Nonsense</b>	Charles McNeill, DDS
	An evidence-based approach to TMD disorders was presented to facilitate multidisciplinary management that promotes tissue repair and improves function with minimal risk for patients.	Duane Grummons, DDS, MSD
	<b>30th Annual Anesthesia Symposium</b>	Ali Makki, DMD
	This symposium focused on a wide range of topics related to the management of patients in the outpatient setting for sedation and general anesthesia with endocrine and systemic inflammatory diseases.	Joseph Caruso, DDS, MS, MPH
		Barry Krall, DDS
		John Leyman, DDS
		Larry Trapp, DDS, MS
		Sigve K. Tonstad, PhD, MD
		J. Lamont Murdoch, MD
		Edwin Krick, MD
February 04	Clinical Solutions to Routine Dental Implant Treatments: Part I	Ruben Santana, DDS
	Clinical Solutions to Routine Dental Implant Treatments: Part II	Ruben Santana, DDS
	Learn to Preserve Bone for Future Dental Implant Placement	Aladdin Al-Ardah, DDS
	What Can We Do For You and Your Implant Patient?	Michael Scalia, DDS
	Behavior Guidance of the Pediatric Patient	Bonnie Nelson, DDS
	Mucogingival Surgery	Jeffrey Henkin, DDS, MS
	Gum Bugs	R. Leslie Arnett, DDS, MS
	Developing Optimal Gingival Form Around Implant Crowns	Dennis Smith, DDS, MS
	Tissue Management 101 for Implant Surgery	Yoon Kim, DDS, MS
	Rational for Alveolar Preservation After Tooth Extraction	Adrian Mobilia, DDS
	Esthetic Materials	Ron Forde, DDS, MS
		Michael Meharry, DDS, MS
		Carlos Chavez, DDS
	Psychology of Denture Patients	Madelyn Fletcher, DDS, MS
	Caries Management	Brian Novy, DDS
	Implants for the Generalist: Should I or Not?	Guy Giacomuzzi, DDS
	Esthetic Communications	Richard Young, DDS
	Local Anesthesia Review	Barry Krall, DDS
	Medically Compromised Patient Review	Joni Stephens, EdS, RDH
	Bad Breath: Causes and Diagnosis	Sean S. Lee, DDS
	Substance Abuse in the Profession	William Hooker, PhD
	Emerging Infectious Diseases and Dentistry	Tom Rogers, DDS
	Review of Common Oral Soft Tissue Lesions	Lane Thomsen, DDS, MS
	Review of Common and a Few Not-So-Common Jaw Lesions	Susan Richards, DDS
	Radiographic Caries Diagnosis	Heidi Christensen, DDS, MS
	Diagnosis Utilizing CBCT	Yoon Jeong Kim, DDS
		Christian W. Johnston, Esq



	<p>What the Dentist Is Legally Responsible for Knowing When it Comes to Radiologic Images                  Universal Health Care Effects on Ethics                  Case-based Ethics for Dental Professionals</p> <p>Faith-based Ethics as Applied to the Dental Profession                  Beyond the Grave: Estate and Personal Planning Essentials                  Mandibular Implant Overdenture - Standard of Care?                  Implant Anterior Esthetics                  Occlusal Analysis: Look Before You Leap!                  Occlusion                  Extrusion of Compromised Teeth                  General Principles of Bone Grafting                  Complications of Third Molar Surgery                  Bis-phosphonate Related Jaw Osteonecrosis                  Internal Derangement of the Temporomandibular Joint                  Latest in Irrigation and Canal Disinfection                  Resorptions: An Update on Types and Treatment Modalities                  Management of Traumatic Injuries                  TMD Management                  When Is a Toothache Not a Toothache?</p>	<p>Gerald Winslow, PhD                  Robert Kiger, DDS, MA                  Kris Wilkins, MA, RDH                  Graham Stacey, PhD                  Walter Moore, Esq                  Amir Khatami, DDS                  Mehrdad Fay, DDS                  Myron Winer, DDS                  Parnell Taylor, DDS                  Fred Berry, DDS                  Liviu F. Eftimie, DDS, MS                  Carlos M. Moretta, DDS                  Lee H. Akin, DDS                  David Y. Park, DDS, MD                  David Jaramillo, DDS                  Bonnie Retamozo, DDS                  Leif Bakland, DDS                  Susan Roche, DDS, MA                  Susan Roche, DDS, MA</p>
	<b>MaxiCourse 2010</b>	
March 11	Literature Review Methodology; Diagnostic Imaging in Implant Dentistry Dental Photography	Jaime Lozada, DDS Juan Mesquida, DDS
March 12	Prosthodontic Diagnosis Index ACP Classifications Implant Diagnosis and Treatment Planning CBCT/CT Scan in Implant Dentistry	Mathew Kattadiyil, DDS, MDS, MS Jaime Lozada, DDS Scott Ganz, DMD
April 01	Applied Pharmacology: Pain and Anxiety Control; Pharmacokinetics and Clinical Application; Medical Evaluation Guidelines for the Dental Implant Patient; Applied Surgical Anatomy	James Rutkowski, DMD
April 02	Applied Anatomy Basics in Dental Implant Surgery	Charles Goodacre, DDS, MSD Jaime Lozada, DDS
April 06	Online Session: Diagnostic Imaging in Implant Dentistry	Jaime Lozada, DDS
May 13	Bone Physiology and Osseointegration Bone Physiology and Dental Implants	Aladdin J. Al-Ardah, DDS, MS Jaime Lozada, DDS
May 14	Biomechanics in Implant Dentistry Radiographic / Surgical Templates	Shankar Iyer, DDS, MDS Mathew Kattadiyil, DDS, MDS, MS
May 18	Online Session: Infection Control	Alisa Wilson
May 17	Pig Jaw Workshop Bone and Soft Tissue Augmentation Diagnosis and Treatment Planning workshop	Istvan Urban, DMD, MD Istvan Urban, DMD, MD Jaime Lozada, DDS Mathew Kattadiyil, DDS, MDS, MS
June 18	Implant Prosthodontic Modalities	Carl Driscoll, DMD
June 22	Online Session: Laboratory Aspects in Implant Dentistry	Mathew Kattadiyil, DDS, MDS, MS
July 15	Zimmer Institute - Suturing Techniques lecture and simulation lab  Zimmer Institute - Implant Placement and Suture simulation lab	Mathew Kattadiyil, DDS, MDS, MS John Won, DDS Mathew Kattadiyil, DDS, MDS, MS
July 16	Impression, Soft Tissue Cast, Provisional simulation lab	John Won, DDS Mathew Kattadiyil, DDS, MDS, MS
August 12	Anterior Implant Esthetics What the Dentist Is Legally Responsible for Knowing, Reading and Referring When It Comes to Radiologic Images	John Won, DDS Joseph Y. Kan, DDS, MS Christian W. Johnston, Esq.

## CONTINUING DENTAL EDUCATION

August 13	Resolving Clinical Challenges With Innovative Functional and Esthetic Solutions Atlantis Custom Abutments	Renzo Casellini, MDT Steven Lockwood, DMD
August 17	Online Session: Management of Surgical Complications	Jaime Lozada, DDS
September 09	Dental Implant System Parade Evaluation of Implant Systems	Jaime Lozada, DDS Aladdin J. Al-Ardah, DDS, MS Jaime Lozada, DDS Mathew Kattadiyil, DDS, MDS, MS
September 10	Hands-on Workshop: Nobel Guide System Principles in Occlusion; Mandibular Movements; Occlusal Schemes in Implant Dentistry	Pat Latunski Mathew Kattadiyil, DDS, MDS, MS
September 14	Online Session: Bone Grafting Biomaterials	Juan Mesquida, DDS
October 07	Distraction Osteogenesis in Implant Dentistry Predictability of Localized Vertical Bone Regeneration Management of the Alveolar Buccal Plate	Alan Herford, DDS, MD Jaime Lozada, DDS Jaime Lozada, DDS
October 08	Predictable Solutions with Implant Overdentures	Mathew Kattadiyil, DDS, MDS, MS
October 12	Online Session: Management of Prosthodontic Complications	Mathew Kattadiyil, DDS, MDS, MS
November 11	Perio-Implant Considerations and Implant Design/Literature Perio-Implant Considerations / Private Practice Applications	Sebastiano Andreatana, DDS, MS Nicolas Caplanis, DMD, MS
November 12	Implant Prosthodontics Guidelines for Completely Edentulous Patients Maxillofacial Prosthodontics with Implant Dentistry Online Session: AAID Exam Review	Mathew Kattadiyil, DDS, MDS, MS Amir H. Khatami, DDS Mehrddad Fay, DDS
December 09	Case Presentation and Diagnosis and Treatment planning workshop	Jaime Lozada, DDS Mathew Kattadiyil, DDS, MDS, MS
December 10	Confessions of Implant Failures - Learn from my mistakes	Jaime Lozada, DDS Mathew Kattadiyil, DDS, MDS, MS
<b>CE - Foreign 2010</b>		
April 26-30	Advanced Course in Implant Dentistry and Prosthodontics - Spain	Jaime Lozada, DDS Charles J. Goodacre, DDS, MSD Alejandro Kleinman, DMD Juan Mesquida, DDS Tony Daher, DDS, MSED Joseph Kan, DDS, MS
October 6-8	Advanced Course in Implant Dentistry and Prosthodontics - Chile	Jaime Lozada, DDS Joseph Kan, DDS, MS Alan Herford, DDS, MD Mathew Kattadiyil, DDS, MDS, MS
<b>CE - Regular 2011</b>		
January 15	Compassion Fatigue: Preventing Burnout and Building Resilience in Healthcare Professionals	John Testerman, MD, PhD
January 30	Cleft Lip/Palate Symposium - An Interdisciplinary Approach to the Cleft Lip/Palate Repair and Care The Presurgical Nasal Alveolar Molding Appliance (PNAM) Pediatric Dentistry Oral Surgery and the Cleft Baby Orthodontic Treatment Genetics Feeding the Cleft Baby The Pediatrician's View What the Parents Need to Know ENT Issues Secondary Surgery Velopharyngeal Insufficiency Plastic Surgery During the First Year of Life	Jung-Wei Chen, DDS, MS, PhD Bonnie Nelson, DDS Alan Herford, DDS, MD Gabriela Garcia, DDS, MS Robin Clark, MD Heather Woolard, MS, CCC-SLP Edward Elmendorf, III, MD Kimberlee McMillian, MSW, PPSC Mark Rowe, MD Andrea Ray, MD Blythe Olander, MS, CCC-SLP Mark Martin, MD

March 6	Complications in Implant Dentistry	Alan S. Herford, DDS, MD Jeffrey S. Dean, DDS, MD Jeffrey Elo, DDS, MBA Souren Rostomian, DDS
March 13	Infection Control	W. Eugene Rathbun, DDS, PhD Nancy Andrews, RDH, BS Bette Robin, DDS, JD
April 3	California Dental Practice Act 4th Annual Periodontic Symposium The Relationship Between Periodontal & Systemic Disease Developing Optimal Ridge Form for Esthetic Pontic Design Dental Scientific Literature Socket Preservation Stability of the Gingival Margin Around Natural Teeth Dental Implant Treatment: What is New, What is Not, and What Does the Evidence Say? Vocal with the Local and other Ways to Keep Your Patients More Comfortable	Craig Ririe, DDS, MSD Dennis Smith, DDS, MS Nikola Angelov, DDS, MS, PhD Mohamed Hassan, DDS, MS Adrian Mobilia, DDS Oliver Hoffmann, DDS, MS  R. Leslie Arnett, DDS, MS
April 10	Esthetic Dentistry Symposium Photography - An Essential Tool of Esthetic Communications Direct Composites: Quality, Aesthetics, and Economics Reverse Preparation Technique (Monolithic Restorations vs. Bi-Layered Restorations)	Richard Young, DDS James Dunn, DDS Michael DiTolla, DDS
April 17 May 22 - 23	Medical Emergencies In The Dental Office Practical Solutions for Complex Restorative Care - An Intense Two-Day Hands-on Workshop	Steven J. Filler, DDS, MS, MA Arun Nayyar, DMD, MS Gregori M. Kurtzman, DDS Mark Malterud, DDS Steven J. Wingfield, DMD Joe Ambrose, CDT Ekram Khan John Won, DDS Larry Lindke, CDT Jennifer C. McDonald Rose Nierman James J. Robinson, CDT Tony Daher, DDS, MSEd Nancy Andrews, RDH, BS Bette Robin, DDS, JD Jim Grisdale, DDS Christopher A. Church, MD
June 5 September 11	Implant Prosthodontics Complications and Their Prevention Infection Control California Dental Practice Act	Jaime Lozada, DDS Alan Herford, DDS, MD Nicholas Caplanis, DMD Stephen Wallace, DDS
September 18 October 2 - 3	Emerging Trends in Periodontics Total Sinus Graft Solutions - Maxillary Sinus Anatomy, Biology and Pathology for the Implant Surgeon Current Trends in Sinus Grafting Graft Materials for Maxillary Sinus Grafting Exposure to Alternative Techniques for Maxillary Sinus Grafting Evidence-based Data for Maxillary Sinus Grafting & Complications and Solutions for Maxillary Sinus Grafting Moderator, Live Surgical Demonstrations Surgeon, Live Surgical Demonstrations	Aladdin Al-Ardah, DDS, MS Joseph Kan, DDS, MS Marvin Fier, DDS Robert Handysides, DDS
October 30 November 13	How to Thrive in the New Economy The Judson Klooster Symposium - Management of the Endodontic Emergency Patient Radiation Here, Radiation There, Radiation Everywhere Frequently Asked Questions for Pediatric Dentists: Tips for treating the pediatric patient Vanadium, Vitallium, Valplast: RPD Dilemmas	Heidi Christensen, DDS, MS Jung-Wei Chen, DDS, MS, PhD  Mark Estey, DDS
December 4	Street Drugs and their Impact on You, Your Family, and Your Dental Practice!	Harold L. Crossley, DDS, PhD



CE - ASC 2011

February 10	Managing the Complex Dental Patient: An Interdisciplinary Approach The Medically Compromised Patient	Vincent O. Kokich, Jr., DMD, MSD
February 11	Consideration for the Dental Treatment of Diabetic Patients Dental Care for the Pregnant Patient The Art and Science of Dental Management in Patients with Pulmonary Diseases The Big Picture on Neurological Patients	Heidi Christensen, DDS, MS Karen Wells, MD Takkin Lo, MD, MPH, CWSP
February 13	<b>My Patient Wants to Quit Using Tobacco - What Do I Need to Know?</b> A scientific and clinical approach to tobacco-dependence treatment in dental practice.	Brad Cole, MD Hyma Gogenini, PharmD Larry Williams, DDS Lane Thomsen, DDS, MS Linda Ferry, MD, MPH Margie Arnett, MS Daniel W. Giang, MD Travis E. Losey, MD David Swope, MD Dean Sherzai, MD Sarah Uffindell, MD John Leyman, DDS Larry Trapp, DDS, MS Barry Krall, DDS
	<b>31st Annual Anesthesia Symposium</b> Focus on neurological conditions and diseases that routinely appear in patients presenting for dental treatment.	Aladdin Al-Ardah, DDS, MS Juan Mesquida, DDS
February 10	Vertical Ridge Augmentation Prior to Implant Placement The Role of Connective Tissue Grafts in Immediate Implant Placement in the Esthetic Zone Comprehensive Implant Treatment Planning and Sequencing Workshop Management of Complications in Implant Dentistry Is the Platform Switch a More Predictable Abutment Connection? 3D Model and Computer Guided Dental Implant Surgery Techniques for Sinus Augmentation Pontic Design for Ridge Development Implant Complications: Prevention and Management The Perio-Systemic Connection Socket Preservation, What You Need to Know Inter-relationship Between Periodontics and Restorative Dentistry Diabetes and Periodontal Disease Implant Treatment Planning; Principles and Guidelines Treatment Plan Considerations for Worn Dentition Post and Core Materials and Procedures RPD Alternatives Who Caries? Overview of Ceramic Restorative Materials Ceramic Bonding Issues Win the Battle Against Biofilm: Leverage the Power of Ultrasonics Extrusion Cases Tooth Whitening Overview: Clinical and Research Perspectives Minor Equipment Repair Preparing to Sell: Maximize the Value of Your Practice Denture Treatment Issues What in the World is That? A Review of Common Mucosal & Radiographic Lesions Panographic Radiology in a Cone Beam World Apply the Pareto Principle to TMD Care - An 80% Solution	Montry Suprono, DDS, MSD John Won, DDS Yun-Chi Wang, DDS Shuji Yoshino, DDS Aladdin Al-Ardah, DDS Dennis Smith, DDS, MS Chun-Xiao sun, DMD, PhD, MS Craig Ririe, DDS, MS Mohammad Hassan, DDS, MS Adrian Mobilia, DDS  Elham Javadi, DDS Wesam Salha, DDS Robert Walter, DDS Nadim Baba, DMD, MSD Mark Estey, DDS Brian Novy, DDS Ronald Forde, DDS, MS Michael Meharry, DDS, MS Karen Hays, RDH, BS Frederick Berry, DDS Sean S. Lee, DDS Mr. Stan Lillard Bette Robin, DDS, JD Madelyn Fletcher, DDS, MS Lane Thomsen, DDS, MS Dwight Rice, DDS Harold Avila, DDS, MS
February 11	Mandibular Implant Overdenture - Standard of Care? Occlusal Analysis: Look Before You Leap! Endodontic Treatment or Implant. Where Do You Draw the Line?	Fernando Munguia, DDS Myron Winer, DDS Mehrddad Fay, DDS

## CONTINUING DENTAL EDUCATION

<p>All-on-4? An Overview                  Esthetics in Operative Dentistry - Methods and Materials                  Esthetic Communications Issues and Procedures                  Soft Tissue Manipulation Around Implants in the Aesthetic Zone                  Bone Grafting Options for Implant Placement                  Odontogenic Infections and Management                  Surgically Assisted Rapid Palatal Expansion (SARPE)                  Root Canal Therapy: Keys to Long Term Success                  Local Anesthesia for Non-Surgical Endodontic Therapy                  Creative Off Label Methods for Handling Common Endodontic Complexities                  Review of Behavior Management Techniques                  Child Abuse                  Sports Dentistry and Mouthguard Fabrication                  Consequences of Mishandled Trauma: A Case Report                  Management of Hemophilia in the Pediatric Dental Patient                  Ectodermal Dysplasia                  Van Der Woude Syndrome                  How Many Root Canals Are Too Much? Differential Diagnosis for Odontogenic vs. Non-Odontogenic Pain                  Overdentures and Overpartials; Over Teeth and Over Implants</p>	<p>Amir Khatami, DDS                  Carlos Chavez, DDS, MS                  Richard Young, DDS                  Jeffrey A. Elo, DDS, MBA                  Young Jun, DDS, MD                  Chan M. Park, DDS, MD                  Carlos M. Moretta, DDS                  John Pratte, DDS                  Kurt Marcks, DDS                  C. John Munce, DDS                    Bonnie Nelson, DDS                  Mark Massi, MD                  Samah Omar, DDS                  Monserrat Jordan, DDS                  Laura McCormack, DDS                  Meghanne Kruienza, DDS                  Noha Abdel-Salam, DDS                  Susan Roche, DDS, MA                  Robert Handysides, DDS                  Judy Strutz, DDS</p>
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### CE - MaxiCourse 2011

<p>March 10                  March 11                  April 7                  April 8                  April 12                  May 12 - 13                  May 12                    May 13                    May 17                  June 23                    June 24</p>	<p>Literature Review Methodology; Case Preparation Guidelines; Diagnostic Imaging in Implant Dentistry                  Dental Photography                  Prosthodontic Diagnosis Index ACP Classifications                  Diagnostic Data Collection                  Implant Diagnosis and Treatment Planning; CBCT / CT Scan in Implant Dentistry                  Applied Pharmacology: Pain and Anxiety Control; Pharmacokinetics and Clinical Application; Medical Evaluation Guidelines for the Dental Implant Patient                  Dental Implant Live Surgical Demonstration; Review of DVD Work Assignments                  Applied Surgical Anatomy                  Basics in Dental Implant Surgery                  Online Session: Alveolar-Socket Preservation                  At Zimmer Institute - Lecture: Suturing Techniques                  Simulation Lab: Incision/Suture - Maxilla/Mandible                    Simulation Lab: Site Preparation, Implant Placement &amp; Suture                    Simulation Lab: Impression, Soft Tissue Cast, Provisional                    Online Session: Infection Control                  Distraction Osteogenesis in Implant Dentistry                  Predictable Solutions with Implant Overdentures                  Peri-Implant Considerations                  Cadaver workshop                  Advanced Dental Implant Surgery                  Prosthodontic Considerations in Designing Implant Single Crowns and Fixed Partial Dentures</p>	<p>Jaime Lozada, DDS                  Mathew Kattadiyil, DDS, MDS, MS                  Juan Mesquida, DDS                  Mathew Kattadiyil, DDS, MDS, MS                  Myron Winer, DDS                  Jaime Lozada, DDS                    James Rutkowski, DMD                  Jaime Lozada, DDS                  James Rutkowski, DMD                  Jaime Lozada, DDS                  Jaime Lozada, DDS                  Mathew Kattadiyil, DDS, MDS, MS                  Jaime Lozada, DDS                  Chris Etherington                  Toby Sexton                  Jaime Lozada, DDS                  Chris Etherington                  Toby Sexton                  Jaime Lozada, DDS                  Chris Etherington                  Toby Sexton                  Alisa Wilson                  Alan Herford, DDS, MD                  Mathew Kattadiyil, DDS, MDS, MS                  Nicholas Caplanis, DMD                  Matteo Chiapasco, MD, DDS                  Jaime Lozada, DDS                  Mathew Kattadiyil, DDS, MDS, MS</p>
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## CONTINUING DENTAL EDUCATION

July 7	Management of the Buccal Plate; Sinus Grafting Techniques Legal Considerations in Implant Dentistry	Jaime Lozada, DDS Christian W. Johnston, Esq. Shankar Iyer, DDS, MDS
July 8	Basic Concepts in Implant Prosthodontics and Application of Biomechanics in Implant Dentistry Online Session: Pop Quiz in Preparation for the AAID exam	
August 11	Anterior Implant Esthetics Bone, Physiology and Dental Implants	Mathew Kattadiyil, DDS, MDS, MS Joseph Y. Kan, DDS, MS Aladdin Al-Ardah, DDS, MS
August 12	Workshop: Nobel Clinician "All on Four"	Mr. Pat Luntunski Mathew Kattadiyil, DDS, MDS, MS Jaime Lozada, DDS
August 16	Online session: Management of Surgical Complications	Jaime Lozada, DDS
September 8	Hands-on Pig Jaw Workshop: Various incision and suturing techniques. Bone Grafting in Preparation for the Placement of Dental Implants Bone and Soft Tissue Augmentation	Istvan Urban, DMD, MD Jaime Lozada, DDS Mathew Kattadiyil, DDS, MDS, MS Istvan Urban, DMD, MD
September 9	Dentium Implants Workshops: Implant design & implant placement demonstration; DASK demonstration and placement of single implant /lateral approach; Prosthodontic impression techniques Implant Dentistry in a Small Town Benefits of AGD Membership	Ali Vahdati, DDS Jaime Lozada, DDS Mathew Kattadiyil, DDS, MDS, MS
September 13	Online Session: Management of Prosthodontic Complications	Ash Kaushesh, DDS Stephen Lockwood, DMD
October 6	Evaluation of Dental Implant Systems	Mathew Kattadiyil, DDS, MDS, MS
October 7	Utilization of Software Designed Patient-Specific Abutments for Achieving Optimized Outcomes Fixed complete dentures & Occlusion and Occlusal Considerations in Implant Dentistry	Aladdin Al-Ardah, DDS, MS Julian Osorio, DMD, MScD Mathew Kattadiyil, DDS, MDS, MS
October 11	Online Session: Surgical and Prosthodontic Considerations for Tilted Implants Planning Success in Implant Surgery	Chun-I Lu, DDS Jaime Lozada, DDS
November 10	Treatment Planning: Dental Implants vs. Root Canal Therapy	Jaime Lozada, DDS
December 15	Clinical Complications Associated with Endosseous Root Form Implants	Charles Goodacre, DDS, MSD Jaime Lozada, DDS
December 16	Trouble Shooting in Implant Dentistry, Learning from Mistakes	Mathew Kattadiyil, DDS, MDS, MS
<b>CE - Foreign 2011</b>		
April 18 - 22	Advanced Course in Implant Dentistry and Prosthodontics (Spain Group) Advanced Course in Implant Dentistry and Prosthodontics (Singapore Group)	Jaime Lozada, DDS Sergio Cacciacane, DMD
August 8 - 12	Vertical Guided Bone Regeneration Current Techniques for Sinus Grafts and Implant Placement Bone Grafting and Complications Prosthesis Design for Implants Computer/Model Guided Surgery and CBCT Applications Current Concepts Related to Socket/Alveolar Preservation Anterior Implant Esthetics Nobel Guide System Hands-on Workshop	Jaime Lozada, DDS Alan Herford, DDS, MD Charles J. Goodacre, DDS, MSD John Won, DDS Aladdin Al-Ardah, DDS, MS Joseph Y. Kan, DDS, MS Jaime Lozada, DDS





Ronald Secor, MBA, Associate Dean  
Financial Administration

**Financial Administration**

Because of the operation costs of dental clinics, according to the American Dental Association, dental education programs are the most expensive component of any private healthcare teaching institution.

With an ever-increasing faculty and student population, patient load, and staff, the budget of Loma Linda University's School of Dentistry is the largest of any LLU school.

Ron Secor, MBA, associate dean, financial administration, oversees an operation that in 2011 served more than 118,419 patient visits.

Supervised by premier faculty, the clinic programs are a win-win situation for patients and students. Procedures

in the dental clinic benefit patients, where charges fall as much as 40-60% below customary professional rates.

During the fiscal year ending in June 2011 patient visits to the School's clinical programs were distributed as follows:

Undergraduate clinic .....	51,970
Graduate specialty clinics .....	35,075
International Dentist Program .....	12,373
Special Care Dentistry .....	7,714
Center for Dentistry .....	11,287

634 students provided dental care:

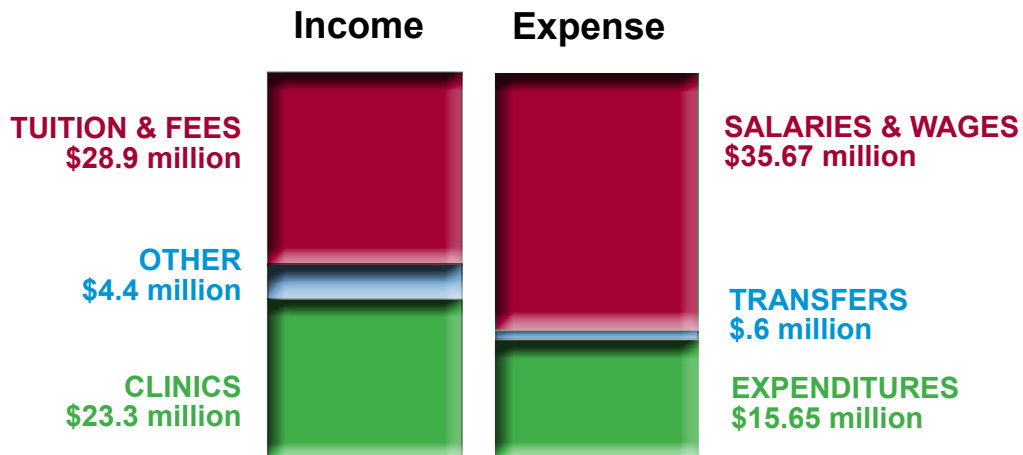
- 487 students in the undergraduate clinic
- 97 students in graduate specialty clinics
- 50 students in the international dentist program.

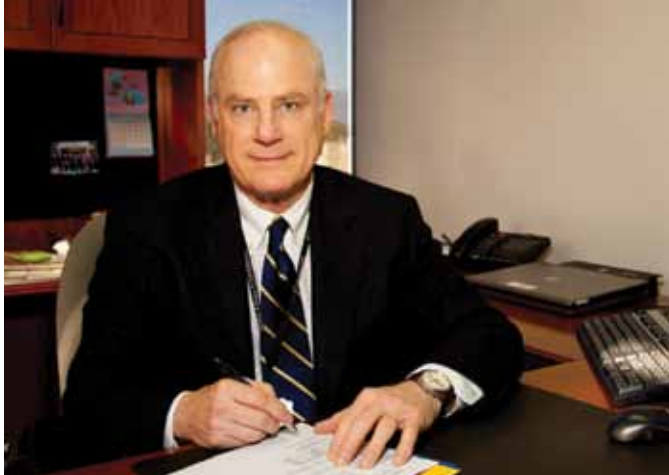
**Faculty and staff**

- 166 full-time faculty
- 218 part-time faculty
- 335 staff

**2010-2011 financial summary**

<b>Income</b>	
Tuition & fees .....	\$28,994,528
Grants & contracts .....	198,088
Other revenue .....	4,391,386
Clinic revenue .....	23,302,213
<b>Total revenue</b>	<b>\$56,886,215</b>
<b>Expenses</b>	
Salaries & wages .....	\$35,671,593
Expenditures .....	15,649,561
Transfers .....	604,076
<b>Total expenses</b>	<b>\$51,925,230</b>





**W. Patrick Naylor, DDS, MPH, MS**  
Associate Dean, Advanced Education

**Office of Advanced Dental Education**

The School of Dentistry offers advanced education in eight (8) separate disciplines, along with three (3) dual-major programs. The dual major options allow students to receive shared credit and complete two three-year programs in an abbreviated curriculum. In addition to a professional certificate, most programs offer an optional master's degree. Dual-major graduates receive a professional certificate in each discipline and also can pursue a master's degree in one area of study. All of the graduate programs begin on July 1 or the first weekday of July.

**Eight advanced education programs**

- Dental Anesthesiology (24 months)—Director: Larry D. Trapp, DDS, MS; Program Secretary: Ms. Lisette Desia
- Endodontics (2 Programs: 27 months, and 36 months-NEW)—Director: Mahmoud Torabinejad, DMD, MSD, PhD; Program Secretary: Ms. Luci Denger
- Implant Dentistry (36 months)—Director: Jaime Lozada, DDS; Program Secretary: Ms. Cynthia Briceno
- Oral Maxillofacial Surgery (2 Programs: 4 years and 6 years (OMS/MD degree)—Director: Jeffrey Dean, DDS, MD; Program Secretary: Ms. Victoria Quihuis
- Orthodontics and Dentofacial Orthopedics (27-months)—Director: V. Leroy Leggitt, DDS, MS, PhD; Program Secretary: Ms. Shauna Gifford
- Pediatric Dentistry (24-months)—Director: Jung-Wei (Anna) Chen, DDS, MS, PhD; Program Secretary: Ms. Rosa Maria Marmolejo

- Periodontics (36-months)—Director: Jeffrey Henkin, DDS, MS; Program Secretary: Ms. Yurisky Jimenez
- Prosthodontics (36-months)—Director: Mathew Kattadiyil, DDS, MDS, MS; Program Secretary: Ms. Robin Mossiah

**Dual-major programs**

- Periodontics and Prosthodontics (up to 5 years in length)
- Periodontics and Implant Dentistry (approximately 4 1/2 years in length)
- Prosthodontics and Implant Dentistry (approximately 4 1/2 years in length)

Four and one-half to five years of study are needed to complete each of the dual-major programs, as opposed to six years if the two programs were taken individually. Applicants must be qualified to meet the admissions criteria of both programs they select. Therefore, they are required to apply to and be admitted to each program in separate admissions processes.

**Two Master's Degree tracks offered\***

The School of Dentistry also offers two graduate degree options for postdoctoral students/residents enrolled in a certificate program: the Master of Science (MS) degree in conjunction with the Faculty of Graduate Studies or the Master of Science in Dentistry (MSD) degree administered by the School of Dentistry.

**Graduate Clinics**

Each of the eight advanced education programs maintains its own graduate clinic. Patients receive care provided by postdoctoral students/residents who have obtained their dental degree and are pursuing additional training in one of the following areas: Dental Anesthesiology, Endodontics, Implant Dentistry, Oral and Maxillofacial Surgery, Orthodontics and Dentofacial Orthopedics, Pediatric Dentistry, Periodontics, or Prosthodontics.

**Quality assurance**

All of the eight specialty programs have developed a quality assurance program. Data have been collected from various sources in an effort to evaluate the care provided, and assess patient experiences, and to identify areas for enhancement.

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\*Note: The MSD degree is not available to students in the Advanced Specialty Education Program in Orthodontics and Dentofacial Orthopedics, and the MS degree is not available to residents in the Advanced General Dentistry Education Program in Dental Anesthesiology.

These programs are continually expanding and refining their QA processes beyond patient surveys to include direct assessment of the actual treatment provided in each discipline.

**Newsletters**

Six of the eight advanced education programs have published several newsletters for alumni and friends or have a newsletter under development. Recently the Dental Anesthesiology program launched its inaugural newsletter, and the Advanced Specialty Education Program in Orthodontics and Dentofacial Orthopedics is soon to release the first edition of its program newsletter. These newsletters allow directors to keep alumni, faculty, and friends more closely connected with the programs and the School of Dentistry. The publications include information and updates regarding recent graduates, incoming postdoctoral students/residents, programs achievements and needs, as well as significant upcoming events.

**Advanced dental education website**

The website for the Office of Advanced Dental Education, located on the School of Dentistry’s homepage under “Graduate Programs,” is constantly updated and refined. Since the last biennial report, photographs have been added to all of the program descriptions. The Advanced Specialty Education Program in Prosthodontics created a video description of its program complete with images of its clinical and laboratory facilities.

**Diversity matriculation**

Loma Linda University School of Dentistry advanced specialty education students matriculate from a diverse world population, as the following list demonstrates.

**Dental school attended (entering 2010)**

Baba Farid University of Health Sciences . . . . .	1
Cairo University . . . . .	1
Case Western Reserve University . . . . .	1
Kaohsiung Medical University . . . . .	1
King Faisal University . . . . .	1
Loma Linda University School of Dentistry . . .	12
Mahidol University . . . . .	1
Mangalore University . . . . .	1
New York University . . . . .	1
Temple University . . . . .	1
University of California, Los Angeles . . . . .	6
University of Missouri, Kansas City . . . . .	2
University of the Pacific . . . . .	2
Universidad Santa Maria . . . . .	1
University of Southern California . . . . .	1

**Advanced education class profiles**

**Entering class of 2010 (graduating 2012 & 2013)**

Total applicants	332
Total accepted	33 (9.9%)
Females	11
Males	22
Average age	31
White, non-Hispanic	16
African-American	0
Asian	11
Hispanic	3
Other	3
Average National Boards	
Part I score	87
Part II score	83
Average GPA	3.45

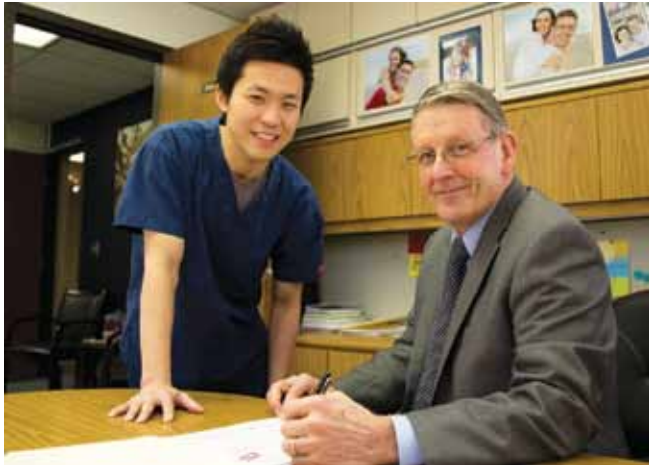
**Entering class of 2011 (graduating 2013 & 2014)**

Total applicants	290
Total accepted	32 (11%)
Females	16
Males	16
Average age	29
White, non-Hispanic	14
Asian/Pacific Islander	13
African-American	0
Hispanic	0
Other	5
Average National Boards	
Part I score	85
Part II score	84
Average GPA	3.48

**Dental school attended (entering 2011)**

Ajman University of Science and Technology . . .	1
Baba Farid University of Health Sciences . . . . .	1
Bangalore University . . . . .	1
Chulalongkorn University . . . . .	1
Creighton University . . . . .	1
Loma Linda University School of Dentistry . . .	14
Oregon Health & Science University . . . . .	1
Shanghai Second Medical University . . . . .	1
Tufts University . . . . .	1
Universitatea Alfonso X El Sabio . . . . .	1
Universitatea De Medicina Timisoara . . . . .	1
University of California Los Angeles . . . . .	1
University of California San Francisco . . . . .	3
University of Colorado Denver . . . . .	1
University of Maryland Baltimore . . . . .	1
University of Southern California . . . . .	1
Virginia Commonwealth University . . . . .	1





**Graham Stacey, PhD, MA, MS**  
Associate Dean, Student Affairs

**Student Affairs**

The Office of Student Affairs exists to ensure that School of Dentistry students have the best possible experience academically, personally, and spiritually. The office personnel make a consistent and conscious effort to be with students where they are or to invite them to spend time with them in the office in order to know them by name and to understand their needs. Here they can expect affirmation of significant personal events and accomplishments (birthdays, weddings, new babies) and find assistance through difficult times of illness or loss.

Student Affairs representation on various School and University committees provides assurance that the students' needs and interests are heard and met. And it communicates the policies and programs of the School and University to the students, helping them realize the positive purpose and effect of professional standards and spiritual values.

**2011 graduate comment:**

*Student Affairs] had the students' best interest in mind and provided a comfortable, safe, enthusiastic environment for students to be heard and understood.*

It is the goal of the Office of Student Affairs to nurture students in a way that builds a foundation for continuing growth beyond the School of Dentistry as they serve others through their profession. The office maintains an active interest in where graduates go in their chosen careers and as human beings.

Gi Sun Kim, dentistry class of 2013, is pictured with Dr. Stacey.

**Activities promoted by Student Affairs**

**Professional standards**

To encourage a higher level of professional integrity, the Student Conduct Committee was renamed the Professional Standards Committee. It now functions with strong student representation.

In addition to this committee, at the suggestion of student leaders working with Dr. Graham Stacey, associate dean for Student Affairs, and in order to maintain a high level of professional accountability, each class now has a student-led committee. This subcommittee is able to handle a large percentage of ethical concerns that may arise.

**Class of 2013 student comments:**

*In order to maintain the standards of a profession, its members must be continually honest in holding both themselves and their colleagues to the highest of ethical standards. As dental students, we must begin to see our fellow classmates as future colleagues, and from this perspective we have an obligation to hold each other to high standards. . . . This is the basis for the formation of the class professional standards committee. We felt that . . . it was our responsibility and obligation to address issues of academic dishonesty at a class level instead of passing the buck to administration.*

**Student financial assistance**

Formed in the 2008-2009 academic year under the direction of the Office for Student Affairs, the structure and function of the Student Financial Assistance Committee has continued to be honed. Because students usually share their financial needs first with Student Affairs, this office oversees the committee. Student Affairs works diligently to help students find assistance as they face challenging financial situations.



Class of 2015 dental students assimilate knowledge in Prince Hall's first floor amphitheater.

**2011 alumnus comments:**

*Ever since I was a child my uncle has inspired me to become a dentist. Being an international student limited my financing options quite a bit, [but] I wasn't going to let anything prevent me from reaching [my goal]. It took a lot of prayer and faith in God and somehow He provided resources for me in moments when I needed them the most. I will always be grateful to the financial committee and alumni of LLUSD for their contribution to [me]. When nothing else seemed to work these people stopped to pray with me and helped me find ways to cover my tuition. Today I am married and am working as an associate dentist in beautiful Coeur d'Alene, Idaho.*

Economic changes have significantly affected availability of financial assistance for students, in particular for dental hygiene and international students. The committee continues to address these challenges. To make the best decisions regarding the students' needs and the finances available, the committee now has additional members including the president of the Alumni Association, the director of development, the Dental Hygiene Department chair, and both the dental and dental hygiene representatives from Loma Linda University's Student Financial Aid Office.

**2011 graduate comments:**

*The day I heard the news [that I had received a memorial fund scholarship] will stay with me for the rest of my life. That day I felt again that God is on my side and that He will help me get through this. That day I recommitted myself to giving back all that I have been blessed with. As much joy as I felt listening to this wonderful news, it will still not be enough compared to the joy I will experience when I will be the one helping someone in need!*



Under the guidance of Edward Ko, SD'85, student clinicians volunteer their clinical services during the 2011 Clinic With A Heart.

**Dental Student Association (DSA)**

The DSA has enthusiastically served the students and School through numerous social activities and service projects.

New students were welcomed each academic year as all celebrated the classes, beginning with the annual DSA barbecue on the lawn. DSA officers with volunteers served food and led out in activities and games.

Mid-autumn found students, faculty, staff, and their family members in the mountains at Pine Springs Ranch for an evening filled with fun and laughter as the classes competed against each other in good-natured games and performances.

**2011 graduate comments:**

*DSA is a wonderful student-run organization that not only encourages comradeship among students but also encourages them to serve the community.*

Among numerous other organized activities, DSA officers provided breakfast, lunch, and snacks for the School's annual Clinic With a Heart when well over 400 volunteer students, faculty, and staff provided a day of free dental care for the needy in the community. Not only did the DSA officers work many hours before the event coordinating and gathering in-kind contributions from various community restaurants and suppliers, but they also provided dental services for those who came to the clinic.

**DSA officers during the 2010-2011 biennium**

**Class of 2010:** Nicholas Marongiu, SD (president 2009/10); Vitalia Borishkevic, SD; Ravinder Gupta, IDP

**Class of 2011:** Landon Libby, SD (president 2010/11); Jeri Swanson, SD, Larina Chu, SD; Michael Hiersche, SD; Stephanie Calvillo, SD; Michelle Rich, SD; Zulema Valdivia-Carbrera, SD



Class of 2010 Dental Hygiene students queue up for their annual pinning ceremony.





LLUSD students read the Dental Pledge during the annual Student Dedication ceremony.

**Class of 2012:** Michael Duvall, SD; Hyuni Lee, SD; Aaron Tenzer, SD

**Class of 2013:** Kevin Prates, SD; Jared Adams, SD; Matt McDonald, SD

**Class of 2014:** Kristen Tayler, DH; Cherestina Boulas, SD

**Professional Organizations**

SA recognized the following professional organization representatives for their time and service on behalf of the School and their class members:

**American Dental Education Association**

Janelle Peterson, SD'10; Ralitza Varlakova, SD'11; Glenn Gregory, SD'12; Melissa Magsipoc, SD'13; Elijah Wang, SD'14

**American Student Dental Association**

Vitalia Borishkevich, SD'10; Adam Burr, SD'11; Michael Flewelling, SD'12; Hyuni Lee, SD'12; Kevin Prates, SD'13; Jason Mashni, SD'13; Jeremy Haines, SD'14

**California Dental Association**

Nicholas Marongiu, SD'10; Scott Arceneaux, SD'11; Vanessa Browne, SD'12; Karen Watanakeeree, SD'13; Aswini Jagadeesh, IDP '10; Varun Vashisht, IDP '11; Jane Kim, SD'14

**Student Members of the American Dental Hygienists' Association**

Jane Kim, '10; Sydnee Helton, '11; Brianna Pickens, '12)

**Awards**

Student Affairs assumed the responsibility to work as part of the awards committee for the 2010-2011 year in the selection and planning process for students to receive awards and scholarships given by various school of dentistry departments and outside entities, such as

the California Dental Association, Delta Dental, and many others, recognizing particular strengths in leadership, academic and clinical skills, service, and whole person care.

Among many prestigious awards and worthy recipients, of special note is the Prince Award, given in honor of LLUSD founding dean, Dr. M. Webster Prince, in recognition of scholarship, leadership, and stewardship qualities. The Prince Award went to Weston Spencer in 2010 and to Donavon Yapshing in 2011.

**DDS/MS Bioethics Dual Degree Program**

The Bioethics faculty in the School of Religion, in conjunction with the School of Dentistry, opened the door for dental students to pursue a dual degree in bioethics and dentistry. At this time, one full scholarship is provided each year for a new student beginning the program. More scholarships may be available in the future.

**Student, SD'13, comments:**

*When I heard of the dual degree program that offered a master's in bioethics, it appealed to me on two levels: first, because I would be able to build on my background in philosophy; and, second, because the recent increase in ethical issues in the field of dentistry is an area of concern to me, and I would like to do something to address this once I enter the field as a professional*

**Senior survey**

Members of every graduating class complete a Student Affairs survey. The valuable insights gathered inform future development of the respective programs as well as reinforce aspects of the program that went well.

**Selected student comments:**

**Critical thinking:** *There was hardly any time when faculty did not challenge my reasoning.*



Second year dental students, Rachel Tanbunan and Peter Park, use sock puppets to teach Honduran children in Valle de Angeles to care for their teeth.





Class of 2010 president, Weston Spencer sports his new dedicatory white coat along with his daughter and son.

**Patient communication:** *With the diversity of patients we learn to communicate with many people.*

**Clinical competency:** *Good feedback from my PAF helped me assess my competency.*

**General:** *Having a fun and cohesive class made my experience all the better. It's wonderful when classmates pull together to help each other.*

*Loma Linda was an incredible, life-changing experience for me.*

Senior surveys also provide feedback about what didn't go so well. Comments indicating that a particular course did not go well or that a clinical instructor was perceived as unfair or harsh also provide necessary corrective feedback to the school.



From left, clockwise: 2011 graduating dental anesthesia residents Chad Tomazin, Jonathan Channer, Jin See Kim, Sonia Kumar, Sue Jean Park, Nolan Korando

In summary, the annual senior surveys provide information, feedback, and opportunities for development.

**Study**

As associate dean for Student Affairs, Dr. Graham Stacey has been pursuing a study that may produce data pertinent to the School's admission process, the dental curriculum, clinical training and National Boards preparation processes, and specialty selections.

One of the challenges for any dental school is to select the best students for its programs. Because most applicants are well qualified academically, it is of interest and benefit to the School to determine what other characteristics inform the decision process.

One potential area of interest is an examination of student personality characteristics, aptitudes, and skills. Identifying students' motivation levels, achievement striving, levels of conscientiousness, and approach to learning, for example, would prove to be instructive.

Analysis of the School of Dentistry database has produced preliminary findings. For example, over the past 10 years, over 54 percent of the students joining the dental classes have demonstrated preferences for practical, tangible, and concrete ways of learning and operating. Others, while in the minority, prefer logical investigation, including conceptualizing and theorizing.

This type of investigation and analysis will aid in curriculum development, teaching strategies, and specialty selection. In other words, understanding dental students from multiple angles or dimensions helps provide the best learning and instructional experiences.

**Future goals for Student Affairs**

- Support a professional practice model in D4 clinic
- Provide job placement service
- Provide ergonomics training – classroom and practical training in lab and clinic

**2010 SD alumnus comments**

*I have truly felt that doors have opened to me because of the education I got at Loma Linda. Many experienced doctors have asked where I graduated from and been impressed with my capabilities early on. Immediately following graduation I was able to secure work in two offices and the transition was seamless to private practice. I attributed this to the experiences I had on clinic and the amazing direction I got from doctors like Dr. Holli Riter and Dr. Parnell Taylor. I love dentistry and the challenges each new patient provides, but it is so rewarding to finish and know I've done something good for them.*



John Leyman, DDS  
Chair

### Department of Dental Anesthesiology and Special Care Dentistry

#### Continuing education at LLU

The Department of Dental Anesthesiology sponsored LLUSD's 30<sup>th</sup> and 31<sup>st</sup> Anesthesia Symposium during the annual alumni conventions in February.

The 30<sup>th</sup> annual program morning lectures focused on endocrinology and systemic inflammatory diseases presented by these members of the University School of Medicine faculty:

- Sigve Tonstad, MD: diabetes
- Lamont Murdoch, MD: thyroid, parathyroid and adrenal gland disorders
- Ed Krick, MD: system inflammatory diseases.

The afternoon session included lectures by these LLUSD faculty:

- John Leyman, DDS: Pharmacology of commonly used medications in dental patients
- Larry Trapp, DDS, MS: New developments in advanced education programs in dental anesthesiology. The dental anesthesia residents presented posters as well as oral case presentations.

The 31<sup>st</sup> annual program focused on neurological diseases. The following presentations were given by faculty of the LLUSM:

- Dan Giang, MD: multiple sclerosis
- Travis Losey, MD: epilepsy

- Dave Swope, MD: Parkinson's
- Dean Sherzai, MD, Alzheimer's
- Sarah Uffindell, MD, strokes

The afternoon session involved rotation through nine different stations in the simulation center for all course participants. This exercise allowed the participants to participate in full scale simulation and to review emergency medications, equipment, and airway management.

#### Dental anesthesiology department curriculum development

The Department of Dental Anesthesiology has continued development and refinement of its simulation education curriculum for both the dental anesthesiology residents and the pre-doctoral dental students. The department also maintained its three-hour, weekly time slot in the simulation center. Two residents rotated through the center each week, experiencing exposure to frequent as well as highly critical, low frequency events in anesthesia patient care. To incorporate the team approach, post anesthesia care unit (PACU) nurses participated in relevant scenarios related to their domain.

Pre-doctoral students enrolled in the departmental honors and teaching assistantships were exposed to simulation education as part of their program. This experience allowed them to experience a variety of medical emergencies in the dental office in a simulated immersive environment.

#### Pre-doctoral curriculum innovations

The pre-doctoral pain and anxiety control course manual and instructional aids continued to evolve. The local anesthesia instructional DVD was improved utilizing animation to better illustrate local anesthesia techniques. The emergency medicine component of the class was completely modified and updated to reflect changing standards and emphasis on defined roles and teamwork. Currently, the honors and teaching assistantship programs accept twelve third-year and thirteen fourth-year dental students. Besides learning advanced local anesthetic techniques and pharmacology, the students provide clinical instruction in the pain and anxiety control class to the second year dental students.

#### Contributions to training in the predoctoral curriculum

The Advanced Education Program in Dental Anesthesiology has contributed to the Emergency



Prince Hall's north facing entrance to the Koppel Special Care Dentistry Center



An operating room in the Koppel Special Care Dentistry Center



A young special needs patient holds the hand of a care provider before sedation and treatment.

Airway Management Training of the predoctoral dental students by means of providing one-week clerkships in dental anesthesiology. The students experience hands-on management of the unconscious dental patients treated at Koppel Special Care Dentistry Center (KSCDC). In addition, they receive experience in establishing intravenous access by means of placing indwelling intravenous catheters. Clinical pharmacology of intravenous general anesthetics and sedatives are reinforced during the clerkship.

Dental students from other dental schools throughout the United States have also elected to do clerkships at KSCDC. Clerkships are offered to the students in the third or fourth year of dental school. Ten students participated in the program in 2010; 15 came for the clerkship in 2011.

#### Student achievements

Lisa Gortari, Bryan Horgan, and Stuart Seheult completed the Dental Anesthesiology Honors Program in 2010. Adam Burr, Larina Chu, David Green, Daniel Guindi, Albert Kang, and Unyong "Estella" Kim completed the Honors Program in 2011.

Admission to the honors programs requires upper third class standing, on schedule clinical competency, and consistent demonstration of exemplary personal and professional integrity.

#### Professional presentations 2010 / 2011

Krall B. Alternate IV techniques to propofol. ASDA Review course, Newark, NJ, September 2010.

Krall B. Local anesthetic update. San Diego Odontic Study Club, May 2011.

Krall B. Medical emergencies in the dental office. Medical/Dental Retreat, Leoni Meadows, California, August 2011.

Krall B. Medical emergencies in the dental office. Jerry Pettis Memorial Veterans Hospital, GPR residency, September 2011.





Loma Linda University's Centennial Pathway comprises a calendar, with 365 pavers representing each year of Loma Linda's service. Each row of pavers marks a month and every 12 rows indicates a new year. The Pathway begins at Magan Hall with the year 1905, continues down the north central mall of the campus toward the Centennial Complex, and ends at Stewart Street with the year 2009.

Historical markers that commemorate major events or milestones in the University and Medical Center's history are embedded in the Pathway as are leadership markers that represent our presidents and the deans of our various schools. The Pathway is intended as a reminder not only of God's leading in Loma Linda's history, but also of the thousands of people whose lives have been touched and mingled meaningfully with the history of the University and Medical Center.





**Kristi Wilkins, MA, BS**  
Chair

**Department of Dental Hygiene**

**Long-time administrator mourned**

Just months after featuring Violet Bates in a phone conversation during its 50<sup>th</sup> year anniversary celebration, members of the dental hygiene program mourned the death of Mrs. Bates, 90, who created the dental hygiene program in 1960 “from scratch” and administered it until 1982.

**Associate degree program in Coachella Valley**

LLUSD opened a new Dental Hygiene Associate Degree program in Coachella Valley fall quarter 2011, matriculating eight students, five from the College of the Desert. A teaching staff of seven, including a half-time dentist and board-certified hygienists, is providing seven quarters of dental hygiene science and clinical training. The program is coordinated by Janeen Duff, DH’81, MS.

**Kristi Wilkins, DH’80, MA**, oversaw development of the program, which will offer this eastern desert community, where 30 percent of the children live below the poverty line, increased access to dental care. A dental clinic offering care to under-served groups will be part of the program. Students completing the first six quarters of dental hygiene education will be eligible to sit for the National Dental Hygiene Board; at the end of the seventh quarter they can sit for the clinical state and/or regional licensing examinations, anticipating entrance into a profession that enhances availability and quality of oral health care.

A proposal submitted by Jonelle Stephens, DH’69, EdS, MS, and Kris Wilkins, DH’80, MA’02, to the American Recovery and Reinvestment Act Equipment Grant to Enhance Training for Health Professionals was awarded in 2010. The \$296,397 award from the Department of Health and Human Services Health Resources and Service Administration supports the training facilities clinic and

sterilization areas, making possible the provision of dental hygiene education and preventive oral hygiene care.

**Alumna of the Year**

**Leslie Nazaroff, DrPh, DH’90**, the Dental Hygiene Alumnus of the Year in 2010, was honored for her devotion to educational pursuits, notably first as a full time teacher in LLUSD’s periodontics department and later as administrator of the San Joaquin Valley College dental hygiene program.

**Darlene Cheek, DH’71, MPH**, received the 2011 Alumna of the Year Award for her role as “an outstanding dental hygienist and alumna who has served her community, our profession, and hundreds of students so well during her 40-year tenure.” Ms. Cheek recently served for two years as president of the Tri-County Dental Hygienists’ Society, and most recently as trustee to the California Dental Hygiene Association and the American Dental Hygiene Association.

**Alumna introduces dental hygiene in Hangzhou**

In mainland China, a country where more than 90 percent of the adults have periodontal disease and 98 percent receive no periodic exams and cleanings, dental hygiene services are underway for the first time.

Sir Run Run Shaw Hospital began in 2009 a collaboration with Loma Linda University to introduce a dental hygiene program at its dental clinic. Leslie Arnett, DDS, MS’69, professor of periodontics, and his wife Linda, dental hygienist, who made two extended visits to China to help initiate the program, went again in March 2011 for the final clinical evaluation of the program’s first graduates.

The two-year program, modeled on LLUSD’s dental hygiene curriculum, had these variations: lectures and clinical training were conducted at noon and after normal work hours; all lectures, educational materials and clinical training were translated by Chinese interpreters; instruction included English dental terminology to facilitate treatment of foreign patients; clinical training included no local anesthesia, soft tissue curettage, sealants, or N<sup>2</sup>O.

In 2011, the 15 dental assistants enrolled in the program completed the didactic program by passing all course work at a competency level modeled to meet California licensure requirements. Media coverage increased the knowledge of dental hygiene in Hangzhou and Zhejiang province.

**Faculty activity**

**Jonelle Stephens, DH’69, MS**, professor, was cited for 40-plus years of teaching and guiding pre-doctoral and dental hygiene students with their annual research reports,



The eight members of the initial (2013) class of LLUSD's new Dental Hygiene Associate Degree program that opened in Coachello Valley for the fall quarter of 2011.

received the 2011 School of Dentistry Distinguished Research Award at the 2011 commencement.

**Michelle Hurlbutt**, RDH, MS, assistant professor, accepted appointment in 2010 as chair of the Dental Hygiene Committee of California. This state board issues, reviews, and revokes licenses as well as developing and administering examinations.

**Janeen Duff**, DH'81, MS, assistant professor, assumed duties as Tri-County's Dental Hygiene president in 2010.

**Darlene Armstrong**, DH'71, EdD, MA, RDHAP, completed her doctoral studies, defending her thesis at Azusa University in December 2011. The thesis, *Embracing Strengths in Health Professions: It Makes a Difference*, explored the impact of health professional educators' use of strengths in educational settings as identified by the Clifton Strengths Finder instrument.

**Colleen Whitt**, DH'79, MS, assistant professor, a five-year veteran in the junior and senior clinics, became the senior clinic coordinator in September 2011.

### Student performance 2010

Jana Nation and Cassandra Pace each received a \$5,000 scholarship created in the memory of Amy Feldkamp-Jacobson, DH'97, by her classmates.

At the close of the 2010 school year, dental hygiene students had contributed 3,800 hours of local service learning; 13 went on international trips.

Karissa Clark, senior dental hygiene student, received the Student of the Year Award at the 2010 alumni dental hygiene luncheon.

Angela Wakefield received the Student of the Year Award at the 2011 dental hygiene luncheon.

Three students completed the BSDH program online in 2010. Matriculating with Associate in Science or dental hygiene certificates, these students pursued two to three courses each quarter, meeting online one or two evenings per week. Eight faculty participated in program.

### Student performance 2011

Four student research groups made presentations at the 2011 California Dental Association convention. Taking first place with "Measuring concentration effect of xylitol" were Dulce Zavala, Erika Nelson, and Angela Wakefield.

For the fifth consecutive year, 100 percent of the senior dental hygiene students passed the National Boards for Dental Hygiene Education. Ten of the 39 students earned a score one standard deviation above the norm, thus qualifying for academic achievement scholarships.

Three students—Cynthia Gutierrez, Chris Chu, and Angela Wakefield—each received a \$2,000 Amy Feldkamp-Jacobson scholarship at the 2011 dental hygiene pinning ceremony.

Dental hygiene students contributed 7,200 service learning hours during the biennium, and participated in 11 international trips that included Jamaica, Ethiopia, Nicaragua, and Bangladesh. They also participated in clinical rotations at five off-campus sites.

### Faculty presentations 2010 / 2011

**Wilkins K, Whitt C, Cheek D, Wilkins R, Stephens J.** Use of a grading rubric to evaluate research abstracts. *Abstract*, International Association for Dental Research and the American Association for Dental Research, Washington, DC, March 3-6, 2010.

**Hurlbutt M.** Demystifying calcium phosphate therapy. Dental Hygienists' Association (DHAA) of Australia national meeting, Darwin, Australia, July 2-3, 2010.

**Hurlbutt M.** Patient natural product use (herbal and dietary supplements). Lectures for dental hygienists, dental therapists, and oral health therapists. Sponsored by 3M ESPE, which provides annually a US educator an Australian tour with 2011 marking the first time the 3M ESPE sponsored a dental hygiene educator at sites in Perth, Western Australia; Melbourne, Victoria; Sydney, New South Wales; and Brisbane, Queensland, June 27-July 19, 2011.

### Faculty publications 2010 / 2011

**Hony JM, Gadbury-Amyot CC, Overman PR, Wilkins K, Petersen F.** Academic integrity violations: A national study of dental hygiene students. *J Dent Educ.* 2010 Mar;74(3):251-60.

**Hurlbutt M, Bray K, Mitchell TV, Stephens J.** California dental hygienists' knowledge, attitudes and practices regarding herbal and dietary supplements. *J Dent Hyg* 2011;85(4):285-96.



## Dental Hygiene Student Awards

Award	2010	2011
Bates Award	Berenice Briseño	Rebecca McCluskey
California Dental Hygienists' Association Outstanding Leadership Award	Jane Kim-Moon	Sydnee Helton
Clinician's Award	Allie McEowen	Beau Snyder
Colgate STAR Award	Katieanne George	Rachel Morris
Dean's Award	Angelina Llopis	Raylin Dahlke
Dental Hygiene Academic Excellence Award	Berenice Briseño	Raylin Dahlke
	Karissa Clark	Danae Davis
	Katieanne George	Ashley Egetter
	Kayla Knutson	Merissa Garcia
	Lisa Kwon	Cynthia Gutierrez
	Angelina Llopis	Erika Nelson
	Cassandra Pace	Caroline Schneider
	Lindsay Richards	Brooke Shibata
	Katie Savage	Beau Snyder
	Rebekah Schomburg	Angela Wakefield
	Stacy Stroup	
	Larysa Volynets	
	Kristen Willard	
	Jana Nation	Danae Davis
Klooster Humanitarian Award	Katieanne George	Rebecca McCluskey
Middleton Award	Kirsten Tayler	Christopher Chu
Mitchell Award	Lauren Stewart	Ashley Egetter
Preventive Dentistry Award for Research	Stacy Stroup	Suzanne Finch
		Cynthia Gutierrez
		Sydnee Helton
Tri-County Dental Hygienist's Society Award	Kirsten Tayler	Angela Wakefield
Student of the Year Award	Karissa Clark	Brooke Shibata
Western Society of Periodontology Award	Larysa Volynets	Christopher Chu
Service Learning Award	Jacqueline Quiroz	Raylin Dahlke
Sigma Phi Alpha Award	Karissa Clark	Beau Snyder
	Kayla Knutson	Cynthia Gutierrez
	Angelina Llopis	Angela Wakefield
	Rona Sung	
American Association of Public Health Dentistry	Larysa Volynets	Jinwoo Pak
David Lee Anderson Scholarship Endowment		Rebecca McCluskey





**Robert Handysides, DDS**  
Chair

**Department of Endodontics**

**Faculty activity 2011**

**Leif K. Bakland, SD'63**, has continued on a part-time basis as the Ronald E. Buell Professor of Endodontics, with primary teaching activities at both the predoctoral and advanced education levels. Additionally, he lectured on dental trauma in many countries as well as in the United States. Among his professional involvements outside the School he has served as executive director of the International Association of Dental Traumatology.

**Steve Morrow, SD'60, MS'87**, was appointed to the Dental Board of California in 2010. A member of the department of endodontics since 1981, Dr. Morrow has served as director of patient care services and clinical quality assurance since 2000.

**Bonnie J. Retamozo, SD'05, MSD'09**, joined the department of endodontics in 2010 along with a part-time position as an endodontist in the dental department at the Jerry L. Pettis Memorial Medical Center, Loma Linda.

**David Jaramillo, DDS**, associate professor of endodontics and clinic director of endodontics, has been very busy mentoring dental students in table clinic projects and conducting research on endodontic irrigation solutions. Dr. Jaramillo pursued a busy schedule during the biennium lecturing and translating at professional meetings in Florida, New York, Texas, Mexico, Ecuador, and Italy, as indicated in the departmental entry.

Interspersed with his administrative and teaching duties, Robert Handysides, SD'93, PG'01, chair of the

department of endodontics, represented LLUSD and his department by invitation at the American Association of Endodontic chair's meeting in Chicago, presenting a lecture on exploration of shifts in multi-generational faculty, August 20, 2010.

On November 15-18, 2010, Dr. Handysides delivered continuing education lectures to dentists in Jakarta, Indonesia, and attended the Quest for Quality Professional convention, sponsored by the Health Ministries Department of the General Conference to improve all the health-related care institutions in the Southern Asia-Pacific area.

Dr. Handysides also added to his calendar in August 2011 a three-year pursuit of a doctorate in education at the University of California. His objective is to enrich educational strategies employed in dental education.

**Mahmoud Torabinejad, DMD, MSD, PhD**, professor and director of the Advanced Specialty Education Program in Endodontics, introduced a 36-month program emphasising implant dentistry. (For details see page 79.)

**Visiting scholars**

**HanTang Sun, DDS, MSD, DScM** from the Fourth Military Medical University, Xi'an, China, spent a six-month fellowship (July to February 2012) pursuing research and studying with Dr. Yiming Li.

**Abbasoli Kademi-Moughari, DMD, MS**, professor and dean of Isfahan Dental School, Isfahan, Iran, visited the department in April 2010 and July 2011.

**Student honors**

Weston Spencer completed the Endodontic Department's Honors Program in 2010. Admission to the program requires an upper third class standing, on schedule clinical competency, and consistent demonstration of exemplary personal and professional integrity.

Dr. David Jaramillo mentored three students—Jun Yoon Chang, Dongjin Sah, and Michelle Shin—who placed first in the 2011 Student Research Presentations, laboratory category in March 2011. Their topic: "A comparison study: The sealing properties of mineral trioxide aggregate and root repair material."

**Faculty presentations 2010**

**Jaramillo D.** Surgical and non-surgical retreatment and single tooth implant. 9<sup>th</sup> Biennial Buell Symposium, Loma Linda, California, January 17, 18, 2010.

**Jaramillo D.** Latest in irrigation and canal disinfection. LLUSD Alumni Student Convention, Loma Linda, California, February 5, 2010.

**Jaramillo D.** Head of Scientific Commission and conference translator, English to Spanish. International Endo meeting, Guanajuato Endodontic College, Guanajuato, Gto., Mexico, February 11-13, 2010.

**Jaramillo D.** Passive ultrasonic irrigation SEM. Long Beach VA hospital endodontic residents, March 10, 2010.

**Bakland LK.** Trauma and root resorption. Board Review. College of Diplomates, American Board of Endodontics, New York, New York, March 12, 2010.

**Jaramillo D.** Participant and observer, WREB examination. Nova Southeastern University, Fort Lauderdale, Florida, March 12, 13, 2010.

**Bakland LK.** Traumatic dental injuries. Chinese American Dental Society of Southern California, Los Angeles, California, March 28, 2010.

**Bakland LK.** Dental trauma, pulp therapy, and MTA. California Society of Pediatric Dentistry. Cancun, Mexico, April 11, 2010.

**Bakland LK.** Tooth infraction: A diagnostic and treatment planning problem. The American Association of Endodontists Annual Session, San Diego, California, April 15, 2010.

**Jaramillo D.** Microbiological aspect of root canal failures. Universidad Cuauhtemoc, Puebla, Mexico, May 6, 2010.

**Jaramillo D.** Passive ultrasonic technique: an SEM and confocal study. University of Buffalo advanced program in endodontics, June 17, 2010.

**Bakland LK.** The use of MTA in dental trauma. International Association of Dental Traumatology, World Congress, Verona, Italy, July 10, 2010.

**Bakland LK.** Mistakes in handling traumatic dental injuries. Cracked teeth and their management. Leoni Meadows Medical/Dental Retreat, Leoni Meadows, California, August 5-6, 2010.

**Handysides R.** Shift of multi-generational faculty. AAE Chairman's Meeting, Chicago, Illinois, August 20, 2010.

Andreasen JO, **Bakland LK**, Andersson L. Oral traumatology for dentists. Beijing Stomatological Hospital, Beijing, China, September 1-3, 2010.

**Jaramillo D.** Eight-hour lecture for endodontic residents. Universidad Autonoma de Baja California School of Dentistry, Tijuana, Mexico, September 3, 2010.

**Jaramillo D.** Eight-hour lecture for endodontic residents. Universidad Autonoma de Baja California, Facultad de Odontologia, Mexicali, BCN, September 28, 2010.

**Jaramillo D.** Root canal microbiology: Presence of Biofilm inside the root canal system, root canal anatomy and rotary instrumentation of the root canal system. CFAM Dental meeting, Morelia, Michoacan, Mexico, October 15, 2010.

**Jaramillo D.** New technology in root canal irrigation. Sociedad Jalisciense de Endodonca, 29<sup>th</sup> Reunion Regional de Endodoncia 2010. Guadalajara, Jalisco, October 22, 23, 2010.

**Handysides R.** Innovations and updates in endodontics. Quest for Quality, Jakarta, Indonesia, November 15, 2010.

**Handysides R.** Generational differences that influence the implementation of change. Dental emergencies. Quest for Quality, Jakarta, Indonesia, November 16, 2010.

**Handysides R.** Restoration of endodontically treated teeth. Quest for Quality, Jakarta, Indonesia, November 17, 2010.

**Handysides R.** Managing the endodontic emergency patient. USC 9<sup>th</sup> International Endodontic Symposium, Los Angeles, California, November 19, 2010.

**Bakland LK, Baba N, Hung Y-L.** Update on dentistry. SRRSH 5<sup>th</sup> Academic Week. Hangzhou, China, November 20-22, 2010.

**Bakland LK.** The problem of cracked teeth and root resorption. Anchorage Dental Society, Anchorage, Alaska, November 29, 2010.

**Handysides R.** Generational differences that influence the implementation of change. Adventist Risk Management Inc. Via Go-To-Meeting, Victoria, B.C., Canada, December 13, 2010.

**Faculty presentations 2011**

**Bakland LK.** Root resorption. Houston Academy of Endodontics, Houston, Texas, January 20, 2011.

**Jaramillo D.** Mentor, endodontic resident research project, Effectiveness of passive ultrasonic irrigation of the root canal system, Tijuana, BCN, Mexico, January 23, 2011.

**Bakland LK.** Pulpal complications and infection-related root resorption. MTA in dental traumatology. UAE International Dental Conference, Dubai, United Arab Emirates, February 1, 2011.

**Handysides R.** How many root canals are too much? LLUSD Alumni Association, Loma Linda, California, February 11, 2011.

**Handysides R.** Inter professional collaboration in your dental curriculum. ADEA presentation, San Diego, California, March 14, 2011.

**Bakland LK.** Trauma and root resorption. Board Review. College of Diplomates, American Board of Endodontics and Columbia University College of Dentistry. New York, New York, March 15, 2011.

**Bakland LK.** Dental trauma: Common mistakes in the management of traumatic dental injuries. UCFS Research Day, San Francisco, California, March 18, 2011..

**Bakland LK.** Dental traumatology. Colegio de Cirujanos Dentista del Estado de Oaxaca, Oaxaca, Mexico, March 30-April 3, 2011.

**Jaramillo D.** Microbiological implications in endodontic and dental implant failures. American Association of Endodontics, San Antonio, Texas, April 13, 2011.

**Bakland LK.** Frequent mistakes in the management of traumatic dental injuries. American Association of Endodontists Annual Session, San Antonio, Texas, April 15, 2011.



**Jaramillo D.** CB SCT scan study in human cadaver in the effectiveness of passive ultrasonic irrigation technique. Center for Dental Research Committee, April 20, 2011.

**Bakland LK.** Infractions and vertical root fractures. Frequent mistakes in the management of dental injuries. 33<sup>rd</sup> Asia-Pacific Dental Congress, Manila, Philippines, May 4-5, 2011.

**Jaramillo D.** Head, scientific commission and conference translator English to Spanish. 15th International Endo meeting, Guanajuato Endodontic College, Guanajuato, Gto., Mexico, May 26-28, 2011.

**Handysides R.** Generational differences that influence the implementation of change. Adventist Risk Management convention, Victoria, British Columbia, Canada, September 12, 2011.

**Jaramillo D.** Chairperson, scientific session, and lecturer in two sessions: Microbiological implications of root canal treatment and dental implant failures; Latest in root canal irrigation: Passive ultrasonic irrigation, laser (PIPS), an update. 15th European Society of Endodontology meeting, Rome, Italy, September 14-17, 2011.

**Bakland LK.** Infractions and vertical root fractures. Faculty of Dentistry, Kuwait University, Kuwait, September 27, 2011.

**Jaramillo D.** Passive ultrasonic irrigation SEM, USC Advanced Program in Endodontic, October 4, 2011.

**Handysides R.** Endodontics Sir Run Run Shaw Hospital in Hangzhou, China, October 20, 21, 2011.

**Handysides R.** Back to the basics: Principle in endodontic instrumentation. Sir Run Run Shaw, Hangshon, China, October 20, 2011.

**Handysides R.** Endodontic mishaps: Why bad things happen to good people. Sir Run Run Shaw, Hangshon, China, October 20, 2011.

**Handysides R.** Restoration of endodontically treated teeth. Sir Run Run Shaw, Hangshon, China, October 21, 2011.

**Handysides R.** Endodontic dental emergencies. Sir Run Run Shaw, Hangshon, China, October 21, 2011.

**Jaramillo D.** Root canal microbiology: Presence of Biofilm inside the root canal system, root canal anatomy and rotary instrumentation of the root canal system. 25th meeting of the Academia de Especialidades Odontologicas del Norte A.C., Cd. Juarez, Mexico, October 28, 2011.

**Jaramillo D.** Head, scientific commission and conference translator English to Spanish. Sociedad Jalisciense de Endodonca, 30<sup>th</sup> Reunion Regional de Endodoncia, Guadalajara, Jalisco, November 3-4, 2011.

**Handysides R.** Management of the endodontic emergency patient. Klooster Symposium, Loma Linda University School of Dentistry, Loma Linda, California, November 13, 2011.

**Jaramillo D.** Asociacion de Endodoncistas de Pichincha. I. Congreso Internacional de Endodoncia y Odontologia Restauradora. Universidad San Francisco de Quito, Quito, Ecuador, November 24-26, 2011.

**Faculty publications**

**Jaramillo D, Rosa R, Angelov N.** Dental trauma: Case scenario protocol for dentists. Macedonian Journal of Medical Sciences 2010 3(1):61-67.

**Retamozo B, Shabahang S, Johnson N, Aprecio RM, Torabinejad M.** Minimum contact time and concentration of sodium hypochlorite required to eliminate Enterococcus faecalis. J Endod 2010 Mar;36(3):520-3.



Luci Denger, senior administrative assistant; Shannon Kokanour, administrative secretary; Debbie Catino, clinic manager; and Dr. Handysides.



Heidi Christensen, DDS, MS  
Chair

Department of Oral Diagnosis,  
Radiology and Pathology

**Transitions**

The Department of Oral Diagnosis, Radiology, and Pathology saw a major transition in 2011 with the retirement of long-time chair, Lane Thomsen (SD'65, MS'74). Dr. Thomsen served two separate 10-year terms as department chair during his 41 years of service at the School of Dentistry. Heidi Christensen, SD'83, MS, associate professor, was appointed chair of the department in October 2011. Since beginning her tenure at LLUSD in 1992, she has served as director for numerous courses in radiology and oral diagnosis. Dr. Christensen also served as chair of the Department of Oral Diagnostic Services at Meharry School of Dentistry from 2006-2008.

**Hilbert Lentz**, SD'57, MS'70, assistant professor and a member of the School's first dental class, retired in 2011. During his 31 years of faculty service at LLUSD, Dr. Lentz screened, examined, and diagnosed thousands of new patients and worked with hundreds of students.

**Heidi Kohltfarber**, SD'03, assistant professor in the department since 2003, is expected to complete her three-year master of science degree in oral and maxillofacial radiology at University of North Carolina, Chapel Hill, in 2012. She plans to continue her studies at UNC for one more year as she works on her doctorate in diagnostic imaging, which will be granted through Kings College, London. In addition to her studies, Dr. Kohltfarber is in charge of a radiology truck that provides panoramic and intraoral radiographic services for patients seen at the

North Carolina Missions of Mercy portable free dental clinics. Dr. Kohltfarber expects to return to LLUSD in the summer of 2013.

**Ali Makki**, DDS, now treats facial pain patients in the Loma Linda Faculty Practice Neurology Department while retaining an adjunct faculty appointment in ODRP.

Audrey Hamrick Mojica, SD'08, returned from maternity leave in 2010 and now is course director for both second-year courses in patient assessment and treatment planning.

**Belen Giordano Geach**, SD'05, joined the department after completing her master of science degree in craniofacial pain at Tufts University School of Dental Medicine in May 2011. In addition she recently completed a preceptorship in orofacial pain and sleep disorders at UCLA School of Dentistry. Dr. Geach has previously served as a primary attending faculty in the pre-doctoral clinic.

**Erin Richards Stephens**, SD'10, assumed a faculty assignment a month after graduation. In addition to working with students in oral diagnosis and restorative dentistry, she teaches the Introduction to Dentistry course to the first year dental students.

**Scott Smith**, SD'09, assistant professor, joined the ODRP faculty in 2011. In addition to working with students in oral diagnosis, he continues to teach restorative dentistry.

**Perry Burtch**, SD'89, assistant professor, also joined the ODRP faculty in 2011. In addition to working with students in oral diagnosis, he continues to supervise students as they provide dental services in LLUSD's mobile dental unit and in their clinic groups.

**Tobacco dependence education**

Launched in 2008, LLUSD's tobacco education program was well underway by 2010. The curriculum has been expanded to eight hours of content for dental students and four hours of content for dental hygiene students, which has been incorporated into existing, related didactic courses.

Dr. Graham Stacey, associate dean, Office of Student Affairs, Margie Arnett, assistant professor, Dental Education Services, and ODRP faculty—Drs. Heidi Christensen, Zina Johnston, Lincoln Edwards, and Oliver Hoffmann—provided the new curriculum and lectures.

Dental professionals and second and third-year students attended an all-day symposium, "My Patient Wants to Quit Using Tobacco: What Do I Need to Know," in

February 2010 and again in February 2011. Joining LLUSD faculty lecturers was Capt. Larry Williams, DDS of the US Navy, Portsmouth Virginia, who presented “Dental Skill Set for Detection, Prevention, and Treatment.”

**Faculty honors**

**Susan Richards**, SD’84, associate professor, received the Teacher of the Year Award at commencement in 2010. She was cited for her proficiency in presenting pathology, a topic usually considered intimidating and difficult, in an interesting, well-organized, and effective style. Dr. Richards was also recognized in 2010 as the Honored Alumna of the Year for the College of Arts and Sciences of La Sierra University in Riverside, California.

A fitting capstone to Dr. Thomsen’s teaching career came when he was named LLUSD Teacher of the Year in 2011. He achieved this honor while offering more courses in the predoctoral curriculum and teaching more hours than any other faculty.

**Neal Johnson receives Dr. Arthur A. Dugoni Faculty Award**

**Neal Johnson**, PhD, SD’08, associate professor, became the 2011 recipient of the \$5,000 annual Dr. Arthur A. Dugoni Faculty Award established by the California Dental Association. The award recognizes notable contributions and creative activities of California dentistry educators. A native of Barbados and the first person in his family to earn a college education, Dr. Johnson taught medical technology at his alma mater, Northern Caribbean University, before completing a microbiology and molecular

genetics doctorate at Loma Linda University. Joining the LLUSD faculty to teach microbiology, immunology, and pathology, Dr. Johnson simultaneously enrolled as a first-year dental student, graduating with the class of ’08.

**Faculty activity**

**James Trott**, SD’82, continues to provide dental care at the SAC-Norton clinic in San Bernardino and now also supervises dental students as they provide dental services at the Assistance League in Redlands.

**Dr. Lane Thomsen** joined Patrick Naylor, DDS, MPH, MS, associate dean, Advanced Education, in a historic visit to the Democratic People’s Republic of Korea in February 2010. Drs. Thomsen and Naylor also shepherded through customs donated equipment and materials in three footlockers, two large boxes, four suitcases and a duffle bag. Initiated by Franklin Graham of Samaritan’s Purse, the two-week visit featured formal lectures on a wide variety of topics attended by dental faculty, staff, and students at Pyongyang Medical University Hospital.

**Dwight Rice**, SD’96, negotiated acquisition of two small to medium field cone beam machines at negligible or zero cost to the dental school. A Kodak 9000 CBCT unit was placed in the future Innovation Clinic, where it is to be used for patient screening and high resolution imaging for implant, endodontic and other procedures. A Morita 3DE CBCT unit has been placed in the Urgent Care Clinic, and is being used to improve diagnosis of difficult endodontic cases, as well as other dental images that require high resolution while producing low radiation dose to the patient. In 2011, Dr. Rice established a 3D imaging service to accommodate outside patient referrals from community dentists.

**Dr. Rice**, Dr. Christensen, Dr. Kohltfarber and Carol Sorrells (Radiology Clinic Supervisor) were instrumental in the replacement of round collimation with rectangular collimation in the Radiology Clinic in order to improve image quality and significantly decrease patient radiation exposure.

**Dr. Christensen** served as president of the Loma Linda University Chi Chi Chapter of the Omicron Kappa Upsilon Dental Honor Society for the year 2010-2011.

**Dr. Neal Johnson** accompanied members of the Class of 2013 to Honduras for a mission trip during both spring and fall breaks of 2011. He serves as the supervisor for the class of 2013 class project that has adopted a dental clinic in Valle de Angeles, Honduras.



Dr. Christensen and Dr. Thomsen share a transitional handshake.



**Dr. Neal Johnson** was elected chair of the School's Faculty Council for 2011-2013, and appointed to Loma Linda University's Faculty of Graduate Studies. Dr. Johnson was also made chair-elect for the ADEA Biochemistry, Microbiology and Nutrition Section for 2011.

#### Student research awards

**Dr. Neal Johnson** mentored the following three students who took first place in the 2011 School Research Presentations, laboratory category: Vanessa Brown, Mike Flewelling and Mark Wierenga. Their topic, "Sterilization of healing abutment and impression copings: A cost benefit analysis," placed first at the CDA Research Competition, second at the ADA/DENTSPLY Student Research Competition, and they were invited speakers at the American Association of Oral Biology meeting in 2011.

**Dr. Heidi Christensen** mentored the following three students who took first place in the 2011 School Research Presentations, educational category: Josh Renk, Nyeland Newel, and David Westerhaus. Their topic was: "Learning axiUm: Facilitating the Transition from Classroom to Clinic." This group went on to win third place at the California Dental Association.

**Drs. Dwight Rice, Susan Richards, Susan Roche, Neal Johnson and Heidi Christensen** mentored, among them, ten third-year dental student or dental hygiene student research groups in 2010 and 2011.

**Dr. Rice** was on the research committees for two graduate students and Dr. Christensen for one student in 2010 and 2011.

#### Faculty presentations

**Richards S.** Review of common, and a few not-so-common, jaw lesions. LLUSD Alumni Convention, February 4, 2010.

**Rice D.** Evaluating and troubleshooting intraoral and panoramic radiographs. Loma Linda University School of Dentistry, April 2010.

**Richards S.** Oral pathology—bony lesions. Annenberg Center for Health Sciences at Eisenhower Medical Center, Rancho Mirage, California, April 7, 2010.

**Rice D.** Panorgraphic radiology in a cone beam world. Loma Linda University School of Dentistry, August 2010.

**Christensen H.** The medically compromised patient: Considerations for the treatment of diabetic patients. Loma Linda University School of Dentistry Alumni Convention, February 2011.

**Rice D.** Panorgraphic radiology in a cone beam world. Loma Linda University School of Dentistry Alumni Convention, February 2011.

**Johnson N.** McClean L, Edwards LP. Hibiscus Sabdariffa induces cell death in oral squamous carcinoma cells. International Association for Dental Research, San Diego, March 15-19, 2011.

**Richards S.** An interactive review of oral pathologic soft tissue lesions. Advanced Dental Concepts Study Club, Fresno, California, March 25, 2011.

**Giordano-Geach B,** Scrivani SJ, Finkelman M, Kulich R, Mehta N. Obstructive sleep apnea in children: A survey of curriculum and screening processes of North American Pediatric Dentistry residency programs. American Academy of Orofacial Pain, Las Vegas, Nevada, April 29-May 2, 2011.

**Thomsen L.** What in the world is that? A review of oral pathology. California Dental Association convention, Anaheim, May 12, 2011

**Christensen H.** Radiation here, radiation there, radiation everywhere! Judson Klooster Symposium. Loma Linda University School of Dentistry, November 2011.

#### Faculty publications

**Retamozo B,** Shabahang S, **Johnson N,** Aprecio R, **Torabinejad M.** Minimum contact time and concentration of sodium hypochlorite required to eliminate *Enterococcus fecalis*. J Endod. 2010 Mar;36(3):520-3.

Kim TS, **Caruso JM,** **Christensen H,** **Torabinejad M.** A comparison of cone-beam computed tomography and direct measurement in the examination of the mandibular canal and adjacent structures. J Endod 2010 Jul;36(7):1191-4.

**Johnson N,** McKenzie R, Fletcher M. The bcp gene in the bcp-recA-vimA-vimE-vimF operon is important in oxidative stress resistance in *Porphyromonas gingivalis* W83. Mol Oral Microbiol 2011 Feb;26(1):62-77.



Joseph Caruso, DDS, MS, MPH  
Chair

**Department of Orthodontics and Dentofacial Orthopedics**

In his dual roles as chair of orthodontics and associate dean, strategic initiatives and faculty practices, Joseph Caruso, SD'73, MS,75, MPH, oversaw designing and planning—as well as spent hours on site—to establish three new School of Dentistry facilities during the biennium: the Center for Dentistry and Orthodontics, the Dental Hygiene facility in Palm Desert, and the Innovation Center in Prince Hall. These facilities have achieved opening dates within a 12-month period to vastly expand services offered by LLUSD faculty.

**The Center for Dentistry and Orthodontics opens**

The Center for Dentistry and Orthodontics officially opened November 20, 2010, at 159 West Hospitality Lane in San Bernardino. The three-story facility provides the most comprehensive oral health care center in the Inland Empire outside of the School of Dentistry.

**Orthodontics professor's distinguished alumnus award**

J. Milford Anholm, DDS, MS'62, received the LLUSD 2010 Distinguished Alumnus Award. Dr. Anholm completed a Master's degree in orthodontics at LLUSD, and became the first Seventh-day Adventist with a dental specialty to serve in a mission appointment. His assignments took him to Bangkok, Thailand, and Harare, Zimbabwe. As an LLUSD faculty member, Dr. Anholm led nearly 30 student mission trips and provided continuing education in 11 countries.

**Accrediting body appoints Dr. Joseph Caruso consultant and site visitor**

Dr. Joseph Caruso was appointed by The Commission on Dental Accreditation (CODA) to a six-year term, beginning in 2011, as a consultant and site visitor for the American Dental Association's specialized accrediting body. Dr. Caruso will join a team that assesses orthodontic programs to assure compliance with CODA standards.

**Student achievement**

Jerherth Ask, SD'10, and Iris Choi, SD'10, completed the Orthodontic Department's honors program in 2010. In 2011, Andrew Corbett, SD'11, and Jessicah McGraw, SD'11, completed the honors program which is reserved for dental students with exceptional interest in the specialty of orthodontics. Honors students must be in the top third of their class (class rank and clinic performance) and must complete an extra training program in orthodontic diagnosis. Current students (class of 2012) in the honors program are Vanessa Browne, Ji "Ally" Kim, Morse Stonecypher, and Mark Wierenga. In addition, three predoctoral students are currently involved in the advanced clinical rotation in orthodontics. In addition, these three class of 2012 students are currently involved in the advanced clinical rotation in orthodontics: Jae Kim, Grace Roh, and Esther Kim.

**Faculty presentation**

**Garcia G.** Orthodontic treatment. Interdisciplinary Approach to Cleft Repair and Care Symposium, LLUMC, January 30, 2011.



A wide-angle view of orthodontic operatories in the new Center for Dentistry and Orthodontics

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Alan Herford, DDS, MD  
Chair

**Department of Oral and Maxillofacial Surgery**

**Distinctive treatment afforded in an academic setting**

It requires confidence and skill to take a person's face apart and put it back together again. The oral and maxillofacial surgery program is rigorously geared toward developing versatility in dentoalveolar surgery. The clinic is a busy place, where students and residents treat people, many of whom have been on a waiting list because they need specialized care that is unavailable in an ordinary dental office.

Many patients seeking oral and maxillofacial procedures at LLUSD travel great distances with the current patient roster including people from Northern California, New Mexico, Nevada, and Italy. These are often patients who come to LLUSD but are too sick to come to the clinic. Students and faculty meet them in the Medical Center, where the patient may be suffering from a serious accident, possess an artificial heart valve requiring special attention, or need corrective surgery after a failed treatment.

Sedation procedures are distinctive in oral surgery. The mouth cannot be obstructed during the procedure, yet a child may be too frightened to admit an IV. Thus, the oral surgeon prefers light sedation with gas before insertion of the IV. The IV sedation in turn is minimal because, unlike medical procedures, a slow wake up to avoid pain is unnecessary, as the procedure includes local anesthesia to take minimize pain.

**Faculty activities**

Jeffrey Dean, DDS, MD, assistant professor, became advanced program director in July 2011.

Alan Herford, SD'94, MD, was named fellow of the invitation-only American College of Dentists (ACD) at the annual meeting of ACD in Las Vegas, Nevada, on October 11, 2011. This appointment, based on leadership exhibited in the profession and community, is awarded by the oldest national honorary organization for dentists.

**Assistants attend anesthesia workshop**

Sobeyda Smallridge, RDA, OSA, clinic supervisor, went with Elena Cenicerros, OSA, Tammy Davis, OSA, and Anna Koon, insurance officer, to the ADSA Assistant Sedation anesthesia workshop in Las Vegas in February 2010. Also in attendance were three senior residents.

**Student achievements**

Dan Niemann, SD'10, and Dan Schlieder, SD'10, completed the department's honors program in conscious sedation in 2010; Mike Knutson, SD'11, and Adam Burr, SD'11, were the department's conscious sedation honors students in 2011.

Mike Knutson, SD'11, Scott Arceneaux, SD'11, and Filip Orban, SD'11, took first place on May 19, 2010, for their student research presentation, A Digital Instruction of Techniques and Principles of Mucoperiosteal Flap. Their mentors were Mei Lu, DDS, PhD, MS, and Wayne Tanaka, DDS.



An operatory in the state-of-the-art Bernard Byrd Oral and Maxillofacial Surgery Clinic





**Bonnie Nelson, DDS**  
Chair

### Department of Pediatric Dentistry

The Department of Pediatric Dentistry pursues its mission dedicated to the highest principles of honesty, integrity, and service. This mission places value on patients, students, staff, and faculty—all essential to the teaching program.

Conversations in the Department of Pediatrics center not only on the patients and their treatment, but with the families who accompany the patients.

A 14-year-old boy arrived with brown teeth. He'd always covered his mouth, and his mother reports that he often comes home from school after being bullied and beaten on the school bus. "You should see that boy smile now!" comments a faculty member. "We were able to make a difference in that child's life."

Still receiving treatment, Kitcia, a high school senior, presented a rare syndrome: 50 un-erupted teeth, and a smattering of baby teeth affecting both her appearance and mastication. After many visits to the department, providers had built up her teeth before the senior prom. Her mother was so happy that she brought a picture of smiling Kitcia, dressed in pink for her senior prom.

A little girl with a broken tooth arrived with her mother following a dentist's recommendation that the tooth be extracted. A pulp treatment in the clinic saved the tooth, and the child's mother was grateful: "You turned a tragic situation into a very positive experience for me and my daughter."

#### Making a difference

Pediatric dental teams, aware of neglected oral care among children, have been active at these events: Children's Health Fair Day. Students from local schools

visited the School's dental van May 19, 2010, and May 18, 2011, on the LLU campus. Outside the van, dental school students demonstrated appropriate tooth brushing technique on stuffed animals.

Give Kids a Smile, organized by Wesley Okumura, SD'94, PG'03, assistant professor, pediatrics, at the SAC clinic, Norton Air Force grounds, February 17, 2011, involved 49 volunteers who performed 167 procedures.

Give Kids a Smile went on the road with Dr. Okumura to treat children at Baker, California, February 24, 2010 (8 volunteer faculty and students), and at Helendale, California, on January 13, 2011 (16 volunteer faculty and students).

Mary Mercy Center's homeless children in San Bernardino received their first visit from the pediatric dental team in July 2011. A morning clinic, established in collaboration with the Interfaith Council of Redlands and the Foundation for World Health, opened with coordination from the local school district, which brought students to the site. Volunteering dentists included Peter Jimenez, SD'00, and Erin Estey, SD'98, Loma Linda area dentists; and LLUSD faculty—Jung-Wei Chen, DDS, PhD, MS, program director; Tom Rogers, SD'83, associate professor, dental educational services, and Hank Mercado, SD'77, MS, assistant professor, dental educational services—who arrived carrying lawn chairs, portable dental units, and air compressors to create a clinic, which is now scheduled to meet at the site three times annually.

#### Cleft Palate Symposium

The Department of Pediatric Dentistry sponsored a cleft palate symposium directed by Dr. Jung-Wei Chen



Every effort is made to make the Department of Pediatric Dentistry clinic as child-friendly as possible.



An air taxi loads passengers and baggage on a gravel runway in Venetie, Alaska.



Dr. Nelson and Laura McCormack, DDS, PG'11, pose with a happy young patient during an April 2010 professional outreach to the underserved of central Alaska.



Drs. Nelson and McCormack teamed with new friends and one old friend and colleague, Dr. Travis Nelson, fifth from left.

on January 30, 2011, featuring a slate of multi-disciplinary presenters: pediatricians, social workers, plastic surgeons, oral surgeons, and speech therapists addressing cleft repair and care.

#### Faculty activity

**Bonnie Nelson, SD'88**, chair, Department of Pediatric Dentistry, spent a week in December 2010, at three Alaska sites accessible only by air. Traveling with Dr. Nelson were Laura McCormack, DDS, a graduate of Universidad Ibero Americana, Santo Domingo, Dominican Republic, a pediatric resident at LLUSD, and Travis Nelson, SD'07, MSD, an acting associate professor at the University of Washington, pursuing a pediatric residency there. The trio provided pediatric care in school gymnasiums at Venetie, Ft. Yukon, and Circle, the latter a town at the end of the road on the Yukon River. Cooking their own food and fishing in the river rounded out their days.

Dr. Nelson also traveled to Roatan, Honduras, March 20-27, 2011, joining three students, a dental hygienist, and three other dentists: Stephen Morrow, SD'60, endodontist; Richard Parker, DDS, general dentist; and Leroy Leggitt, SD'84, MS'92, orthodontist.

**Dr. Jung-Wei Chen** accepted an appointment as chair of the School's research task force committee, in July 2011. Dr. Chen also serves on the board of directors of the California Society of Pediatric Dentists.

Dr. Chen's itinerary took her to a multitude of venues during the biennium, including participation in LLUSD's annual multiple-clinic operations in Nicaragua in June 2011.

#### Student awards

The California Society of Pediatric Dentistry's award went to Sarah Jane Harebottle in 2010 and to Stephanie Calvillo in 2011.

The American Academy of Pediatric Dentistry honored Brad Field in 2010, and Ralitzia Varlakova in 2011, with its Predoctoral Student Award for interest and proficiency in the care of young patients.

Hasan Daoud, Lauren Gutenberg, Brent Hiebert, Sarah-Jane Shearer, and Janelle Tonn completed the Pediatric Department's Honors Program in 2010. Admission to the program requires upper third class standing, on-schedule clinical competency, and consistent demonstration of exemplary personal and professional integrity.



Jeffrey M. Henkin, DDS, MS  
Interim Chair

Department of Periodontics

Faculty transitions

**Craig Ririe**, DDS, MS, interim chair, Department of Periodontics, who for eight years commuted to LLUSD weekly from Pleasant Grove, Utah, retired in June 2011, leaving behind a department enhanced by his leadership.

**Nikola Angelov**, DDS, MS, PhD, is the new program director for the undergraduate periodontal program, having served as a faculty member of the department since 2004.

**Jeffrey Henkin**, DDS, MS, now serving as interim chairman of the periodontics department, oversees a periodontal faculty that achieves considerable flexibility in serving both pre-doctoral and graduate students.

New faculty

**Martyn Green**, DDS, a diplomate of the American Board of Periodontology, joined the Periodontics Department full time in 2011. Coming from a Hollywood, California, practice, Dr. Green has served on the dental faculties of both the University of California Los Angeles and the University of Southern California.

It should be noted that periodontic faculty teach in both predoctoral and advanced education programs.

Faculty activity (overseas)

**Leslie Arnett**, DDS, MS, professor, Department of Periodontics, and his wife Linda, a dental hygienist, assisted fifteen dental hygienists in becoming mainland China's first such professionals. The country's first class of dental hygienists graduated at Sir Run Run Shaw Hospital on March 13, 2011. The program was the culmination of an effort germinated by a trip in 2005 when Dr. Arnett and his wife introduced basic scaling in dental prophylaxis procedures to a pair of dental assistants at the hospital's clinic. Subsequently, China's sole dental hygiene program took form.

A second class currently studying dental hygiene consists of five dental assistants and ten recently graduated dentists.

Faculty activity (on site)

The department's third and fourth annual Periodontal Symposia, April 18, 2010, and April 3, 2011, provided general dentists and hygienists with practical day-to-day patient care skills.

**Dr. Craig Ririe** moderated the events, with faculty participating as presenters.

Research

**Dr. Nikola Angelov** collaborated with numerous academicians and researchers: Hansel Fletcher, PhD, vice chair, LLU Division of Microbiology; Penelope Duerksen-Hughes, PhD, associate dean, LLU Division of Biochemistry; Salvador Nares, DDS, PhD, director, Graduate Program in Periodontics, University of Chapel Hill; Niki Moutsopoulos, DDS, PhD, assistant investigator, NIH/NIDCR; and David Pride, MD, PhD, assistant professor, Department of Pathology, UCSD.

Collaborative service

Dr. Angelov has the distinction of being the only LLU faculty who serves on both Institutional Review Board and Institutional Animal Care and Use Committee, which are essential components of human and animal research at LLU.

Faculty honors

**Dr. Leslie Arnett** received the School of Dentistry Distinguished Service Award at the 2011 commencement, given in recognition of his notable roles in organized dentistry. He serves as a conscious sedation on-site examiner for the Dental Board of California and is a sought after assistant to students' IV sedation procedures in the clinic. In the community he has been active with the American Cancer Society, the United Fund, the American Diabetes Association and the Boy Scouts of America.





Dr. Leslie Arnett and his dental hygienist wife, Linda, celebrate with China's first dental hygiene graduates and hospital administrators the fruit of their combined efforts

**Student performance**

LLUSD D4 students had a 100 percent pass rate on the 2010 and 2011 WREB periodontal section.

**Dental students take 1st place (Clinical)**

Drs. Neal Johnson, Raydolfo Aprecio, Paul Richardson, Nikola Angelov, and Ms. Alisa Wilson, mentored Vanessa Browne SD'11, Mike Flewelling SD'11, and Mark Wierenga SD'11, who took first place in LLUSD's 2011 student research presentations with their topic, "Sterilization of used and contaminated implant healing abutments and impression copings: A cost benefit analysis." Repeating their presentation at the ADA's International Association of Student Clinicians (SCADA), these students, the first representatives from LLLUSD to participate in several years, received the second place award, in competition with 76 researchers from all U.S. dental schools and 17 international schools.

As director of the Research Design Course for dental students in 2010/2011, Dr. Angelov guided LLUSD dental students' presentations at the California Dental Association competition in Anaheim, where they won

all awards except for one second and one third place in all three competing categories.

Active in the student research arena, Adrian Mobilia, DDS, assistant professor, periodontics, mentored a series of student research projects, assisted in some cases by Darlene Armstrong, MA, RDHAP:

Loma Linda University, Feb 2010: "The Antimicrobial Properties of Aloe Vera Gel as Compared to Conventional Antimicrobial Agents Used in Dentistry. An In Vitro Study." *Sheryleen Sampayan, Ralitzza Varlakova, Aprecio Ray.*

Loma Linda University, Feb 2010: "Individualized Care Case Presentation (Patient with Special Needs)." *Hossai Tahmas, Pamela Slonaker, Sherwin Taylor.*

CDA annual meeting, Anaheim, California, April 2010: "Individualized Care Case Presentation (Patient with Special Needs)." *Hossai Tahmas, Pamela Slonaker.*

Loma Linda University, March 2011, placing first in dental hygiene educational category: "Case Study of a

Patient with Post-Polio Syndrome.” *Trisha Aprecio, Chris Chu, Danae Davis.* (Darlene Armstrong, M.A., RDHAP, also mentored.)

AADR, March 2011 San Diego, California: “The Antimicrobial Effect of Aloe Vera Gel Compared to Conventional Antimicrobials Used in Dentistry—An In-Vitro Study.” *R. Varlakova, S. Sampayan.* (Also mentoring: R. Aprecio, OD, U. Oyoyo, MPH.)

CDA April 2011. Anaheim, California. “Case Study of a Patient with Post-Polio Syndrome.” *Trisha Aprecio, Chris Chu, Danae Davis.* (Darlene Armstrong, MA, RDHAP, also mentored on this study.)

**Faculty Presentations 2010**

**Mobilia A.** Rationale for alveolar preservation after tooth extraction. LLUSD Alumni Convention Scientific Session, Loma Linda, California, February 2010.

**Mobilia A.** Comparing effectiveness of plaque removal using three different interproximal devices. AADR, Washington D.C., March 2010.

**Angelov N.** Dealing with recession: Clinical aspects of predictable root coverage. LLUSD Periodontal Symposium, April 18, 2010.

**Arnett RL.** Gum bugs. LLUSD Periodontal Symposium, April 18, 2010.

**Henkin J.** Implantology: An overview of the science. LLUSD Periodontal Symposium, April 18, 2010.

**Hoffmann O.** Regeneration of intraosseous defects. LLUSD Periodontal Symposium, April 18, 2010.

**Kim Y.** Tissue management 101 for implant surgery. LLUSD Periodontal Symposium, April 18, 2010.

**Smith D.** Developing optimal gingival form around implant crowns. LLUSD Periodontal Symposium, April 18, 2010.

**Weissman A.** Crown lengthening: Considerations and techniques. LLUSD Periodontal Symposium, April 18, 2010.

**Mobilia A.** Tongue coating score variations in different tongue coating zones. LLUSD Faculty Advance Seminary, June 2010.

**Angelov N.** Session chair, IADR general session, Barcelona, Spain, July 2010.

**Faculty Presentations 2011**

**Mobilia A.** Periodontics. Invited lecturer for Dent 103, La Sierra University, Riverside, California, February 2011.

**Mobilia A.** Periodontics and restorative dentistry: The basics. LLUSD Alumni Convention Scientific Session, February 2011.

**Angelov N.** Dental scientific literature: Fact or fiction? LLUSD Periodontal Symposium, Loma Linda, California, April 3, 2011.

**Arnett RL.** Vocal with the local and other ways to keep your patients more comfortable. LLUSD Periodontal Symposium, Loma Linda, California, April 3, 2011.

**Hassan M.** Socket preservation. LLUSD Periodontal Symposium, Loma Linda, California, April 3, 2011.

**Hoffmann O.** Dental implant treatment: What is new, what is not, and what does the evidence say? LLUSD Periodontal Symposium, Loma Linda, California, April 3, 2011.

**Mobilia A.** Stability of the gingival margin around natural teeth in relation to restorative dentistry. LLUSD Periodontal Symposium, Loma Linda, California, April 3, 2011.

**Ririe C.** The relationship between periodontal and systemic disease. LLUSD Periodontal Symposium, Loma Linda, California, April 3, 2011.

**Smith D.** Developing optimal ridge form for esthetic pontic design. LLUSD Periodontal Symposium, Loma Linda, California, April 3, 2011.

**Arnett RL.** Gum Bugs: Their capture and control. Tri-County Dental Hygienist Society, Loma Linda, California, June 2011.

**Mobilia A.** Symbiosis between periodontics and restorative dentistry: Challenges of a delicate balance, central 8-hour course, and Clinical management of dental hypersensitivity, a lecture. Dominican Dental Association. Santa Domingo, Dominican Republic, September 29, 2011.

**Posters and Abstracts 2010 / 2011**

Moutsopoulos, N, Gupta B, **Angelov N**, Nares S, Wahl S: 2010 P Gingivalis engages immune pathways linked to TH1/TH17 lineage differentiation. AADR Annual Meeting, Washington, DC, March 2010.

**Mobilia A.** Comparing effectiveness of plaque removal using three different interproximal devices. AADR, Washington DC, March 2010.

**Sun C-X**, Wall NR, **Angelov N**, **Ririe C**, **Chen J-W**, Boskovic DS, **Henkin JM.** Expression change of adenosine receptors in human chronic periodontitis. AADR Annual Meeting, Washington, DC, March 2010.

**Mobilia A**, Erickson G, Drouin V, Mercer, J, Perez S. Abstract: Comparing effectiveness of plaque removal using three different interproximal devices. J Dent Res 2010; 89(A):167. <[www.dentaresearch.org](http://www.dentaresearch.org)>

Moutsopoulos N, **Angelov N**, Bassim CW, Freeman A, Holland S, Wahl SM. Th17 cells in the pathogenesis of chronic periodontal disease. IADR general session, San Diego, California, March 2011.

Varlakova R, Sampayan S, **Aprecio R**, **Oyoyo U**, and **Mobilia A.** Abstract: The antimicrobial effect of aloe vera gel compared to conventional antimicrobials used in dentistry: An in-vitro study. March 18, 2011; <<http://iadr.confex.com/iadr/2011sandiego/webprogram/Paper148831.html>>



Douglass Roberts, DDS, MS  
Chair

### Department of Restorative Dentistry

Chairing a department that covers almost half the dental curriculum and boasts the School of Dentistry's largest faculty roster, Dr. Douglass Roberts, says, "We have a good crew; its members try to fit in; we don't have the turf wars that some schools experience."

#### Student achieves two LLUSD "firsts"

Mark Wierenga, SD'12, became the first student to complete the department's honors program in esthetic dentistry, which was incorporated in 2011. He also performed the School's first single-appointment indirect restoration.

#### CEREC technology added to the curriculum

Computer-aided procedures are taking a variety of forms pertinent to restorative dental care. Installation for one such innovation, CEREC technology, began at LLUSD in November 2010 with a briefing by trainers from Sirona, the company that produces CEREC. Another round of training for faculty convened in July 2011, with the participants given the task of educating their colleagues.

The Department of Restorative Dentistry immediately instituted voluntary evening classes for D-4 students. CEREC alters the time table for crown preparation and installation. Students recognize the potential—no temporaries and no return visits for installing a crown. CEREC affords a one-appointment operation. The students experimented with creating crowns, and several students successfully incorporated CEREC technology into their patient restorations.

Beginning with the 2011-12 school year, D-3 students were receiving an introduction to CEREC technology in esthetic classes. With this expertise, students can anticipate incorporating CEREC technology into their practice or competently join practices where CEREC technology is pursued.

#### Caries management protocol adopted for the clinic

Brian Novy, SD'06, assistant professor, Restorative Dentistry, has successfully encouraged the School of Dentistry in general, and the Department of Restorative Dentistry in particular, to incorporate into its caries management curriculum Caries management by risk assessment (CAMBRA)—a methodology that identifies the cause of disease through the assessment of risk factors for each individual patient and then manages those risk factors through behavioral, medicinal, and minimally invasive interventions.

The assumption underlying CAMBRA is that caries are the consequence of a transmissible bacterial infection that can be prevented or cured. As Dr. Novy explains, "Filling a tooth doesn't fix the caries disease." The profession of dentistry faces a sometimes ignored challenge of treating tooth decay medically as well as topically. A medical approach not only treats disease but seeks to rule out risk factors. Doing little or nothing to prevent development of future caries fails to follow the medical model.

Recently voted co-chair of the western CAMBRA coalition, Dr. Novy had been asking, "After doing bacteria cultures, what do we do when the patient returns with more caries? Why procure oral cultures if we merely repeat the process of finding and filling caries?" In Dr. Novy's first caries management class, Nathan Leiske, SD'11, echoed Dr. Novy's query, "After we take all these tests, what can we do with them?"

After consulting with colleagues who were pursuing an analysis of such data based on oral cultures, Dr. Novy gave Dr. Leiske, then a first-year student, access to the filing cabinet of bacteria test materials. He ended up assisting his mentor in designing protocols for implementing CAMBRA in the School's clinic.

By the time of their 2011 graduation, Dr. Leiske and his classmates had demonstrated that by utilizing CAMBRA, students could give patients better treatment. Aware that a failed restoration might unfairly be attributed to inferior dentistry, the students had begun alerting patients, "You need to take care of this filling, because it will fail unless you



take care of it.” Currently the goal of the cariology course is to train students: Before drilling a tooth, you have to do more than fix the hole; you need to treat the infection.

Caries management through testing is not yet mandatory in the clinic. Students pursue a caries assessment only if the patient chooses to accept the testing procedure (requiring a saliva sample). When some students temporize, “Nobody else is doing this, or “My father, who is a dentist, doesn’t do this,” Dr. Novy explains, “This is a new standard of care. If our goal is ‘to make man whole,’ we need to go one step farther.”

By offering a wealth of bacteria culture tests that indicate the physiological conditions of the mouth, LLUSD has become a vanguard among dental schools for CAMBRA. Implementation is successful when students learn to interpret the results and treat them by prescribing procedures that change the oral bacteria identified in the test. The tests represent cutting edge technology that allows students to utilize the microbiology, chemistry, physiology and other science-related course work they have learned and apply the knowledge to what they see in the patient’s mouth.

Dr. Novy sums up the new protocol established in the clinic: “Dentistry is about assuming the patient will never have a cavity again. We are trying to change the ecology of the patient’s mouth.”

“What we do is not risky,” Dr. Novy adds, “We are running with the torch (options such as varnish, saliva stimulants, topical paste, baking soda), to see if it works. The theory: a topical paste, for example, may be effective in reversing a cavity, getting it to re-mineralize so that it will last.”

A strongly supportive resource for the caries management protocol in CDA studies reported at the CAMBRA Symposium, June 7-8, 2011, is found in the CDA journal of September/October 2011.

**Faculty transitions**

**Fred Berry**, DDS, professor of restorative dentistry, retired after 23 years of commuting from Dana Point to Loma Linda University (an estimated 600,000 miles) to lecture in classes that received consistently excellent reviews.

**Dan Hall**, DDS, PG’95, associate professor in restorative dentistry, retired at the end of 43 years of service that included section chief for removable prosthodontics, director of the Faculty Dental Office, and director of the International Dentist Program.

**So-Ran Kwon**, DDS, MS, PhD, new 2011 faculty, completed a dental degree in 1993 at Yonsei University, College of Dentistry. A textbook author (see entry that follows), Dr. Kwon is president of the Korean Bleaching Society in Seoul, Korea, and will be pursuing research as well as classroom teaching.

Five other new faculty are alumni: Iris Choi, SD’10, Wendy Gregorius, SD’07, Eileen Soh Yeun Kim, SD’10, Scott Smith, SD’09, and Erin Stephens, SD’10. Drs. Smith and Stephens are shared with the Oral Diagnosis, Radiology and Pathology Department.

**Faculty honors**

**Brian Novy**, DDS’06, assistant professor of restorative dentistry, was selected in 2010 for a four-year appointment as cariologist in ADA’s Council of Scientific Affairs.

**Nadim Baba**, DMD, MSD, professor, restorative dentistry, received the 2010 Dr. Arthur A. Dugoni Faculty Award sponsored by the California Dental Association. The award supports individuals who contribute to the scholarly and creative activities of the school through direct contact with students. Dr. Baba will use the award funds to continue development of electronic educational materials on removable partial dentures.

**John Won**, SD’05, assistant professor in restorative dentistry, became an associate fellow in the American Academy of Implant Dentistry (October 2011), a fellow in the American College of Prosthodontics (November 2011), and achieved board certification as a diplomate in the American Board of Prosthodontics (November 2011).

**Faculty presentations 2010**

**Young R.** Photography: An essential tool for communication in dentistry. Yankee Dental Meeting, Boston, Massachusetts, January 27-31, 2010.

**Young R.** The integration of simplified photography in day to day dentistry. LLUSD Alumni Student Convention, February 4, 2010.

**Meharry MR**, Dawson DV, Kummet CM, Wefel JS. Use of polarized light microscopy lesion area in early caries detection. Abstract. AADR Washington, D.C., March 2010.

Wefel J, **Meharry M**, Dawson D, Hartess J, Kummet C. Polarized light microscopy lesion area in early caries detection. Poster, AADR, Washington, D.C., March 2010.

**Young R.** Photography: An essential tool for communication in dentistry. Pacific Dental Conference, Vancouver, Canada, April 15, 16, 2010.

**Lee SS, Meharry M**, Arambula M, Abdel-Salam N, **Li Y.** iBond self etch: A 14-month clinical evaluation. Poster, IADR, Barcelona, Spain, July 2010.

**Li Y, Kurti RS, Meharry M, Perry C.** Laser-assisted curing method to increase resin composite surface microhardness. Poster, IADR Barcelona, Spain, July 2010.

**Won J.** Management of complex cases in implant dentistry. American Academy of Implant Dentistry Maxicourse, Zimmer Institute, Carlsbad, California, July 16, 2010.

**Kurti RS, Meharry M, Li Y.** An innovative curing method to reduce resin composite curing stress. Abstract, IADR, Barcelona, Spain, July 2010.

**Kan J.** Dentistry in the digital era: Focus on Cone beam technology and esthetic implant treatment (supplemented with live C-T guided surgery using the Nobel Guide). Two-day continuing education lectureship at LLUSD, October 17-18, 2010.

**Won J.** [Academic speaker] Nobel Procera. Nobel Procera Road Show, New Orleans, Louisiana, and Toronto, Ontario, Canada, November 5 and 19, 2010.

**Faculty presentations 2011**

**Won J.** Management of complications in implant dentistry. LLUSD Alumni conference, February 10, 2011.

**Young R.** Esthetic communication, issues, and procedures. LLUSD Alumni Student Convention, February 11, 2011.

**Young R.** The integration of simplified photography in day to day dentistry. Utah Dental Society, Salt Lake City, Utah, March 11, 2011.

**Chen J, Kurti RS, Meharry, M, Kattadiyil M, Perry C, Li Y.** Increasing resin composite surface microhardness by laser post treatment. IADR/AADR/CADR General Session and Exhibition, March 16-19, 2011.

**Meharry M, Lee SS, Chen J-W.** Whitening effectiveness comparison of four different bleaching tray designs. International Association for Dental Research, in conjunction with the American Association for Dental Research annual meeting, San Diego, March 15-19, 2011.

**Riter HC, Arambula M.** Clinical evaluation of N'DURANCE, a high-conversion/low-shrinkage nanohybrid dental composite. International Association for Dental Research, in conjunction with the American Association for Dental Research annual meeting, San Diego, March 15-19, 2011.

**Wilson AC, Richardson PL, Morrow SG, Naylor WP.** Infection control/safety compliance by faculty, staff and students; Infection control/safety, patient care services and quality assurance. International Association for Dental Research, in conjunction with the American Assoc. for Dental Research annual meeting, San Diego, March 15-19, 2011.

**Young R.** Photography: An essential tool of esthetic communication. Esthetic Dentistry Symposium, LLUSD, April 10, 2011.

**Won J.** An interactive cone beam computed tomography experience. LLUSD continuing education, May 22-23, 2011.

**Young R.** The integration of simplified photography in day to day dentistry. New Mexico Dental Association, Albuquerque, New Mexico, June 9, 2011.

**Won J.** [Academic speaker] Nobel Procera. Nobel Procera Road Show, New Orleans, Louisiana, and Toronto, Ontario, Canada, November 5 and 19, 2010.

**Faculty Publications 2010**

Meng GK, Chung KH, **Fletcher-Stark ML, Zhang H.** Effect of surface treatments and cyclic loading on the bond strength of acrylic resin denture teeth with autopolymerized repair acrylic resin. *J Prosthet Dent* 2010 Apr;103(47):245-52.

**Roggenkamp CL, Berry FA,** Lu H. In vitro bond strengths of amalgam added to existing amalgams. *Oper Dent* 2010 May-Jun;35(3):314-23.

**Faculty Publications 2011**

**Arnett MR, Baba NZ.** Improving tobacco dependence education among the Loma Linda School of Dentistry Faculty. *J Dent Educ.* 2011;75:332-338.

**Baba NZ, Goodacre CJ.** Key principles that enhance success when restoring endodontically treated teeth. *Roots* 2011;7(2);30-35.

**Fletcher-Stark ML,** Chung KH, Rubenstein JE, Raigrodski AJ, Mancini LA. Shear bond strength of denture teeth to heat- and light-polymerized denture base resin. *J Prostodont* 2011;20(1):52-59.

**Fletcher-Stark ML,** Rubenstein JE, Raigrodski AJ. The use of computer-aided manufacturing during the treatment of the endentulous mandible in an oral radiation therapy patient: Clinical report. *J Prosthet Dent* 2011;105(3):154-157.

**Kwon S,** Ko S, Greenwall L. Tooth whitening in esthetic dentistry: Principles and techniques. Chicago: Quintessence Publishing, 2011.

Roe P, **Kan JYK, Runcharassaeng K, Won JB.** Retrieval of a fractured zirconia implant abutment using a modified crown and bridge remover: A clinical report. *Jour Prosthodont.* 2011;20(4):315-318.

**Baba NZ,** Berry F, Lehnhof MC. Early shear bond strength of experimental amalgam-bonding combinations with and without thermocycling. *Int Arab J. dent.* 2011. (In print.)

**Johnston Z.** Review of *Ethics and law in dental hygiene, 2<sup>nd</sup> ed.* *Jour of Dent Hyg* 2011;85(1):4,5.

**Rogers TC,** Zaninovic P, Urankar YR, Natto ZS, Turner RL, **Toledo GA,** Duran GG, **Trott JR.** An innovative HIV training program for dental students. *J Dent Educ* 2011 Nov;75(11):1426-33.



Gregory Mitchell, DDS  
Director

### International Dentist Program

#### Anniversary celebration

The International Dentist Program celebrated its 25th anniversary February 10, 2011, during the School of Dentistry's 51st Alumni Student Convention, citing the vision and perseverance of Dr. Lloyd Baum, and his administrative collaborator, Dr. Thor Bakland, executive associate dean at the time. The program has made it possible for 374 dentists from 78 countries to earn US licenses.

#### Faculty transitions

**Gregory Mitchell**, SD'84, joined LLUSD's faculty in January 2010 as director of the International Dentist Program (IDP). In a restructuring of the School's clinic administration that placed Dr. Mitchell in charge of clinical systems, Michael Fitzpatrick, SD'87, became the IDP director in June 2011. Everyone involved has called it a "smooth transition."

**Marcelo Toledo**, DDS, who studied dentistry in his native Argentina and practiced dentistry at a mission in Madagascar for seven years, came to the United States on a tourist visa. He completed the process of becoming a U.S. citizen while completing the IDP program in 2006 and then assumed a part-time teaching position at LLUSD. Now a full-time faculty member, Dr. Toledo pursued the grueling three-year process of qualifying for the Air Force Reserve and was sworn in as a captain in March 2011.

#### New clinic locale

During the June 2011 quarter break, with the help of the indefatigable clinic support team, the site of the IDP clinic changed from the south wing to the east wing of Prince Hall, effecting a space swap with dental hygiene. The move, which placed the IDP clinic adjacent to the main clinic, facilitated putting preclinical teaching on the same page, whether predoctoral or international.

#### Curriculum adjustment

To enrich IDP students' clinical experience, preclinical classes were remodeled, chair time in the clinic was expanded, and offsite service learning opportunities were increased.

An informal "adjunct faculty" appointment was created for advanced seniors during their final six months in IDP. These students qualified for the distinctive role by earning at least 450 points beyond the required 1,850 points. Being close to the kinds of questions the new students were raising, they created a triad of winning experiences.

#### Diversity

The international nature of IDP is recognized as a strong asset in the program's educational process. In consonance with the student population, the faculty roster includes natives of Mexico, Iraq, Romania, India, Russia, Ukraine, and Argentina.

During the biennium, the first Haitian students graduated from IDP, one in 2010 and one in 2011. Students in the 2010 and 2011 classes also registered from these countries of origin: Canada, Mexico, Dominican Republic, El Salvador, Brazil, Venezuela, Peru, Argentina, Egypt, Sudan, Cameroon, Iran, Iraq, Armenia, Romania, Spain, Germany, Russia, Jordan, Syria, Pakistan, India, Thailand, China, South Korea, Philippines.

#### Off-site activities

To establish community in IDP's highly diverse population, faculty, students, and any resident family members participate in a lively extracurricular program. Weekend hikes, excursions (including biking and boating), and camping trips facilitate bonding among the students, which is especially important for those that are far from spouses and children.

#### Amazon River trip

The department's annual mission trip during spring break, March 2011, was so popular that it required a lottery to



determine which applicants would fill the eight available slots. Traveling with Mike Potts, SD'75, of Camarillo, California, Drs. Mitchell and Fitzpatrick, and Medical Center faculty and students, the IDP students became a part of the 40-member team that traveled the Amazon River, moving by boat each day to a new site and new patients.

The students returned with vivid memories of sleeping in hammocks on the upper deck, swimming in the Amazon river, capturing (and releasing) young alligators, finding a piranha on the end of a fishing line, and, most importantly, hauling equipment to villages accessible only by boat to set up clinics in church or school buildings that did not have electricity. Aided by battery-powered

tools and sunlight, the IDP team treated over 300 patients, and performed more than 800 procedures during the eight-day trip, abiding by their commitment to remain until they could treat everyone who came to their site.

**Graduates entering specialties**

In both 2010 and 2011, 24 students completed the International Dentist Program. Five of these dentists have now entered graduate specialty programs. From the 2010 class, Elena Justice elected to pursue endodontics; Ewa Parciak and Miguel Pappaterra Leon entered prosthodontics; from the 2011 class Zulema Valdivia Cabrera, is now pursuing periodontics, and Morris De Leon Andrino enrolled in pedodontics.

**IDP students' countries of origin**

Albania	Dominican Republic	Italy	Pakistan	Sundan
Argentina	Egypt	Japan	Palestine	Switzerland
Armenia	El Salvador	Jordan	Palau	Syria
Australia	France	Kazakhstan	Panama	Taiwan
Azerbaijan	Georgia	Kenya	Paraguay	Tanzania
Bangladesh	Germany	Kuwait	Peru	Thailand
Belarus	Guatemala	Kyrgyzstan	Philippines	Turkey
Brazil	Haiti	Lebanon	Poland	Ukraine
Bulgaria	Honduras	Lithuania	Puerto Rico	United Kingdom
Cameroon	Hungary	Macedonia	Romania	United States
Canada	India	Madagascar	Russia	Uruguay
Chile	Indonesia	Malaysia	South Korea	Uzbekistan
China	Iran	Mexico	South Vietnam	Venezuela
Columbia	Iraq	Nepal	Spain	Vietnam
Cuba	Ireland	New Zealand	Srilanka	Yugoslavia
Czechoslovakia		Nicaragua	St. Vincent	Xianggang/HongKong



*Dental Anesthesiology*



Larry D. Trapp, DDS, MS  
Director



Barry Krall, DDS  
Associate Director

**Advanced Specialty Education Program  
Dental Anesthesiology**

A career in dental anesthesiology allows a dentist to provide the full scope of perioperative pain and anxiety management for patients undergoing all types of dental treatment. Residents in the Advanced Education Program in Dental Anesthesiology provide anesthesia care for dental patients in the adjacent quarters of the Koppel Special Care Dentistry (SCD) Center. Most of the 5,000 or so yearly patients are pre-cooperative pediatric patients and adult special needs patients who receive general anesthesia by the dental anesthesiology residents, dental treatment by members of the School of Dentistry faculty.

**Patient statistics**

The anesthesiology department treated nearly 10,000 patients during the biennium; approximately 85% of the patients were under 21 years of age.

**Accreditation by CODA in 2011**

The Advanced Education Program in Dental Anesthesiology initiated an application for accreditation by the Commission of Dental Accreditation (CODA) by submitting a self-study of the educational program in April 2011. The site visit team from CODA completed a one-day site visit on September 27, 2011. The team examined all aspects of the program including two of the institutions that provide rotations for residents. A preliminary report indicated only minor suggestions

and no required program changes were recommended. The official accreditation status will be announced at the next meeting of the commission, which is scheduled for the winter of 2012.

**Residency information**

The Advanced Education Program in Dental Anesthesiology accepts six residents each year into a 24-month training program. The residents rotate through three medical centers over thirteen months for experience in operating room protocol, medical anesthesia, cardiology and internal medicine. The LLU Dental Anesthesiology program offers one of the most clinically intensive training programs when compared to the other dental anesthesiology residency programs.

In order to track the actual numbers of cases each resident provides, and to be able to provide meaningful resident evaluations, the residents input each case profile into a web-based software package utilized by the department. Approximately fifty percent of all medical anesthesia training programs in the United States are using this software, which makes monthly evaluations by the hospital attending anesthesiologists easier to accomplish.

In 2010 and again in 2011, six students completed the Advanced Specialty Education Program in Dental Anesthesiology (see pictures on page 32).

*Endodontics*



Mahmoud Torabinejad, DMD, PhD, MSD  
Director

**Advanced Specialty Education Program  
in Endodontics**

**New 36-month program emphasises implant dentistry**

The 36-month program in Endodontics will provide additional care for patients who have failed root canal treatment and require a single tooth implant. This program combines the 27-month curriculum with additional courses in periodontics, radiology, and implant dentistry. Applicants now have the option to apply to either the existing 27-month program or the new 36-month track. The main goal is to provide additional knowledge and skills to graduates who are interested in treatment of patients with failed root canals and would benefit from surgical placement, and restoration of a single tooth implant, when such care is needed. Approved by the accrediting board in 2011, the program will accept its first student in July 2012.

Enrollees in the three-year program during the 2010-2011 biennium included nine graduate students in 2010 and ten in 2011. These students provided broad international representation, with three coming from India, two each from Thailand and Taiwan, and one each from Iran, Japan, Romainia, Spain, and the United States.

**New endodontic lab/equipment**

Seven workstations, each of which has this equipment:

- Seven Global Surgical Microscopes
- High/slow speed for hand pieces, ultrasonic and compressed air
- A portable rotary (Digital Torque control) and obturation system (Calamus Dual)

- Nomad portable x-ray unit and digital sensor
- One workstation (instructor) is equipped with camera equipment and a monitor for displaying the procedure as seen through the microscope.

**ABE written boards**

Three students (2009-2011) passed the written portion of the American Board of Endodontics Examination (ABE) June 2011.

**Graduates for 2010, 2011**

The program celebrated the graduation of three students in 2010 and of another three in 2011. (For pictures, see pp. 33.)

**2011 graduates (and their research projects)**

Hadi Faras, PG'11. Research project: Revitalization of teeth with necrotic pulps and open apexes using platelet-rich plasma. Mentors: Drs. M Torabinejad, S Shabahang, K. Wright.

Joseph Packer, PG'11. Research project: The effect of sonophoresis on topical anesthesia: A clinical trial. Mentors: Drs. M Torabinejad, B. Krall, A. Makki.

Patrick Tsai, PG'11. Research project: Accuracy of Cone-Beam computerized tomography and periapical radiography in detecting small periapical lesions. Mentors: Drs. M. Torabinejad, D. Rice, BC Azevedo.

**New Textbook authorship - in progress 2011**

*Principals and Practice of Single Tooth Implant and its Restoration*, Drs. Mahmoud Torabinejad, Mohammad Sabeti, and Charles Goodacre began collaborating on this textbook in 2011.

- I. History of single tooth implants (Sabeti and White)
- II. Diagnosis and treatment planning, indication and contraindication (Torabinejad and Nowzari)
- III. Tissue reaction to implants (Roberts and Stanford)
- IV. Bone grafts and bone substitute materials (Herford and Stanford)
- V. Tooth extraction and preparation of site for implant placement (Caplanis, Lozada and Mesquida)
- VI. Implant placement with simultaneous Guided Bone regeneration (Sabeti and Cummings)
- VII. Esthetics of the soft tissue following placement of single implants and crowns (Kan and Rungcharassaeng)
- VIII. Restoration single tooth implant (Goodacre and Kattadiyil)
- IX. Maintenance of single tooth implant (Nowzari and Jorgensen)



*Endodontics*

**Faculty presentations 2010**

**Torabinejad M.** Perio-Endo Relationships. Isfahan, Iran, July 25, 2010.

**Torabinejad M.** Evidence Based Dentistry and Medicine. Isfahan, Iran, July 26, 2010.

**Torabinejad M.** Management of Teeth with Open Apexes. Iranian Association of Endodontists, Mashad, Iran, July 28, 2010.

**Torabinejad M.** Advanced Endodontic Surgery. Iranian Association of Endodontists, Isfahan, Iran, July 30, 2010.

**Faculty presentation 2011**

**Torabinejad M.** Live Surgical Demonstration at the Thirteenth Annual Meeting of the Iranian Association of Endodontists. Shiraz, Iran, April 18, 2011.

**Torabinejad M.** Management of Open Apexes at the Thirteenth Annual Meeting of the Iranian Association of Endodontists and the 16th meeting of APAC. Shiraz, Iran, April 19, 2011.

**Torabinejad M.** Pulp Regeneration. Shiraz, Iran, April 25, 2011.

**Torabinejad M.** Factors Affecting Treatment Planning for Root Canal Treatment of Implants. North Eastern Society of Periodontists. New Your, NY, April 29, 2011.

**Faculty publications 2010**

**Jaramillo D, Rosas R, Angelov N.** Dental trauma: Case-scenario protocol for dentists. *Macedonian Journal of Medical Sciences.* 2010 Mar 15;3(1):61-67.

**Retamozo B, Shabahang S, Johnson N, Aprecio RM, Torabinejad M.** Minimum contact time and concentration of sodium hypochlorite required to eliminate *Enterococcus faecalis*. *J Endod.* 2010 Mar;36(3):520-3.

**Ruddle CJ.** Filling root canal systems: The Calamus 3-D obturation technique. *Dent Today.* 2010 Apr;29(4):76, 78-81.

Parirokh M, **Torabinejad M.** Mineral trioxide aggregate: a comprehensive literature review-Part I: Chemical, physical, and antibacterial properties. *J Endod* 2010;36(1):16-27.

**Torabinejad M, Parirokh M.** Mineral trioxide aggregate: A comprehensive literature review-Part II: Leakage and biocompatibility investigations. *J Endod* 2010;36(2):190-202.

Yasuda Y, Tatematsu Y, Fujii S, Maeda H, Akamine A, **Torabinejad M, Saito T.** Effect of MTAD on the differentiation of Osteoblast-Like Cells. *J Endod* 2010;36(2):260-63.

Parirokh M, **Torabinejad M.** Mineral trioxide aggregate: A comprehensive literature review-Part III: Clinical applications, drawbacks, and mechanism of action. *J Endod* 2010;36(3):400-13.

Kim TS, **Caruso JM, Christensen H, Torabinejad M.** A comparison of cone-beam computed tomography and direct



Dr. Torabinejad examines a patient using one of the OPMI pico dental microscopes that populate each of the endodontic clinic cubicles.

measurement in the examination of the mandibular canal and adjacent structures. *J Endod*, 2010;36(7):1191-1194.

**Faculty publications 2011**

Andreasen JO, **Bakland LK,** Flores MT, Andreasen FM, Andersson L. *Traumatic dental injuries: A manual.* 3rd edition, Wiley-Blackwell, Oxford, UK, 2011.

Brodie AJ, Crow HC, Eber RM, **Handysides R,** Holexa R, Kiatamnuay S, Spallek H. Evaluating postdoctoral dental candidates: Assessing the need and recommendations for a national qualifying examination. *J Dent Educ*, 2011;75(6):719-25.

**Torabinejad M, Corr R, Buhrey M, Wright K, Shabahang S,** An animal model to study regenerative endodontics. *J Endod* 2011;37(2):197-202.

**Torabinejad M, Turman M.** Revitalization of tooth with necrotic pulp and open apex by using platelet-rich plasma: A case report. *J Endod* 2011;37(2):265-8.

**Torabinejad M.** Root Canal irrigants and disinfectants. *Endodontics: Colleagues for Excellence.* American Association of Endodontists, Winter 2011.

**Torabinejad M, Turman M.** Letters to the Editor. Revitalization of tooth with necrotic pulp and open apex by using platelet-rich plasma: A case report. *J Endod* 2011;37(6):743-44.

*Implant Dentistry*



Jaime L. Lozada, DDS  
Director

**Advanced Education Program in  
Implant Dentistry**

**Student population**

Implant Dentistry attracts a diverse population to its 36-month certificate program with an optional Master of Science (MS) or Master of Science in Dentistry (MSD) degree, not to mention its two options for the implant dentistry fellowship program (one year full time or two years part time). Non-degree students are able to enroll in either an internship (up to one year), an externship (short-term period of study) or a two-year practicum course that consists of one year of internship training.

The 19 students enrolled in the three-year degree program during the 2010-2011 biennium demonstrated broad international representation: with five students from India; three each from Taiwan and Thailand; two each from Romania, Spain, and the United States; one each from Iran, Japan, Romania, Spain, Thailand; and one each from Iran and Japan.

The program celebrated the graduation of three students each year. An additional six students enrolled in the one-year full time or two-year part-time fellowship program.

Implant Dentistry has the largest internship-externship enrollment in the School of Dentistry. The program has attracted interns and externs from Saudi Arabia, Spain, Japan, and Thailand.

**Postdoctoral student awards**

Three graduate students received honors for their poster and table clinic presentations at the American Academy of Implant Dentistry meeting in Boston, Massachusetts in October 2010.

Dr. Chun-I Lu: "An assessment of the anterior loop of the mental nerve using cone beam CT-scan." First place poster.

Dr. Yusuke Suzuki: "Vertical dimensions of the bone in the mandibular first molar region using cone beam computed tomography (CBCT)." Second place poster.

Dr. Juan Mesquida: "The role of connective tissue grafts in immediate implant placement and provisionalization in the esthetic area." First place table clinic.

**Postdoctoral student awards**

Two graduate students received honors for their presentations at the American Academy of Implant Dentistry meeting in Las Vegas, Nevada in October 2011.

Dr. Chun-I Lu: "An Assessment of the Posterior Superior Alveolar Artery Using Cone Beam CT-Scan." First place poster.

Dr. Juan Mesquida: "The thickness of the alveolar buccal bone after immediate implant placement and provisionalization: A retrospective CBCT evaluation." First place table clinic.

**Student presentations at the 2011 American Academy of  
Implant Dentistry annual meeting**

Dr. Antoanela Garbacea: "Assessment of maxillary sinus condition before sinus graft surgery. A survey of 200 CBCT images between ENT specialists, implant dentistry specialists, implant dentistry graduate students and LLU MaxiCourse® students."

Dr. Tarun Patel: "Vertical alveolar dimensions of the bone in the maxillary premolar and first molar region using cone beam computed tomography (CBCT)."

Dr. Ashish Sharma: "Feasibility of Superimposition of Cone Beam Computerized Tomography Images Utilizing Simplant Software."

Dr. Petch Oonpat: "Location of Greater Palatine Crest: A Cone Beam Computed Tomography Assessment."

*Implant Dentistry*

**Alumni updates**

Seven postgraduate students completed the American Academy of Implant Dentistry's Associate Fellow certification and credentialing process during the recent biennium (see photos on page 34).

**Adjunct faculty**

**Dr. Istvan Urban**, adjunct assistant professor from Budapest, Hungary, presented a hands-on pig jaw workshop showing various incision suturing techniques and bone grafting preparation for the placement of dental implants for the LLU/AAID MaxiCourse on September 8, 2011.

**Dr. Matteo Chiapasco**, adjunct assistant professor from Milan, Italy, lectured on "Introduction to cadaver laboratory" and "Advanced dental implant surgery." He also did a dissection demonstration and instruction on fresh cadaver heads for LLU/AAID MaxiCourse participants and implant dentistry graduate students on June 24, 2011.

**Faculty recognition**

**Dr. Jaime L. Lozada** was the recipient of the Isaiah Lew Memorial Research Award sponsored by the American Academy of Implant Dentistry Research Foundation during the AAID annual meeting in Boston in October 2010. This award honors an individual who has contributed significantly to research in implant dentistry and who has demonstrated singular leadership and/or responsibility in research that advances the science of implant dentistry.

**Dr. Lozada** was appointed as a past presidents' representative and chairman of the American Academy of Implant Dentistry Research Foundation by the AAID board of trustees during its 2011 annual business meeting in Las Vegas, Nevada, in October 2011.

**Dr. Aladdin Al-Ardah** completed the American Board of Oral Implantology/Implant Dentistry's Diplomate credentialing process during the American Academy of Implant Dentistry annual meeting in Las Vegas, Nevada, October 3-6, 2011.

**Faculty publications 2010 / 2011**

**Kan JY, Morimoto T, Rungcharassaeng K, Roe P, Smith DH.** Gingival biotype assessment in the esthetic zone: visual versus direct measurement. *Int J Periodontics Restorative Dent* 2010 Jun;30(3):237-43.

**Choi KS, Lozada JL, Kan JY, Lee SH, Kim CS, Kwon TG.** Study of an experimental microthreaded scalloped implant design: proximal bone healing at different interimplant distances in a canine model. *Int J Oral Maxillofac Implants* 2010 Jul-Aug;25(4):681-9.

**Liao KY, Kan JY, Rungcharassaeng K, Lozada JL, Herford AS, Goodacre CJ.** Immediate loading of two freestanding implants retaining a mandibular overdenture: 1-year pilot prospective study. *Int J Oral Maxillofac Implants* 2010 Jul-Aug;25(4):784-90.

**Roe P, Kan JY, Rungcharassaeng K, Lozada JL, Kleinman AS, Goodacre CJ, Chen JW.** Immediate loading of unsplinted implants in the anterior mandible for overdentures: a case series. *Int J Oral Maxillofac Implants* 2010 Sep-Oct;25(5):1028-35.

**Urban IA, Lozada JL.** Implants placed in augmented sinuses with minimal and moderate residual crestal bone: results after 1 to 5 years. *Int J Oral Maxillofac Implants* 2010 Nov-Dec;25(6):1203-12.

**Patel RD, Kan JY, Jonsson LB, Rungcharassaeng K.** The use of a dental surgical microscope to aid retrieval of a fractured implant abutment screw; a clinical report. *J Prosthodont* 2010 Dec;19(8):630-3.

**Kan JY, Rungcharassaeng K, Lozada JL, Zimmerman G.** Facial gingival tissue stability following immediate placement and provisionalization of maxillary anterior single implants: a 2- to 8-year follow-up. *Int J Oral Maxillofac Implants* 2011 Jan-Feb;26(1):179-87.

**Lozada JL, Goodacre C, Al-Ardah AJ, Garbacea A.** Lateral and crestal bone planning antrostomy: a simplified surgical procedure to reduce the incidence of membrane perforation during maxillary sinus augmentation procedures. *J Prosthet Dent.* 2011 Mar;105(3):147-53.

**Urban IA, Nagursky H, Lozada JL.** Horizontal ridge augmentation with a resorbable membrane and particulated autogenous bone with or without anorganic bovine bone-derived mineral: A prospective case series in 22 patients. *Int J Oral Maxillofac Implants* 2011 Mar-Apr;26(2):404-14.

**Tsuda H, Rungcharassaeng K, Kan JY, Roe P, Lozada JL, Zimmerman G.** Peri-implant tissue response following connective tissue and bone grafting in conjunction with immediate single-tooth replacement in the esthetic zone: a case series. *Int J Oral Maxillofac Implants* 2011 Mar-Apr;26(2):427-36.

**Roe P, Kan JY, Rungcharassaeng K, Won JB.** Retrieval of a fractured zirconia implant abutment using a modified crown and bridge remover: a clinical report. *J Prosthodont* 2011 Jun;20(4):315-8.

**Chung S, Rungcharassaeng K, Kan JY, Roe P, Lozada JL.** Immediate single tooth replacement with subepithelial connective tissue graft using platform switching implants: A case series. *J Oral Implantol* 2011 Oct;37(5):559-69.[Epub 2010 Sep 30].

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*Oral and Maxillofacial Surgery*



**Jeffrey Dean, DDS, MD**  
Director

**Advanced Specialty Education Program  
Oral and Maxillofacial Surgery**

LLUSD offers two graduate programs in oral and maxillofacial surgery—a four-year program, and a six-year program leading to an MD degree. Both programs lead to a certificate with an optional Master of Science (MS) or Master of Science in Dentistry (MSD) degree.

**Newsletter publication**

The Oral and Maxillofacial Surgery program has published a newsletter every six months. Issued to faculty, staff, and alumni of the program, the newsletter is also distributed to members of oral and maxillofacial surgery programs throughout the United States.

**Faculty educational programs**

The first annual Facial Trauma Cadaver Course was presented by Alan Herford, SD'94, MD, Jeffrey Dean, DDS, MD, and Carlos Moretta, SD'01, in conjunction with Loma Linda University Continuing Education. They invited faculty members from the Divisions of ENT, Plastic and Reconstructive Surgery to also present.

**Faculty highlights**

**Jeffrey Dean, DDS, MD**, was appointed the new program director for the Oral and Maxillofacial Surgery Residency Program effective July 1, 2011.

**Dr. Dean** successfully completed the American Board of Oral and Maxillofacial Surgery recertification

examination. In addition, he has been invited to serve as a content expert for the American Board of OMS.

**Alan Herford, SD'94, MD**, who was appointed as one of the surgery section co-chairs for the 2011 oral certifying examination, will continue as a section co-chair (Section III) for the 2012 oral certifying examination in Dallas.

**Drs. Dean and Herford** became members of the prestigious Chalmers J. Lyons Academy of Oral and Maxillofacial Surgery founded in 1927. The Academy, an oral and maxillofacial surgery honor society, is dedicated to the education of its members and all oral and maxillofacial surgeons.

**Dr. Herford** was inducted into the American College of Dentists in conjunction with the annual meeting of the American College of Dentists. Wayne Tanaka, DDS, one of his nominators, served as his sponsor at the convocation held October 11, 2011, in Las Vegas, Nevada.

**Residents**

Six residents enrolled in the two oral and maxillofacial surgery programs during the 2010 and 2011 academic years, with one completing the four-year program in 2010, and one each completing the six-year program in 2010 and 2011.

The department's participation in the Match process resulted in the arrival of three new residents to the oral and maxillofacial surgery program on July 1, 2010; two entered the four-year program and one was admitted to the six-year program.

**2011 OMSITE results**

On May 25, 2011, the American Board of Oral and Maxillofacial Surgery released the year's Oral and Maxillofacial Surgery In-Service Training Examination results. The OMSITE was developed to measure the OMS residents' knowledge in oral and maxillofacial surgery. Three of the OMS residents—Jason Gile, DDS; Young Jun, SD'05, MD; and Chan Park, DDS, MD—scored in or above the 90<sup>th</sup> percentile. This is an outstanding scholastic achievement.

**Visiting lecturer**

**Glen Houston, DDS**, chair, oral-maxillary pathology at the University of Oklahoma, lectured to the OMFS residents in 2010 and 2011.

*Oral and Maxillofacial Surgery*

**Professional visitors**

The Philip J. Boyne/Peter Geistlich Professorship Endowed Lecture for 2010 was presented by Likith V. Reddy, DDS, MD, FACS, of New Orleans, on January 20, 2010. His presentations included "Hypertelorism and Orbital Dystopia Correction" and "Staging of Cleft Lip and Palate Surgery and Primary Cleft Repair Techniques."

Two guest lecturers presented Philip J. Boyne/Peter Geistlich Professorship endowed lectures: Steven G. Press, DDS, of Vanderbilt University, on April 27, 2011, lectured on "Mandibular Reconstructive Options Utilizing Virtual Surgical Planning" and Daniel R. Cullum, DDS, of Implants Northwest in Coeur d'Alene, Idaho, on December 14, 2011, spoke about "Contiguous Sinus Floor Elevation and Osteotome Techniques."

**Bone Research Laboratory**

**Mei Lu**, DDS, PhD, MS, associate professor, manager of the Philip J. Boyne Bone Research Laboratory, continues to oversee the processing of specimens for research projects. The published research results of one project were entitled: "Recombinant Human Bone Morphogenetic Protein 2 Combined with an Osteoconductive Bulking Agent for Mandibular Continuity Defects in Nonhuman Primates." *Journal of Oral and Maxillofacial Surgery*, May, 2011.

In addition, the department purchased a new whole slide imaging system for the bone research laboratory.

**Global activity**

In March, 2011, the Department of Oral and Maxillofacial Surgery faculty was involved in multiple mission trips. Dr. Jeffrey Dean traveled to Lima, Peru, along with two of the OMFS residents, Drs. Young Jun and Jason Gile. The OMFS team was part of the Idaho Condor Humanitarian Services which provides oral and maxillofacial healthcare in Peru.

**Carlos Moretta**, SD'01, and OMFS resident Dr. Kourt Chatelain traveled (also in March 2011) to Dhaka, Bangladesh. Accompanied by a team of physicians, dental and dental hygiene students as well as other healthcare specialists, Drs. Moretta and Chatelain treated approximately 3,000 patients in five days in the Seventh-day Adventist Southern Mission School.

**Faculty presentations 2011**

**Herford, Alan**. Oral surgery. Interdisciplinary Approach to Cleft Repair and Care Symposium, LLUMC, January 30, 2011.

**Lu M, Cicciu M, Herford A**. Histological evaluation of PDGF for bone graft coverage in pigs. 89th General Session & Exhibition, International Association for Dental Research, San Diego, in conjunction with American Association for Dental Research annual meeting, March 15-19, 2011.

**Faculty publications 2010 / 2011**

**Liao KY, Kan JY, Rungcharassaeng K, Lozada JL, Herford AS, Goodacre CJ**. Immediate loading of two freestanding implants retaining a mandibular overdenture: 1-year pilot prospective study. *Int J Oral Maxillofac Implants* 2010 July-Aug; 25(4):784-90.

**Herford AS, Akin L, Cicciù M, Maiorana C, Boyne PJ**. Use of a porcine collagen matrix as an alternative to autogenous tissue for grafting oral soft tissue defects. *J Oral Maxillofac Surg* 2010 Jul;68(7):1463-70.

**Herford AS, Cicciù M**. Recombinant human bone morphogenetic protein type 2 jaw reconstruction in patients affected by giant cell tumor. *J Craniofac Surg* 2010 Nov;21(6):1970-5.

**Akin L, Herford AS, Cicciù M**. Oral presentation of disseminated histoplasmosis: A case report and literature review. *J Oral Maxillofac Surg*. 2011 Feb;69(2):535-41.

**Maiorana C, Beretta M, Battista Grossi G, Santoro F, Herford AS, Nagursky H, Cicciù M**. Histomorphometric evaluation of anorganic bovine bone coverage to reduce autogenous grafts resorption: Preliminary results. *Open Dent J* 2011 Apr;25(5):71-8.

**Herford AS, Cooper TC, Maiorana C, Cicciù M**. Vascularized connective tissue flap for bone graft coverage. *J Oral Implantol* 2011 Apr;37(2):279-85.

**Boyne PJ, Caruso JM, Rungcharassaeng K, Hong J**: Recombinant human bone morphogenetic protein 2 combined with an osteoconductive bulking agent for mandibular continuity defects in nonhuman primates. *J Oral Maxillofac Surg* 2011, May 4.

**Herford AS, Lu M, Buxton AN, Kim J, Henkin J, Boyne PJ, Caruso JM, Rungcharassaeng K, Hong J**. Recombinant human bone morphogenetic protein 2 combined with an osteoconductive bulking agent for mandibular continuity defects in nonhuman primates. *J Oral Maxillofac Surg* 2011, Epub May 6.

**Herford AS, Dean JS**. Complications in bone grafting. *Oral Maxillofac Surg Clin North Am* 2011, May 28.

**Herford AS, Dean JS**. Complications in bone grafting. *Oral Maxillofac Surg Clin North Am* 2011 Aug; 23(3):433-42.

**Murray M, Dean J, Slater L**. Multifocal oral Langerhans cell histiocytosis. *J Oral Maxillofac Surg* 2011 Oct;69(10):2585-91.

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*Orthodontics and Dentofacial Orthopedics*



**Leroy Leggitt, DDS, MS, PhD**  
Director

**Advanced Specialty Education Program in Orthodontics and Dentofacial Orthopedics**

Six students are admitted each year to LLUSD's 27-month program leading to a Master of Science (MS) degree or a professional certificate in orthodontics and dentofacial orthopedics. The program's 12 residents are among the 800 individuals in the United States currently in training for the specialty.

**Graduate student research projects 2010**

Sherry A. Caraveo, Effects of orthodontic treatment on social perceptions. Mentor: Joseph Caruso

Jeffrey M. Hwang, Creating prediction models for obstructive sleep apnea. Mentor: Joseph Caruso

Joanne S. Kim, MicroCT study of critical-sized defects restored with a new rhBMP-2 carrier. Mentor: Joseph Caruso

Ryan M. Pulfer, The slope of the vomer and facial growth. Mentor: David Rynearson

Tye A. Roylance, Work of fracture in ceramic bracket bonding systems. Mentor: Craig Andreiko

Matthew A. Sanders, Facial type analysis comparison between MRI, CBCT, and lateral cephalometrics. Mentor: Leroy Leggitt

**Graduate student research projects 2011**

Melina Adamian, Profile attractiveness in borderline class III surgical/orthodontic cases. Mentor: Graham Stacey

V. Jenee Kaplan, The influence of outdoor air quality on vertical and transverse dental dimensions. Mentor: Leroy Leggitt

Warren D. Libby, Cone-beam computed tomography and orthodontics: awareness assessment. Mentor: Leroy Leggitt

Gregory W. Olson, Civic attitude and activity of Loma Linda University graduates. Mentor: Joseph Caruso

Brent J. Tingey, Sleeping tongue posture and its relationship to craniofacial morphology. Mentor: Joseph Caruso

Todd E. Wesslen, Accuracy of unsegmented CBCT in mesial-distal tooth measurements. Mentor: Joseph Caruso

**2010 students (incoming or first year)**

- Melissa Bailey, DDS
- Andrew Ferris, DDS
- Allison Milliner, DDS
- Ryan Rudd, DDS
- Tamar Sardarian, DDS
- Jelson Yalung, DDS

**2011 students (incoming or first year)**

- Emily Caskey, DDS
- Andrew Corbett, DDS
- Jeffrey Lam, DDS
- Da "Grace" Lee, DDS
- Jessica Moretz, DDS
- Christopher Wood, DDS

**Faculty mission service 2011**

**Dr. Leroy Leggitt**—Roatan, Honduras. LLUSD student mission trip.

**Dr. Leroy Leggitt**—Dembidolo, Ethiopia. LLUSD student mission trip.

**Faculty publications 2010**

Roe P, Kan JY, Rungcharassaeng K, Lozada JL, Kleinman AS, Goodacre CJ, Chen JW. Immediate loading of unsplinted implants in the anterior mandible for overdentures: A case series. *Int J Oral Maxillofac Implants* 2010;25:1028-1035.

Patel RD, Kan JY, Jonsson LB, Rungcharassaeng K. The use of a dental surgical microscope to aid retrieval of a fractured implant abutment screw: A clinical report. *J Prosthodont* 2010;19:630-3.



*Orthodontics and Dentofacial Orthopedics*

Liao KY, Kan JY, Rungcharassaeng K, Lozada JL, Herford AS, Goodacre CJ. Immediate loading of two freestanding implants retaining a mandibular overdenture: 1-year pilot prospective study. *Int J Oral Maxillofac Implants* 2010;25:784-90.

Kan JY, Morimoto T, Rungcharassaeng K, Roe P, Smith DH. Gingival biotype assessment in the esthetic zone: Visual versus direct measurement. *Int J Periodontics Restorative Dent* 2010;30:237-243.

**Faculty publications 2011**

Kan JYK, Roe P, Rungcharassaeng K, Patel R, Waki T, Lozada JL, Zimmerman G. Classification of sagittal root position in relation to the anterior maxillary osseous housing for immediate implant placement: A cone beam computed tomography study. *Int J Oral Maxillofac Implants* 2011 Jul-Aug;26:873-876.

Kan JY, Rungcharassaeng K, Lozada JL, Zimmerman G. Facial gingival tissue stability following immediate placement

and provisionalization of maxillary anterior single implants: A 2- to 8-year follow-up. *Int J Oral Maxillofac Implants* 2011;26:179-87.

Tsuda H, Rungcharassaeng K, Kan JYK, Roe P, Lozada JL, Zimmerman G. Peri-implant tissue response following connective tissue grafts in conjunction with single immediate tooth replacement in the esthetic zone: A case series. *Int J Oral Maxillofac Implants* 2011;26:427-436.

Roe P, Kan JYK, Rungcharassaeng K, Won JB. Retrieval of a fractured zirconia implant abutment using a modified crown and bridge remover: A clinical report. *J Prosthodont* 2011;20:315-318.

Chung S, Rungcharassaeng K, Kan J, Roe P, Lozada J. Immediate single tooth replacement with subepithelial connective tissue graft using platform switching implants: A case series. *J Oral Implantol* 2011;37:559-569.

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Graduate students in orthodontics and dentofacial orthopedics gather for class in the Center for Dentistry and Orthodontics' Thomas J. Zwemer Conference Room.

*Pediatric Dentistry*



**Jung-Wei Chen, DDS, PhD, MS**  
Director

**Advanced Specialty Education Program  
in Pediatric Dentistry**

The Advanced Specialty Education Program in Pediatric Dentistry is a 24-month program designed to prepare residents for a practice limited to the care of children and adolescents. The program leads to a professional certificate with the option to earn either a Master of Science (MS) or Master of Science in Dentistry (MSD) degree.

**Newsletter**

The Advanced Specialty Education Program in Pediatric Dentistry began publishing a departmental newsletter in 2010 to provide updates on activities in the department and stay current on alumni news.

**Faculty transitions**

**J. Todd Milledge**, SD'88, PG'95, associate program director of the Advanced Specialty Education Program in pediatric dentistry, moved to Yakima, Washington, in 2010, where he is pursuing a practice and affiliating as an associate professor at University of Washington School of Dentistry's Pediatric Department.

**Samah I. Omar**, DDS, MSD, joined the Pediatric Dentistry Department as an associate professor upon completion of her residency program at LLUSD in 2010. Coming to LLUSD from Jordan with her husband, Aladdin Al-Ardah, DDS, MS (LLUSD Implant Dentistry), Dr. Omar first completed LLUSD's International Dentistry Program in 2005. She recently

passed the Oral Board Examination and became a diplomate of the American Board of Pediatric Dentistry.

**Greg Olson**, DDS, MS, joined the Pediatric Dentistry department full-time upon completion of his second graduate program at LLUSD in orthodontics and dentofacial dentistry. Earlier (1998) he had completed LLUSD's Advanced Education Program in Pediatric Dentistry and practiced pediatric dentistry in Oak Harbor, Washington. Dr. Olson is a diplomate of the American Board of Pediatric Dentistry.

**Shanaz Bonyanpoor**, DDS, who previously taught in the Pediatric Dentistry Department (1992-2001), rejoined the department in 2011, after pursuing a private practice, and spends time in the clinic, instructing predoctoral and graduate students.

**Faculty**

**Jung-Wei (Anna) Chen**, DDS, PhD, MS, became program director of the Advanced Specialty Education Program in Pediatric Dentistry in 2009, and serves on the California Society of Pediatric Dentistry board of directors, is an oral board examiner for the American Board of Pediatric Dentistry.

**Visiting scholar**

**He Jun**, DDS, of Zhejiang, China, spent July to September 2010 as an extern in the department before returning to Sir Run Run Shaw Hospital, College of Medicine, where she serves as faculty in the Pediatric Dentistry Department.

**Zhang Feng**, DDS, of Zhejiang University Children's Hospital, China, spent two months, beginning on March 29, 2011, observing the clinic and other aspects of pediatric treatment in the department.

**Residents become alumni**

June 2011 marked the eighteenth year of students completing the department's Advanced Specialty Education Program. Alumni of the pediatric program now number 56. Pediatric residents gain skills in working with children, many with special needs or craniofacial problems. Their experience includes oral and general sedation in the Pediatric Clinic, Koppel Special Care Dentistry Center and LLUMC operating room. On-call services are covered at the LLUMC Children's Hospital and Pediatric Emergency Room.

*Pediatric Dentistry*

**Graduate student research projects**

These residents completed these research projects and received their MSD degrees in June 2010:

Sam Alzayat, IDP'04 MSD. Comparison of clinical effectiveness among different age groups of children by using a combination of oral and submucosal sedation: A ten-year retrospective study. Mentor: Dr. Jung-Wei Chen

Bryan Fletcher, SD'08, MSD. Effects of partially pre-curing a resin-modified glass ionomer restorative material on microleakage. Mentor: Dr. Jung-Wei Chen

Raelene McDowell-Fulford, SD'07, MSD. A comparison of adults' first impression of children age 6-14 before and after orthodontic treatment. Mentor: Dr. Jung-Wei Chen

Samah Omar, IDP '07, MSD. Fluoride level in commonly consumed infant juices. Mentor: Dr. Jung-Wei Chen

These residents completed research and received their MSD degrees in June 2011:

Noha Abdel-Salam, IDP'08, MSD. Effect of erosion on microleakage and penetration ability of filled and unfilled fissure sealants. Mentor: Dr. Jung-Wei Chen

Monserrat Jorden, DDS, MSD: Comparison of acoustic pulse produce by ER,CR:YSGG laser and a conventional high speed handpiece in primary teeth. Mentor: Dr. Jung-Wei Chen

Meghanne Kruiuzenga, SD'07, MSD. The association between parenting style and parental acceptance of behavior management techniques. Mentor: Dr. Jung-Wei Chen

Laura McCormack, IDP'09, MSD. A comparison of adverse sedation related events for two muti-agent oral sedation regimens in pediatric dental patients. Mentor: Dr. Jung-Wei Chen

**Excellence in academic performance – ABPD**

These alumni became diplomates of the American Board of Pediatric Dentistry after passing the oral board in 2011:

- Sameh Alzayat, DDS'10
- Bryan Fletcher, DDS, MSD'10
- Samah Omar, DDS, MSD,'10
- Allen Job, DDS, MS, MPH, MS'05

Four members of the graduating class of 2011 passed the qualifying examination of the American Board of

Pediatric Dentistry with scores at 100 percent, ranking above the national average and scoring in the first quartile:

- Noha Abdel-Salam, DDS, MSD
- Monserrat Jorden, DMD, MSD
- Meghanne Kruiuzenga, DDS, MSD
- Laura McCormack, DDS, MSD

**Colleagues in Training Fund**

The Advanced Specialty Education Program in Pediatric Dentistry Colleagues-in-Training Fund is successfully being implemented through alumni donations who are funding opportunities for residents to attend professional meetings, attend the American Board of Pediatric Dentistry Comprehensive Review course, and purchase new equipment.

**Service learning**

The Department of Pediatric Dentistry is involved in service to the community and, with the Department of Service Learning, participates in various mission trips that the School promotes.

During the annual **Clinic With a Heart**, January 2011, the pediatric clinic treated approximately 18 patients. This allowed the clinic to do quadrant work.

For Give Kids a Smile, another annual service learning project, Wesley Okumura, SD'94, PG'03, along with current residents, pediatric dental assistants, and volunteer faculty, went to Helendale Unified School District. After performing screenings in January, they returned for treatments in February. Also, in February they spent an afternoon at S.A.C.H. Norton treating San Bernardino area children.

Faculty oversaw annual mission trips that provided dental treatment to children in low income, underserved communities. In March 2011, Dr. Bonnie Nelson joined a team that went to Honduras; and, in June 2011, Dr. Chen accompanied students to Nicaragua.

Both Drs. Chen and Omar have spent time at the University of Dammam in Saudi Arabia teaching in the Pediatric Dentistry Department. They presented didactic and clinical instruction as well as CE courses for the students, faculty, and staff.

**Faculty Presentations/ Abstracts 2010**

**Chen J-W.** Effects of saliva and water contamination on the shear bond strength of glass ionomer to dentin. International Association of Dental Research. Washington, DC, March 10, 2010.

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*Pediatric Dentistry*



Recent bilateral complete cleft lip/palate patient of Dr. Chen's before and after the application of a PNAM appliance and one surgery.

**Chen J-W.** New trends in pediatric dentistry: (1) change of caries preventions, (2) the esthetic restoration in primary anterior teeth I, (3) the esthetic restoration in primary anterior

teeth II, (4) new technology in pediatric dentistry. Annual scientific meeting, Academy of Pediatric Dentistry, Taiwan. Academy of Pediatric Dentistry, Kaohsiung, Taiwan, 2010.

**Butler L, Chen J-W, Traficante FR, Roggenkamp HC, Riter H.** Effects of contaminations on dentin bonding strength of glass ionomers. AADR annual meeting, Washington, DC, 2010, Abstract #2017.

**Segura S, Chen J-W, Nelson B, Traficante FR.** Relationship between parents' knowledge of caries transmissibility and caries prevalence. AADR annual meeting, Washington, DC, 2010, Abstract #1090.

**Sun CX, Wall NR, Angelov N, Ririe C, Chen J-W, Boskovic DS, Henkin JM.** Expression change of adenosine receptors in human chronic periodontics. AADR annual meeting, Washington DC, 2010, Abstract #1445.

**Chen J-W.** Pediatric dental trauma treatment. Keynote speaker, Association for Dental Services of the Republic of China, Taipei, Taiwan, November 28, 2010.

**Chen J-W.** Treatment of dental trauma. Wang-Frang Hospital, November 29, 2010.

**Chen J-W.** Trauma and emergency treatment. Taipei Medical University, November 30, 2010.

**Chen J-W.** New trends in pediatric dentistry. Keynote speaker, Taiwan Academy of Pediatric Dentistry, Taiwan, Taipei, December 5, 2010

**Chen J-W.** Lingual frenectomy using laser: Interesting cases and differential diagnosis FAQs for pediatric dentistry. Sir Run Run Shaw Hospital, Hangzhou, China, December 5, 2010.

**Faculty Presentations / Abstracts 2011**

**Chen J-W.** The PNAM appliance. Interdisciplinary Approach to Cleft Palate Repair and Care Symposium, LLUMC, January 30, 2011.

**Nelson B.** Pediatric dentistry. Interdisciplinary Approach to Cleft Palate Repair and Care Symposium, LLUMC, January 30, 2011.

**Meharry M, Lee SS, Chen J-W.** Whitening effectiveness comparison of four different bleaching tray designs. IADR/AAADR general session, San Diego, California, March 15-19, 2011.

**Omar S, Chen J-W, Nelson B, Okumura W, Zhang W.** Fluoride level in commonly consumed infant juices. IADR/AAADR general session, San Diego, 2011.

**Faculty publications 2010**

Katheria BC, Kau CH, Tate R, **Chen J-W**, English J, Bouquot J. Effectiveness of impacted and supernumerary tooth diagnosis from traditional radiography versus cone beam computed tomography. *Pediatr Dent* 2010 Jul-Aug;32(4):304-9.

**Roe P, Kan J, Rungcharassaeng K, Lozada J, Kleinman A, Goodacre C, Chen J-W.** Immediate loading of unsplinted implants in the anterior mandible for overdentures: A case series. *Into J Oral Maxillofac Implants* 2010;25(5): 1028-35 PMID 20862419.

**Moseley-Stevens J, Chen J-W, Traficante FR, Grabowsky RL.** Comparison of fluoride concentrations in commonly consumed ready-to-eat infant foods. *Pediatr Dent* 2010 Nov-Dec;32(7):513-7.

**Faculty publication 2011**

**Sun CX, Wall N, Angelov N, Ririe C, Chen J-W, Boskovic D, Henkin J.** Changes in mRNA expression of adenosine receptors in human chronic periodontitis. *The Chinese Journal of Dental Research* 2011;14(2):113-120.

*Periodontics*



**Jeffrey M. Henkin, DDS, MS**  
Director

**Advanced Specialty in Periodontics  
Biennial Report**

The Advanced Specialty Education Program in Periodontics emphasizes high-level technical procedures: esthetic and prosthetic-related mucogingival surgery, resective and regenerative surgical procedures, surgical placement of root-form implants combined with any necessary preparatory augmentation and reparative procedures. Graduate students pursue didactic, clinical, and research components in the program that leads to a professional certificate with the option to earn either a Master of Science (MS) or a Master of Science in Dentistry (MSD) degree.

**Department of Periodontics Highlights for 2010-2011**

Approximately 25 percent of all predoctoral procedures performed on any given day are periodontal procedures (about 25 chairs). This is about 15,000 patient visits/year.

Approximately 7,500 unique patient visits to the graduate program resulted in about 6,000 separate procedures performed.

LLU periodontal graduate students won first place at the California Society of Periodontists annual Research Award competition in 2010.

**Jeffrey Henkin, DDS, MS**, was elected to the board of directors of the California Society of Periodontists.

**Erik Sahl, SD'06, MSD'11**, was nominated for the 2011 CSP Leadership Award.

Over the past three years, 100 percent of periodontal graduates taking the American Board of Periodontology

exam were successful and became diplomates of the American Board of Periodontology.

**Dr. Erik Sahl** was awarded the prestigious Abram and Sylvia Chasens Teaching and Research Fellowship Award from the American Academy of Periodontology in 2010. This very prestigious award is presented to graduate students who are planning a career in teaching.

Four of the ten current LLU periodontal graduate students are alumni of LLU School of Dentistry.

**Beatrice Criveanu, DDS**, assistant professor, volunteered for a mission trip to Belize during which dental care was provided for hundreds of needy patients in 2010.

The third annual Department of Periodontics Symposium was held on April 18, 2010. There were over 150 attendees.

The fourth annual symposium, April 3, 2011, drew more than 85 attendees.

**Chun Xiao Sun, DMD, PhD, MS**, associate professor, has been awarded a \$10,000 research grant that supplements his faculty research fund of \$5,000.

**Graduate students**

Two graduate students completed the three-year program in 2010, six completed the program in 2011, and three new students were admitted to the program in 2011.

**New full time faculty for 2010-2011**

**Martyn Green, DDS**, assistant professor  
**Erik Sahl, DDS, MSD**, assistant professor

**Curriculum additions**

**Dennis Smith, DDS, MS**, introduced a course in occlusion for the graduate students. They also receive training in minor orthodontics and some restorative procedures.

**Intercity Periodontal Research Symposium**

At the 21st Annual Intercity Periodontics Research Symposium, periodontal graduate students from USC, UCLA, Wadsworth/VA, and LLU presented their research projects to each other. For the May 6, 2011, meeting at USC, four LLU students participated:

- Elisa Sin, DDS, MSD
- Graig Erickson, DDS
- Wesam Salha, DDS
- Elham Javadi, DDS, MSD

*Periodontics*

**Graduate student research**

These students completed research projects and received MSD degrees in 2011:

**Elham Javadi**, DDS, MSD, 2011. The correlation between bone density of computed tomography and bone mineral density of micro computed tomography.

**Elisa Sin**, DDS, MSd, 2011. The correlation of bone mineral density using cone beam-computed tomography and micro-computed tomography.

**Pedram Fakheri**, DDS, MSD, 2011. The effects of variables on the bone mineral density acquired by cone beam.

**Erik Sahl**, DDS, MSD, 2011. A comparison of curette samples of periodontal lesions taken from different depths of the lesions on the recovery of putative periodontal pathogens.

**Faculty presentations**

Moutsopoulos N, **Gupta B**, **Angelov N**, Nares S, Wahl S. P Gingivalis engages immune pathways linked to TH1/TH17 lineage differentiation. AADR annual meeting, Washington, D.C., March 2010.

**Sun C-X**, **Wall NR**, **Angelov N**, **Ririe C**, **Chen J-W**, **Boskovic DS**, **Henkin JM**. Expression change of adenosine receptors in human chronic periodontitis. AADR annual meeting, Washington, D.C., March 2010.

**Sun C-X** [poster presentation]. Expression change of adenosine receptors in human chronic periodontitis. AADR annual meeting, Washington, D.C., March 2010.

**Sun C-X** [poster presentation finalist]. Correlation of bone mineral density and bone volume in human jaw bones using micro-computed tomography. Research Forum Poster Session, American Academy of Periodontology, Honolulu, Hawaii, 2010.

**Angelov N** [invited speaker]. The role of SLPI in healing of oral mucosal wounds. Integrated Biomedical Sciences Seminary Series, Loma Linda University, June 3, 2010.

**Angelov N** [session chair], **Filippova M**, **Duerksen-Hughes P**, **Fletcher H**. Gingipain-induced Caspase-1 activity in bovine coronary artery endothelial cells. IADR General Session, Barcelona, Spain, July 2010.

**Faculty publications 2010**

**Jaramillo D**, **Rosa R**, **Angelov N**. Dental trauma: Case scenario protocol for dentists. Mac J Med Sci 2010 Mar 15;3(1):61-67.

**Zafireopoulos GG**, **Deli G**, **Bartee BK**, **Hoffmann O**. Single-tooth implant placement and loading in fresh and regenerated extraction sockets: Five-year results. A case report. A case series using two different implant designs. Periodontol 2010 April;81(4):604-15.

**Zafireopoulos GG**, **Gioglio D**, **Hoffmann O**, **Thielen U**, **Beaumont C**. Zirconia removable telescopic dentures on teeth or implants for maxilla rehabilitation: Three-year observation of three cases. J Oral Implantol 2010 36(6):455-65.[Epub 2010 June 14]

**Zafireopoulos GG**, **Hoffmann O**, **Deli G**. Maintenance of class III tri-furcated molars versus implant placement in regenerated extraction sockets: Long-term results of two cases. Oral Implantol 2010 Jun 16 [Epub ahead of print] PMID:20553166.

**Serra R**, **Al Saidi AG**, **Angelov N**, **Nares S**. Suppression of LPS-induced matrix-metalloproteinase responses in macrophages exposed to phenytoin and its metabolite, 5-p-hydroxyphenyl, 5 phenylhydantoin. J Imflamm (Lond) 2010 Sep 15;7:48.

**Zafireopoulos GG**, **di Prisco MO**, **Deli G**, **Hoffmann O**, **Kasaj A**. Maintenance after a complex orthoperio treatment in a case of generalized aggressive periodontitis: Seven-year result. J Int Acad Periodontol 2010 Oct;12(4):112-22.

**Hoffmann O**, **Zafireopoulos GG**. The tooth-implant connection: A review. J Oral Implantol 2010 Nov 23 [Epub ahead of print]

**Zafireopoulos GG**, **Kasaj A**, **Hoffmann O**. Immediate implant placement in fresh mandibular molar extraction socket: Eight-year results. A case report. Oral Implantol 2010;36(2):145-51.

**Mobililia A**, **Erickson G**, **Drouin V**, **Mercer J**, **Perez SS**. Comparing effectiveness of plaque removal using three different interproximal devices. J. Dent Res 2010; 89(A):167.

**Sun C-X**, **Ririe C**, **Henkin JM**. Hyperplastic dental follicle: Review of literature and report of two cases in one family. The Chinese Journal of Dental Research 2010;13(1):71-75.

**Faculty publications 2011**

**Zhou Y**, **Schneider DJ**, **Morschl E**, **Song L**, **Pedroza M**, **Karmouty-Quintana H**, **Le T**, **Sun C-X**, **Blackburn MR**. Distinct roles for the A2B adenosine receptor in acute and chronic stages of bleomycin-induced lung injury. J Immunol 2011 Jan 15;186(2):1097-1106.

**Aranasovska-Stojanovska A**, **Trajkov D**, **Nares S**, **Angelov N**, **Spiroski M**. IL4 gene polymorphisms and their relation to periodontal disease in a Macedonian population. Hum Immunol 2011 Feb 25 [Epub ahead of print]

**Pesevska S**, **Nakova M**, **Gjorgoski I**, **Angelov N**, **Ivanoski K**, **Nares S**, **Andreana S**. Effect of laser on TNF-alpha expression in inflamed gingival tissue. Lasers Med Sci 2011 Mar 5 [epub ahead of print]

**Hoffmann O**, **Zafireopoulos GG**. The tooth-implant connection: A review. J Oral Implantol. July 2011. [Epub ahead of print]



*Prosthodontics*



**Mathew T. Kattadiyil, DDS, MDS, MS**  
Interim Director

**Advanced Specialty Education Program  
in Prosthodontics**

Prosthodontics is the dental specialty that deals with rehabilitating patients in a comprehensive manner: restoring function, comfort, appearance, and health. The program is 36 months in length and accepts four students per year.

Mathew Kattadiyil, BDS, MDS, MS, FACP, serves as the Director of the Advanced Specialty Education Program in Prosthodontics.

**Recent transitions in staffing**

**Daniel Tapia**, DH '09, joined the Prosthodontics staff as dental hygienist (part-time) in 2010.

**Kenneth Wical Award for Excellence in Prosthodontics**

The Kenneth Wical Award for Excellence in Prosthodontics is awarded to honor individuals who have contributed significantly to the specialty of prosthodontics. The award is named in honor of Dr. Kenneth Wical, professor, Loma Linda University School of Dentistry for his contribution to the specialty of prosthodontics.

**Recipients of the Kenneth Wical Award**

- 2011 - Roy T. Yanase DDS
- 2010 - W. Patrick Naylor, DDS, MPH, MS

**Prosthodontics honors**

Students who completed the undergraduate Prosthodontics Honors Program during the recent biennium were Miguel Pappaterra Leon, IDP'10, and

Andrew Corbett, SD'11. Admission to the program requires an upper third class standing, on-schedule clinical competency, and consistent demonstration of exemplary personal and professional integrity.

**Graduates**

The 2010 and 2011 graduates of the Advanced Specialty Education Program in Prosthodontics are pictured on page 39.

**Prosthodontic graduate student research projects**

The following students completed research projects and were awarded the Master of Science in Dentistry (MSD) Degree in 2010:

Vahik Meserkhani, DDS, PG'09: Comparison of the Accuracy in Stereolithographic Models of a Human Mandible: An In-Vitro Pilot Study. Mentors: Dr. Mathew T. Kattadiyil, Dr. W. Patrick Naylor, Dr. Jaime Lozada, Dr. Charles Goodacre, Dr. Udochukwu Oyoyo

The following students completed research projects and were awarded the Master of Science in Dentistry (MSD) Degree in 2011:

Bader Ahmad, DDS, PG'09: Effect of varying water-powder ratio on linear dimensional change, strength, and detail reproducibility of die stones. Mentors: Dr. Mathew T. Kattadiyil, Dr. Charles Goodacre, Dr. Yiming Li, Dr. Amir Khatami, Dr. Jung-Wei Chen

Ronald Forde, DDS, PG'09: Changes in the Retentive Force of Locator Attachments at Selected Angulations. Mentors: Dr. Mathew T. Kattadiyil, Dr. Alejandro Kleinman, Dr. Douglass Roberts, Dr. Jay Kim

Montry Suprono, DDS, PG'10: Effect of Disinfection on Traditional Irreversible Hydrocolloid Impression Materials, Hydrocolloid Alternative Impression Materials and Resultant Gypsum Casts. Mentors: Dr. Mathew T. Kattadiyil, Dr. Charles Goodacre, Dr. Myron Winer.

**Graduate students**

Twelve students are currently enrolled in the prosthodontics specialty program and anticipate graduating in 2012, 2013, and 2014.

*Prosthodontics*

**Faculty publications 2010**

**Goodacre CJ.** Carbon fiber posts may have fewer failures than metal posts. *J Evid Based Dent Pract* 2010 Mar;10(1):32-4.

**Khatami AH, Toljanic JA, Kleinman A.** Mandibular reconstruction with vascularized fibula flap and osseointegrated implants: a clinical report. *J Oral Implantol* 2010;36(5):385-90.

**Noumbissi SS, Kleinman A.** A comparative clinical histological and histomorphometric study of mineralized allograft and xenograft materials in the treatment of atrophic maxillary sinuses. *JACD* 2010 June: 2(5):47-60.

**Khatami AH, Campagni WV.** Effect of axial height and palatal wall on the resistance form of a maxillary anterior metal-ceramic crown preparation. *J Calif Dent Assoc.* 2010 Jul;38(7):505-11.

**Liao KY, Kan JY, Rungcharassaeng K, Lozada JL, Herford AS, Goodacre CJ.** Immediate loading of two freestanding implants retaining a mandibular overdenture: 1-year pilot prospective study. *Int J Oral Maxillofac Implants* 2010 Jul-Aug;25(4):784-90.

**Paravina RD, O'Neil PN, Swift EJ Jr, Nathanson D, Goodacre CJ.** Teaching of color in predoctoral and postdoctoral dental education in 2009. *J Dent* 2010;38 Suppl 2:e34-40.

**Roe P, Kan JY, Rungcharassaeng K, Lozada JL, Kleinman AS, Goodacre CJ, Chen JW.** Immediate loading of unsplinted implants in the anterior mandible for overdentures: a case series. *Int J Oral Maxillofac Implants* 2010 Sep-Oct;25(5):1028-35.

**Sadowsky SJ, Pfeifer DL, Goodacre CJ.** 2008 Survey of pro bono services provided by practicing prosthodontists. *J Prosthodont* 2010 Oct;19(7):553-6.

**Patel RD, Kattadiyil MT, Goodacre CJ, Winer MS.** An in vitro investigation into the physical properties of irreversible hydrocolloid alternatives. *J Prosthet Dent.* 2010 Nov;104(5):325-32.

**Roe P, Patel RD.** Fabrication of a modified repositioning key for relining provisional restorations. *J Prosthet Dent.* 2010 Dec;104(6):401-2.

**Urban IA, Nagursky H, Lozada JL.** Horizontal ridge augmentation with a resorbable membrane and particulated autogenous bone with or without anorganic bovine bone-derived mineral: a prospective case series in 22 patients. *Int J Oral Maxillofac Implants* 2011 Mar-Apr;26(2):404-14.

**Arnett MR, Baba NZ.** Improving tobacco dependence education among the Loma Linda University School of Dentistry faculty. *J Dent Educ* 2011 Jun;75(6):832-8.

**Chedid NR, Bourgeois D, Kaloustian H, Baba NZ, Pilipili C.** Caries prevalence and caries risk in a sample of Lebanese preschool children. *Odontostomatol Trop* 2011 Jun;34(134):31-45.

**Roe P, Kan JY, Rungcharassaeng K, Lozada JL.** Immediate loading of unsplinted implants in the anterior mandible for overdentures: 3-year results. *Int J Oral Maxillofac Implants* 2011 Nov-Dec; 26 (6):1296-302.

**Faculty publications 2011**

**Baba NZ, Berry F, Lehnhof MC.** Early shear bond strength of experimental amalgam-bonding combinations with and without thermocycling. *Int Arab J dent* 2011;2(2):25-30.

**Baba NZ, Goodacre CJ.** Key principles that enhance success when restoring endodontically treated teeth. *Roots Int Mag of Endodont* 2011;7(2):30-35.

**Lozada JL, Goodacre C, Al-Ardah AJ, Garbacea A.** Lateral crestal bone planning antrostomy: A simplified surgical procedure to reduce the incidence of membrane perforation during maxillary sinus augmentation procedures. *J Prosthet Dent.* 2011 Mar;105(3):147-53.



Rachel Terwillegar, CFRE, CSPG, Director of Development; Charles J. Goodacre, DDS, MSD, Dean; and Maynard Lowry, PhD, Director, Gift Planning and Special Gifts

**Development**

Philanthropic support for the School topped \$4 million in 2010. Total gifts for calendar years of 2010 and 2011 totaled more than \$7.5 million. Special gifts by alumni, faculty, staff, foundations, and corporations are significant components of the total amount raised.

**Endowment funds**

The first endowment fund for the School of Dentistry was established during the 1989-90 academic year. As of June 30, 2011, School of Dentistry endowment/foundation accounts have a value of more than \$11 million. A new scholarship endowment fund, in memory of Dr. Gerald A. Mitchell Sr., was established for dental hygiene students.

**Alumni support**

More than \$400,000 was raised by the Alumni Association Century Club for various projects including service learning scholarships, the student dedication service, research, and other alumni board-approved projects.

The Honor Class Challenge, instituted in 2009, has brought significant support to the School of Dentistry. In 2010, two classes raised more than \$160,000 each, with the other honor classes averaging total gifts of more than \$12,000 per class. In 2011, one class raised more than \$400,000, two classes gave over \$100,000 each, and the other honor classes averaged \$10,000 per class.

Student classes are becoming involved in philanthropy. The class of 2011 graduated with nine of its cohort becoming Dean’s Circle members (each making a gift

of \$150 or more). The Class of 2013 is participating in a mission project to Honduras each year until graduation and is raising funds to support its activities in Honduras. As a result of this participation, many are Dean’s Circle members.

The Alumni Association Century Club announced a bold new program: annual membership with benefits. Giving levels include Bronze at \$100, Silver at \$500, and Gold at \$1,000, with student Century Club membership at \$50. Membership benefits at the Gold level include a membership card; member’s name published (by class) in *LLUSD Dentistry*; access to job postings on the alumni section of the alumni website; the BETA version of the online alumni directory; a 10 percent discount for lecture-only on campus LLUSD continuing education courses; a 10 percent discount on Alumni Association purchases and on LLU Campus Bookstore items; access to Del Web Library (as a Friend of the Library, valued at \$75); and a membership certificate.

**Planned giving**

The School of Dentistry has been actively promoting planned giving through special ads appearing in various School of Dentistry publications such as *LLUSD Dentistry*, *Contact*, and dental hygiene newsletters. In addition, the URL to special planned giving content—[llusdlegacy.org](http://llusdlegacy.org)—appears on all development material. Planned gifts during this biennial period totaled more than \$1,200,000.

**Department projects**

Pediatric Dentistry has participated in a successful challenge grant during each of the last four years. The department received a matching gift of \$10,000 each of those years.

Orthodontia alumni, under the direction of Drs. Randall E. Hoff and Thomas L. Thomas, raised more than \$230,000 to name the new orthodontic clinic the “J. Milford Anholm Orthodontic Clinic,” and a conference room in the new facility, the “Thomas J. Zwemer Conference Room.”

**Source of funds**

More than 1,300 donors during the biennial period contributed to School of Dentistry funds. Here is a breakdown of the source of those funds:

Alumni .....	41%
Corporations/business .....	37%
Foundations .....	5%
Non-alumni faculty/employees .....	1%
Other individuals .....	14%
Other organizations .....	2%

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Fred Kasischke, DMin, associate dean, Admissions and Service Learning, and Dean Charles Goodacre, celebrate an in-kind donation of instruments from Arun Nayyar, DMD, MS.

Corporate sponsors include 3M Unitek Corporation; American College of Prosthodontists; American Dental Hygienists' Association, American Orthodontics Corporation; Aribex, Inc.; Arnold and Mabel Beckman Foundation; Brasseler USA; Calvary Presbyterian Church; Covenant Hills Adult Residential Facility; Colgate-Palmolive Company; Delta Dental Plan of California; Dentsply International; Dentsply/GAC International, AG; G. Hartzell & Son; First Baptist Church of Redlands; Heraeus Kulzer, Inc.; Johnson and Johnson Services, Inc.; KinderKrowns; KOMET USA, LLC; Loma Linda Korean Seventh-day Adventist Church; Loma Linda University Church of Seventh-day Adventists; Loma Linda University Dental Group; Loma Linda University Special Care Dentistry; Nobel Biocare, Inc.; Pacific Dental Services, Inc.; Peter Cheng Orthodontic Labs, Inc.; The Procter & Gamble Company; PracticeWorks Systems, LLC; Quintessence Publishing Co., Inc.; Strauman Company; Stryker Craniomaxillofacial; Success Essentials; Synthes USA; Tri-County Dental Society; Tulare-Kings Dental Society; and Wendle Motors.

Foundation support was received from the American Dental Partners Foundation, Arnold and Mabel Beckman

Foundation, California Dental Association Foundation, Chi Chi Chapter OKU, Global Health Institute, National Association of Seventh-day Adventist Dentists, Patterson Foundation, Significance Foundation, Tropical Health Alliance Foundation, Unihealth Foundation, and WalMart Foundation.

#### Gifts-in-Kind

Gifts in the form of products and equipment continue to be a component of the philanthropy program. Gifts valued at more than \$300,000 were received from Colgate-Palmolive Company, Hu-Friedy, KinderKrowns, KOMET USA LLC, Nobel Biocare, Peter Cheng Orthodontic Labs, Inc., The Procter and Gamble Company, and Success Essentials.

#### Gold 4 Good

More than \$13,000 has been reclaimed during this biennial period from a project in which the proceeds from dental scrap are used to provide care for underserved pediatric patients. Containers for the dental scrap, flyers, and other printed materials have been prepared so that dental professionals can collect it from their patients. Promotional materials are available from the Office of Development.

#### The M. Webster Prince Society

The M. Webster Prince Society was formed to recognize those who share the late Dr. Prince's vision and are committed to sustaining the School of Dentistry in its mission of education, service, and advancement of the dental profession.

Membership is voluntary with no age limits, nor are there any preferred types or sizes of gifts. Membership is reserved for those who have included the School of Dentistry in their will or trust, or who have created another deferred gift plan.

#### Dean's Circle

Membership in the Dean's Circle continues to grow, with membership in 2011 at 353, an increase of 42.3 percent from the previous year. At the 2011 Dean's Circle dinner, 14 were recognized for five years, 12 for 10 years, and eight for 15 years membership. Of the original 44 members, 18 were members in 2011. Forty-three have been members of the Dean's Circle for more than 15 years. Members for 2012 (qualifying during 2011) total 374.



Dean Goodacre poses with Keith Corbett, SD'78, MS'81, at the unveiling of the glass sculpture of the Good Samaritan in the entrance to the Center for Dentistry and Orthodontics.

Three students joined the ranks of 2010 Dean's Circle members, and in 2011 more than 25 students became members. In 2011 there were 22 dental hygiene/assisting members of the Dean's Circle, including Arlene Klooster (Madsen), an honorary member and widow of the Dean's Circle founder, Dr. Judson Klooster.

Individuals making a leadership gift of \$1,500 or more during a calendar year are invited to become members of the Dean's Circle (student membership requires an annual gift of \$150). Gifts to any School of Dentistry fund qualify for membership. Gifts of any kind qualify for membership, including gifts of cash, non-cash gifts (gifts-in-kind), real property, stocks, and planned gifts. Gifts may also be made through regular payroll deduction or on a recurring basis with a major credit card.

### Dental Hygiene

"We're growing!" announced Dental Hygiene Department chair, Kristi Wilkins, MA, RDH, in her 2011 spring appeal letter to alumni, "Like purple crocuses and the first faint buds on trees, early signs of growth are sprouting across the United States, especially here at the School of Dentistry at Loma Linda University. Our online degree completion program is growing, students continue to obtain their bachelor's degree with a focus in dental hygiene, and the dental hygiene program is expanding. An associate degree program based in the Coachella Valley will start in September. This new program will attract under-represented adult students to the dental hygiene profession." Each alumnus received a package of forget-me-not flower seeds to enjoy along with their letter.

The amount contributed to dental hygiene funds in calendar years 2010 and 2011, by 248 donors, was more

than \$460,000. Alumni provided 14 percent of all dental hygiene gifts, 19 percent came from non-alumni, and 67 percent from corporations and organizations. These percentages were a bit unusual. In the previous two-year period, alumni provided 80 percent of all gifts to the dental hygiene program.

Scholarships awarded in 2011 alone totaled more than \$15,000, of which \$6,000 was from the DH Class of 1969, in memory of Amy Feldkamp-Jacobson.

In 2010, \$76,231 established a scholarship fund in memory of Dr. Gerald E. Mitchell. The interest earned on this fund each year will be used to provide scholarships for worthy students.

During 2011, more than \$260,000 was received in support of the new associate degree program in Palm Desert.

Of those who supported dental hygiene funds during this time period, an average of more than 90 gave each year at the Ivory Society level of \$100 or more.

Fifteen dental hygiene/assisting alums were members of the Dean's Circle in 2011 (qualifying in 2010), and 13 in 2012 (qualifying in 2011).

### Staff activity

Director of development, Rachel Terwillegar, and director of gift planning and special gifts, Maynard Lowry, continue to maintain trust services certification by the Seventh-day Adventist Church, which requires 20 hours of annual continuing education. Along with alumnus dean, Dr. Charles J. Goodacre, Dr. Lowry visits with alumni throughout the United States and abroad. Alumni receptions were held in Arizona, California, Illinois, Massachusetts, Nevada, Tennessee.

Kent Green, a graduate of Avondale College, Australia, replaced Cindy Libby as development assistant. Ms. Libby left in September with her husband, Warren Libby, a 2011 graduate of the Advanced Education Specialty Program in Orthodontics, who will begin a private orthodontics practice in Anchorage, Alaska.

More information or materials are available at the Office of Development, School of Dentistry, 11092 Anderson Street, Loma Linda, California 92350, (909) 558-4754, fax (909) 558-0473, by email to [sdgiving@llu.edu](mailto:sdgiving@llu.edu), or online at: [llu.edu/dentistry](http://llu.edu/dentistry) or [LLUSDlegacy.org](http://LLUSDlegacy.org).



Doyle Nick, DDS, and Quint Nicola, DDS,  
Co-Directors

**International Dental Affairs**

The International Dental Affairs office oversees a collaboration between LLUSD and the General Conference of Seventh-day Adventists' Health Ministries, working closely with the National Association of Seventh-day Adventist Dentists. Through this office, placement of qualified oral health care personnel in international clinics occurs. Dr. Doyle Nick, director of the program, and Dr. Quint Nicola, his associate, support the clinic personnel, and in their extensive trips to dental outposts they provide mentoring and negotiate equipment procurement, shipment, and even repairs. They travel on commuter planes with unpronounceable names, sometimes switching to motorbike taxis on unpaved roads to reach dentists in remote areas. Their team circles the globe and manages an immense collaborative effort.

Consider a letter from the ministerial secretary in Mozambique, "Can you come do dental work on our pastors' teeth?" These are extremely poor pastors with limited education whose libraries consist of a few books under the bed. Providing specialized care for the pastors does not fit the scope of International Dental Affairs commitments, but the invitation did not go unheeded. Four annual trips are planned, beginning in June of 2012, that include doing comprehensive dentistry for the pastors as well as a program of pastoral education to increase the pastors' effectiveness in public health and ministering to people facing widespread medical challenges such as HIV and malaria.

**Clinic equipment**

2011 saw the arrival of equipment at dental clinics in Lusaka, Zimbabwe, Guyana, and Ghana. The totally new

Ghana clinic received usable, donated x-ray equipment, two chairs with compressor suction, and lab equipment. A Filipino dentist who accepted an appointment at the Ghana clinic in Obwasi is there (without his family) for 18 months to fulfill the government's waiting period to be granted certification.

In Paraguay, five dentists with a burden for outreach dentistry say, "What we really need is a mobile clinic. Our countrymen can't afford the trip to our office, much less the dental care." The International Dental Affairs office sought help from the Caring Hand to Mouth organization in Hermiston, Oregon, which builds mobile dental clinics and now possesses the goal to put a mobile clinic on every continent, complete with maintenance arrangements and drivers.

**Short-term volunteers**

Frank Artavia, DDS, a dentist trained in Costa Rica, visited the International Dental Affairs booth at the 2010 General Conference session in Atlanta, Georgia, and submitted his volunteer application information. A few months later an urgent email was sent to all potential volunteers. Volunteer relief for was needed for two months during the summer (2011) for Dr. Milan Moskale, a dentist from the Czech republic, at the Adventist Dental Clinic in Dhaka, Bangladesh. A half hour after the email from the Dental Affairs office went out, Dr. Artavia responded by phone. He simply said, "I'll go."

Kwang Chung, SD'82, practices dentistry in Bakersfield, California, and recently served two months at a clinic in St. Vincent (June 24 to August 28, 2011). Previously he had closed his office and worked for nine months when called to a clinic in Kigali, Rwanda. He has worked at the Scheer Memorial Hospital in Nepal, the Lusaka Adventist Clinic in Zambia, the Rwanda dental clinic, the general hospital clinic in Trinidad and Tobago, and at many other more remote sites in China, Mongolia, Thailand, Philippines, India, Pakistan Uzbekistan, Papua New Guinea, Haiti, Mexico, Peru, Russia, Romania, Tanzania. Why does he go? Dr. Chung says he wants to share genuine talk with the poor and sick whose struggles in life remind him of his earlier life. He adds that the real reason for going on mission trips is, "I made a contract with God upon finishing my school. And God showed me the direction every time I prayed. I will keep doing this as long as there is a single person with a toothache somewhere in the world."





Dr. Blanca Sol and her assistant treat an orthodontic patient.

Other short-term volunteers during the current biennium have similar stories of dedication. They include:

- Gabriela Garcia, DDS, an Argentina graduate to Dhaka, Bangladesh, June 24 - August 11, 2010
- Dennis Calkins, DDS, a Howard University graduate, to St. Vincent, July 6, 2010 - September 6, 2010
- Jemima Chatto, DDS, a Southwestern University, Cebu City, Philippines graduate, to Kigali, Rwanda: June 26, 2011 - August 20, 2011
- Charles P. Lee, SD'75B, to Madagascar, July 11 - November 11, 2011

**Interaction with sister dental schools**

The International Dental Affairs office communicates actively with its sister schools. The school at Montemorelos, Mexico, now in its seventh year, is “doing very well, sending out its first dental missionaries this year to the Dominican Republic.”

Philippine Adventist School of Dentistry, started six years ago, has now graduated its second class. Dr. Marissa Virgines, dean of the College of Dentistry at Adventist University of the Philippines, consulted with LLUSD’s deans from April 4 to May 6, 2010. She explored the current programs offered in the School with the expectation of implementing improvements in the dental program she oversees.

Responding to the request of church officers in Kyrgyzstan, Dental Affairs contacted generous NASDAD members who then pledged to pay for most of the tuition of a young lady from Kyrgyzstan. She was selected by her local church organization to pursue a dental education in order to provide much needed quality dental care in her country.

**Forthcoming mission appointments**

Several alumni and students are on deferred mission appointments, anticipating future placement:

- Ekatarina Tomenko-DiPinto, SD'10, awaits her husband’s completion of education before beginning a four-year commitment.
- Devon Lowry, SD'12, expects to begin his appointment when his wife, Ingrid Wahjudi, graduates with LLUSM’s class of 2014.
- Jessica Buenjemia, SD'04; Michael Duvall, SD'12, Roy Koh, SD'12, and Andrea Lewis-Beckford, SD '05, are also awaiting placement.

**Current mission appointees**

- Warren Creed, SD'86, arrived at Davis Memorial Hospital, Guyana, in September 2010.
- Scott Parker, SD'08, has been at the Guam SDA Clinic since January 2009.
- Crystal Pierson, SD'05, and Kenneth Pierson, SD'00, joined the Saipan Adventist Clinic in September 2005.
- Sarah-Jane Shearer, SD'10, and her husband William Shearer, SD'09, are in their second year at the Saipan clinic.
- Michael Stafford, SD'03, is in his fourth year at the Saipan Clinic.
- Wayne Ward, SD'90, and Chad Ordelheide, SD'04, are at the Guam SDA clinic, having arrived in 2004.
- Sang Yoon, SD'01, went to St. Vincent February 2009.
- Don Sandquist, SD'69, to St. Kitts 1997.
- Paul Yoo, SD'08, arrived at Lusaka Adventist Dental Clinic, Zambia, in August of 2011.



Paul (SD'08) and Janie (SM'08) Yoo in downtown Siavonga.



Clinique Dentaire Adventiste in Antananarivo, Madagascar



Drs. Nick & Nicola stand with the staff of Yaounde Adventist Dental Clinic in Cameroon.

- Dr. Yoo and his wife are “living out of suitcases” until the shipment container with the rest of their belongings arrives—early in 2012, they hope. On a six-year commitment, part of a plan to pursue long-term missions, Dr. Yoo is the only dentist at Lusaka Adventist Dental Services; his wife (LLUSM’08) is one of 22 ophthalmologists in the country of 13 million people. Dr. Yoo is “learning to make do” with chairs and delivery systems that are close to 30 years old.

**Dr. Yoo reports:**

*Having been on numerous short term mission trips (one week to a month), I felt that I would just ease into this long term work; however I quickly learned that I can no longer just pack up and go home when challenges mount, like I used to on short term trips. I often feel that God led me here to teach me patience, and although it has been a slow process I am definitely learning.*

**Certification program in a clinical training program for international dentistry**

A program for international dentists under assignment to mission clinics has attracted a diverse corps of dentists. Arriving early in 2011, Dr. Sarah Gill was following in the footsteps of her Pakistani father, who received advanced dental training from Dr. Quint Nicola, first in Pakistan and later during a six-month certification program at LLUSD. Dr. Gill returned to Pakistan in October 2011 to open a clinic in Rawalpindi.

**Support and referral services**

All the dentists working in dental mission clinics under the International Dental Affairs umbrella receive

monthly bulletins from the home office. During 2011 the bulletins focused on pediatric dentistry.

A mission dentist needing a consult about a clinical problem may lack local resources except for long-distance help. “What do you do with the occlusal plane on this person?” a dentist may ask by email. The International Dental Affairs office personnel arrange a referral to a prosthodontist, one of a panel of 27 experts on call to assist their counterparts at diverse, remote sites around the world.

The staff of the Office of International Affairs believes that the most important collaborator is God who is interested in His work, His workers, and all of His children around the world.



**William Heisler, DDS**  
Executive Director

**National Association of  
Seventh-day Adventist Dentists**

During the 2010-2011 biennium The National Association of Seventh-day Adventist Dentist (NASDAD) has continued its support of the dental arm of the Seventh-day Adventist Church's (SDA) medical mission outreach. Total reserves plus annual giving to the support of mission-related projects for the latest year (2011), as of the annual meeting held in October, totaled \$68,977. Of this total, \$54,082.37 was disbursed to fund a total of nine previously voted projects. The items funded included \$17,000 to the Loma Linda University School of Dentistry (LLUSD) Service Learning Endowment Fund and \$10,000 to the Maasai Dental Clinic Endowment Fund, as well as support for SDA dental schools in Mexico and the Philippines. Unfunded but voted projects totaled \$35,350. Voted projects are funded as they become viable and as funding becomes available. Requests for funding for the coming year total \$82,850. The annual meeting contributions totaled \$19,439, almost four times the amount received at the previous year's gathering.

The Maasai (Kenya) Dental Clinic was a major focus at the annual meeting. The year 2011 saw several fourth-year students from LLUSD giving service at the Maasai Clinic which is staffed full time by volunteer dentists, usually one month at a time. These dentists, who must have LLUSD adjunct faculty appointment to mento students, are serving the dental needs of the Maasai people, many of

whom walk 30 or more miles to reach the clinic. The much needed dental care ranges from cleanings to treatment for serious oral and facial injuries, such as those sustained by a boy kicked in the teeth by a wildebeest while tending the family cattle.

Several former students, now in dental practice, who worked at the Maasai clinic attended the annual NASDAD meeting and gave enthusiastic reports about their work. In addition several students from the 2012 class were sponsored by NASDAD members to attend the meeting. The inclusion of these students and recent graduates added a new dimension to the gathering and is the well-spring from which the future of NASDAD will be assured.

Doyle Nick, SD'78, an experienced mission dentist and assistant dental director for the Health Ministries Department of the General Conference of Seventh-day Adventists, was installed in a two-year term as NASDAD president. Dr. Nick is already planning for more involvement of LLUSD students and recent graduates.

Members of NASDAD acknowledged and expressed gratitude to the School of Dentistry for its generous infrastructure support to NASDAD.



Landon Libby, SD'11(left), and Justin Libby, SD'11(right), pose with fellow runner and new friend, William of Maasai. A service learning trip the Libby brothers participated in can be seen at: <http://www.youtube.com/watch?v=fmiTSrGzdYc>





**Joseph Caruso, DDS, MS, MPH**  
Associate Dean, Strategic Initiatives  
and Faculty Practices

**Center for Dentistry and Orthodontics**

The team of oral healthcare professionals who comprise the LLUSD Center for Dentistry and Orthodontics (COD) makes this reassuring offer: “Have a dentist who teaches dentists be your dentist!”

**Site change**

A new setting and a staff emphasizing commitment to consistent, stabilized patient care characterize the Center for Dentistry and Orthodontics, which opened its doors in November 2010. A year later, the COD posted a “positive growth year,” according to Tina Malmberg, practice manager, who joined the staff in February of 2010 and oversaw the monumental move from the original Faculty Dental Office site on Taylor Street to the facility on Hospitality Lane.

A five-minute drive from the School of Dentistry, the COD provides a setting where integrated dentistry occurs. Signage at the entrance introduces the patient to his/her dentist, providing personal information about the education and interests of the professional.

**Services and facilities**

Adding pediatric dentistry, endodontics, and oral surgery to its pre-2010 offerings, the COD now has nearly 20 specialty practitioners. They include orthodontists, periodontists, prosthodontists, oral surgeons, and oral pathologists to whom the Center’s 15 general dentists refer patients. The

facility also provides TMJ/TMD treatment and cosmetic dental services. The patient merely moves to a different chair for a specialty procedure or other service.

Whereas the Faculty Dental Office contained only 10 chairs, space at the new facility has permitted installation of 26 chairs—some equipped with a massage unit.

More full-time staff produce dedicated support system. Four part-time dental hygienists supplement two full-time hygienists now on the staff. Multi-specialty providers are on-site full-time during office hours; an on-call dentist is available after office hours for emergencies.

**Professional upgrading and collaboration**

Part of the success of the COD’s operation is explained by its commitment to provide integrated patient care. Education regarding oral health is considered to be part of a patient’s treatment. Additionally, staff members engage in role playing to put at ease frightened, nervous, or difficult patients. Each patient is assured continuity of care, being assigned to the same dentist at each appointment.

With the conviction that full oral screenings should become part of a person’s health care, the CDO is negotiating an affiliation with Loma Linda University’s Center for Health Promotion, so that patients’ full body examinations and preventive health care protocols can become truly comprehensive. This collaboration is consistent with the University’s motto, “To make man whole.”



Recreated as a work in glass, this replica of Alan Collins’ Good Samaritan sculpture featured on the university’s main campus may be viewed inside the entrance to the Center for Dentistry and Orthodontics.

The glass representation was made possible through a generous gift from Dr. and Mrs. I. Keith Corbett. Dr. Corbett graduated from Loma Linda University School of Dentistry with his doctor of dental surgery degree in 1978 and his master’s in orthodontics in 1981. He and his wife, Peggy, live in Quesnel, British Columbia.



Yiming Li, DDS, PhD, MS  
Director

**Center for Dental Research**

The Center for Dental Research (CDR) at Loma Linda University School of Dentistry continues to pursue the University’s mission “to make man whole” by engaging in cutting edge research in clinical dentistry and basic science.

With the support of the School, high-quality government and industry-funded research has increased, as reflected by the number of grants and awards received by LLUSD. Special effort has been made to provide an environment that encourages students to participate actively in research activities that stimulate critical thinking. In order to support all faculties with research education and experience, the Research Task Force Committee has been formulating a mentor program to facilitate and promote high quality faculty research.

The School has increased its research budget, providing new salary support to faculty members and postdoctoral students pursuing research excellence in areas of esthetic dentistry, molecular genetics, and stem cell biology. The CDR has been providing assistance to several new research faculty members to meet their needs for protected time, technical staff, and initial seed funding. A number of new equipment items have been acquired to enhance research capabilities in existing and newly expanded research areas. In addition, the CDR also provides matching funds for new equipment, supporting faculty of other departments with research supplies, technical staff, and travel costs to attend scientific meetings.

The CDR continues to collaborate on intra-University and extra-university research, nationally and internationally. The international collaboration is well reflected by the number of

visiting scholars who come from other countries. During the recent biennium, 13 visiting scholars participated in the exchange of expertise and collaborated on research projects that span a wide range of fields that include dental materials science, toxicology studies, ISO certification processes, and molecular biology. Several faculty members visited other universities for collaborative research in the United States, Australia, China, Canada, and several countries in Europe and the Middle East.

The CDR looks to the future with great anticipation as it explores potential sites and buildings for the relocation of its research laboratories. Proximity and access to the School of Dentistry permit students and faculty to meet CDR’s future goals and vision for excellence in research.

**New faculty and postdoctoral researcher appointed**

**David Jaramillo, DDS**, who began teaching part-time at Loma Linda University in 2004, accepted a full-time assignment in endodontics as clinic director in 2011. A graduate of the Universidad Autonoma de Guadalajara in 1986, Dr. Jaramillo completed endodontics training in 1990. He is collaborating with the CDR, working on the presence and removal of Biofilm from inside the root canal system. An expert in the use of the scanning electron microscope (CLSM), he is also collaborating with the Department of Electrical Engineering-Electrophysics, Viterbi School of Engineering, at University of Southern California. The author of a number of papers on cold-plasma technology, and a patent applicant for his work on micro surgical pluggers and an anti-biofilm root canal irrigation solution, Dr. Jaramillo also lectures extensively in North America and Europe.

**So Ran Kwon, DDS, PhD, MS**, joined LLUSD faculty in the summer of 2011 as an associate professor in the Department of Restorative Dentistry. Dr. Kwon completed her DDS, MS, and PhD degrees in South Korea before pursuing a master’s degree in operative dentistry at the University of Iowa. She has lectured on esthetic dentistry at more than 100 professional conferences. One of Dr. Kwon’s major achievements is her textbook, *Tooth Whitening in Esthetic Dentistry*, published by Quintessence and available in English, Korean, and Chinese. Her research in tooth whitening, resin-based composites, and porcelain laminate veneers will enhance her contribution as a faculty member.

**Jianwu Chen**, PhD, has pursued postdoctoral research at the CDR since the summer of 2011. He received his doctoral degree in microbiology at Sun Hatsen University in 2003, and taught in the Department of Medical Microbiology at China's Fujian Medical University before working as a postdoctoral researcher at the University of California Riverside (2004-2010). In 2010 he held a research associate appointment in University of Pittsburgh's School of Medicine. Dr. Chen is working on multiple research projects, including stem cell research, and has published more than 25 peer-reviewed papers.

**Faculty serving as principal investigators for new research grants**

**Dr. Lincoln Edwards** was awarded a two-year grant of \$445,000 from the National Institute of Diabetes and Digestive Kidney Diseases (NIDDK) for his project entitled "Novel Imidazole Compound as Antidiabetic Agent."

**Dr. Charles Goodacre** received an industrial grant of \$51,427.

**Dr. Alan Herford** received three industrial grants totaling \$461,143.

**Dr. Joseph Kan** received two industrial grants with total funding of \$107,700

**Dr. Steve Kurti** (SD) together with Dr. Christopher Perry (SM) as co-PIs received the 2010 Loma Linda University GRASP grant of \$50,000 for their project entitled, "Laser Assisted Polymer Mediated Size and Shape Control of Gold Nanoparticles."

**Dr. Sean Lee** received new funding of \$16,350 for two on-going, industrial grants.

**Dr. Yiming Li** received industrial grants, totalling \$757,870, to support his clinical and laboratory projects.

**Dr. Jaime Lozada** received an industrial grant of \$356,167.

**Dr. Michael Meharry** received an industrial grant of \$11,222.

**Dr. Holli Riter** received new funding of \$16,380 for two on-going, industrial grants.

**Dr. Mahmoud Torabinejad** received two industrial grants with total funding of \$20,580

**Dr. Wu Zhang** (SD) together with Dr. Xiaobing Zhang (SM) as co-PIs received the 2010 Loma Linda University Grants for Research and School Partnerships (GRASP) with \$50,000 for her project entitled, "Treating Periodontal Disease with iPS Cell-Derived Mesenchymal Stem Cells in a Rat Model."

**Student awards**

The student research program involves both D3 dental students and senior dental hygiene students who, in groups of two to three each, conduct research projects under faculty guidance. The exceptional success of the student research was evidenced by the number of table clinic winners at the annual meetings of California Dental Association: nine winners (including three firsts) out of 16 prizes in 2010, and eight winners (including four firsts) in 2011 (see pages 107-111).

In addition, Michael Hiersche, Larina Chu, and Bryce Chun won the 2010 student research award at the annual meeting of American Institute of Oral Biology (AIOB) in Palm Springs with their project, "Electromechanical Luxation: An Application of Dynamic Loading in Tooth Extraction." Mentors: Drs. Mei Lu and Alan Herford.

Vanessa Browne, Mike Flewelling and Mark Wierengoa won second prize at the International Association of Student Clinicians held during the 2011 American Dental Association Meeting with their research, "Sterilization of Used and Contaminated Implant Healing Abutments and Impression Copings: A Cost Benefit Analysis." Mentors: Drs. Neal Johnson, Raydolfo Aprecio, Paul Richardson, Nikola Angelov, and Ms. Alisa Wilson.

**Faculty presentations 2010**

Haywood V, and **Li Y.** Tooth whitening/bleaching: Treatment considerations for dentists and their patients. American Dental Association ADA Council on Scientific Affairs 2010.

**Li Y,** Hujuel P, Su M, **Zhang W,** Kim J, Zhang Y, Devizio W. Prevalence and severity of gingivitis in American adults. *Am J Dent* 2010;23:9-13.

**Stephens J, Zhang W, Richardson P.** Microbial contamination of eyewash stations. *CDHA Journal*, 2010;25:(1):19-20.

Ma J, Du R, Wang S, **Li Y.** Effects of background, direction and intensity of ambient light, measuring position, and adjacent teeth, on anterior tooth colour measurement in vitro. *The Chinese Journal of Dental Research* 2010;13(2):147-152

George KO, Gonzalez Jr RR, **McLean L,** Hall RG, **Edwards LP.** Angiotensin II induced tension development in rat-tail artery involves PLD and PKC. *Advanced Studies in Biology* 2010;2(3):123 -140.

**Edwards LP,** Crane L, Baziard-Mouysset G, Brown-Bryan T. Imidazolines as single agent therapy for diabetics with hypertension. *Federation of American Societies for Experimental Biology J* 2010 April;24:#597.3



**Lee S, Meharry M, Arambula M, Abdel-Salam N, Li Y.** iBOND Self Etch: A 24-month clinical evaluation. *J Dent Res* 2010;88(Spec Iss A):#690.

**Li Y, Lee S,** Delgado E, Zhang Y, De Vizio W, Mateo L. Instant/lasting dentin hypersensitivity reduction efficacy of two professionally-applied desensitizing pastes. *J Dent Res* 2010;88(Spec Iss A):#1869.

**Lee S,** Jeong W, Moon J, Lee D. Tongue-coating score variations in different tongue-coating zones. *J Dent Res* 2010;89(Spec Iss A):#277.

**Li Y, Aprecio R, Zhang W, Lee S.** Identification of micro-organisms in dental plaques using checkerboard DNA-DNA hybridization. *J Dent Res* 2010;89(Spec Iss A):#366.

**Puri S, Govindagoudar S, Zhang W, Khoie R, Mohamed OA, Wang Q, Poulsen, K,** Kim, J, **Li Y.** Efficacy and compliance of sterilization methods in dental practice. *J Dent Res* 2010;89(Spec Iss A):#372.

**Wang Q, Zhang W, Aprecio R, Mohamed OA, Govindagoudar S, Puri S, Li Y.** Mouse model of experimental diabetic periodontitis induced by gram-negative infection. *J Dent Res* 2010; 89(Spec Iss A):#1133.

**Wang Q, Zhang W, Aprecio R, Li Y.** Expression of 25-hydroxyvitaminD<sub>3</sub>-1-a-hydroxylase in gingival epithelial cells. *J Dent Res* 2010;89(Special Iss A):#1136.

**Kurti RS, Meharry M, Li Y.** An innovative curing method to reducer composite curing stress *J Dent Res* 2010;90(Spec Iss A):#466.

**Li Y, Kurti RS, Meharry M, Perry C.** Laser-assisted curing method to increase resin composite surface microhardness. *J Dent Res* 2010;90(Spec Iss A):#731.

Zhao XY, **Zhang W, Lee S, Roggenkamp C, Lu M, Li Y.** Evaluation of porosity in the restorations of light-cured resin composite. *Zhonghua Kou Qiang Yi Xue Za Zhi* 2010;45:39-43.

**Faculty publications 2011**

Hyde M, Wilkins K, **Li Y.** Whiter, brighter sales. *Mentor* 2010; January:32-34.

**Li Y, Lee S,** Zhang YP, Delgado E, DeVizio W, Mateo LR. Comparison of clinical efficacy of three toothpastes in reducing dentin hypersensitivity. *J Clin Dent.* 2011;22:113-20.

Martínez-Mier EA, Cury JA, Heilman JR, Katz BP, Levy SM, **Li Y,** Maguire A, Margineda J, O'Mullane D, Phantumvanit P, Soto-Rojas AE, Stookey GK, Villa A, Wefel JS, Whelton H, Whitford GM, Zero DT, **Zhang W,** Zohouri V. Development of gold standard ion-selective electrode-based methods for fluoride analysis. *Caries Res* 2011;45:3-12.

**Kwon, S, Li Y.** Maximizing esthetic success by combining orthodontics, tooth whitening and restorative dentistry. *MICD Journal* 2011;01(1):26-30.

Ge L, Shu R, **Li Y,** Li C, Luo L, Song Z, Xie Y, Liu D. Adjunctive effect of photodynamic therapy to scaling and root planing in the treatment of chronic periodontitis. *Photomedicine and Laser Surgery* 2011;29: 33-37.

**Li Y.** Commentary. Successful bleaching of teeth with dentinogenesis imperfecta discoloration: A case report. *J Esthet Restor Dent* 2011;23:11.

**Kwon S,** Denehy E. Predictable diastema closure using an innovative, indirect mock-up technique. *Cosmetic Dentistry* 2011;5(3):12-15.

**Li Y.** Safety controversies in tooth bleaching. In: Calamia JR, Wolff MS (eds.) *Diagnosis and treatment of the most common esthetic needs.* *Dent Clin N Am* 2011;55:255–263.

**Liu J, Xu L, Li Y,** Ma J. Temporally controlled multiple-gene delivery in scaffolds: A promising strategy to enhance bone regeneration. *Med Hypotheses* 2011;76:173-5.

**Omar S, Chen J-W, Nelson B, Okumura W, Zhang W.** Fluoride level in commonly consumed infant juices. *J Dent Res* 2011;90(Special Iss A):Abstract #1257.

**Wang Q, Wu W, Zhang W, Aprecio R,** Lin J, Bary K, **Y Li.** Up-regulation of Cathelicidin by knocking down 24-hydroxylase in oral keratinocytes. *J Dent Res* 2011;90(Special Iss A):#1360.

**Wang Q, Aprecio R, Wu W, Zhang W,** Lin J, Zhao S, **Y Li.** Anti-bacteria effects of 25-dihydroxyvitamin D3 in 24-hydroxylase knocked-down oral keratinocytes. *J Dent Res,* 2011;90(Special Iss A):#1361.

**Wang Q, Zhang W, Wu W, Aprecio R, Zhao S, Lin J, Y Li.** Dosage effects of 25-hydroxyvitamin D3 in human oral keratinocytes. *J Dent Res* 2011;90(Special Iss A):#1364.

**Li Y,** Lee SS, Mateo LR, Zhang YP, Delgado E, De Vizio W. Instant effectiveness comparing Colgate Sensitive Pro-Relief and Sensodyne Rapid Relief. *J Dent Res* 2011;90(Special Iss A):#1465.

**Du R, Zhang W, Aprecio R, Tseng EK,** Zhang L, Ma J, **Li Y.** Effect of curing conditions on cytotoxicity of a RMGI material. *J Dent Res* 2011;90(Special Iss A):#1466.

**Hyde M, Wilkins K, Li Y.** Current trends in tooth whitening. *Dimensions of Dental Hygiene* 2011;9:36-42.

**Zhang W,** Sturman P, **Khoie RN, Li Y.** Citrisil in controlling bacteria opportunistic pathogen contamination in DUWLs. *Dental Products Report* 2011;76-84.

**Varlakova R, Sampayan S, Aprecio R, Oyoyo U, and Mobilia A.** Antimicrobial effects of aloe vera compared to conventional dental antimicrobials. *IADR.* San Diego, California, 2011;Abstract #148831.

**Kwon S,** Wertz PW, **Li Y,** Chan DCN. Penetration patterns of rhodamine dyes into enamel and dentin: Confocal laser microscopy observation. *Int J Cosmet Sci,* 2011; Epub ahead of print doi: 10.1111/j.1468-2494.2011.00688.x

Liu J, Xu L, **Li Y,** Ma J. Temporally controlled multiple-gene delivery in scaffolds: A promising strategy to enhance bone regeneration. *Med Hypotheses.* 2011; 76:173-5.

Herring S, **Li Y,** Popowics T, Rafferty K, Liu Z, Wang S. Oral biology and dental models. In: *The Minipig in Biomedical Research.* Eds.: McAnulty P, Dayan AD, Hastings KH, Gandercup N. CRC Monograph, Taylor & Francis Publication 2011.



**The CDR team recently assembled in a Christmas spirit.** Clockwise (in white coats) from CDR Director Dr. Yiming Li at the 5:30 position: Michele Arambula, technical assistant, CDR; Neal Johnson, PhD, SD'08, assistant professor, Department of Oral Diagnosis, Radiology and Pathology; Sean Lee, DDS, professor, Department of Restorative Dentistry, and director, Clinical Research, CDR; Saied Moazzami, DDS, MS, visiting scholar; Jianwu Chen, PhD, post doctoral fellow, CDR; Lincoln Edwards, PhD., SD'98, DDS, SD'09, associate professor, Dental Educational Services; Michael Meharry, DDS, SD'80 associate professor, Department of Restorative Dentistry; Raydolfo Aprecio, OD, research associate, CDR; David Jaramillo, DDS, E.E., associate professor, clinic director, Department of Endodontics; Lancelot McLean, PhD, SD'08, associate professor, Department of Dental Education; Hantang Sun, DDS, MS, visiting scholar

**Clockwise** from CDR administrative assistant Cindy Wicker at the piano (in colored clothes): Steven Kurti, PhD, associate professor, Photonics Applications and Biomaterials Laboratory, Center for Dental Research; Wu Zhang, M.D., associate professor, Director, Research Services, CDR; So Ran Kwon, DDS, MS, PhD. MS, associate professor of Restorative Dentistry and CDR; Rachelle McKenzie, PhD, SD'09, Post-doctoral Fellow, Department of Microbiology and Molecular Genetics, School of Medicine and CDR; Omaima Mohamed, Lab Assistant, CDR; Heng Yang, DDS, MS, visiting scholar, CDR; Mayra Orozco, Lab Assistant, CDR; Mei Lu, DDS, PhD, MS, DDS, SD'08 (IDP), associate professor, Department of Oral and Maxillofacial Surgery; Christa Vandervoort, dental assistant, CDR

## STUDENT TABLE CLINIC RESEARCH PROJECTS

### Student Research 2010 and 2011

Each spring, student research projects conducted by junior dental students and senior dental hygiene students are presented under one of three categories and evaluated by judges chosen from the LLUSD faculty. Winners from the three categories go on to compete for awards at the annual meetings of the California Dental Association.

#### 2010 WINNERS BY CATEGORY

“The Association between Caries Risk Assessment Levels and Streptococcus Mutans and Lactobacillus Levels”

*Adam Burr, Michael Gilman, Patrick Hachee*

Mentors: Dr. Brian Novy, Dr. Mei Lu

ASC 1st place, Clinical Category

**CDA 2nd place, Clinical Category**

“Canal Morphology in Mandibular Premolars Using Cone Beam Tomography”

*Joanne Oh, Christina Chun*

Mentors: Dr. David Jaramillo, Dr. Mei Lu

ASC 2nd place, Clinical Category

**CDA 3rd place, Clinical Category**

“SEM Examination of Restoration Margins In Vivo: An Observational Study”

*Dane Andersen, Ray Arsenault, Justin Schmidt*

Mentor: Dr. Brian Novy

ASC 3rd place, Clinical Category

“Needle Gauge & Pain Perception”

*Allina Lopez, Lucrecia Santana, Kristen Taylor*

Mentors: Dr. Barry Krall, Ms. Joni Stephens

ASC 1st place, Clinical Category (dental hygiene)

“Changes in Shade and Glossiness Relative to Changes in pH Found in Bleaching Agent”

*Joohee Oh, Lily Cha, Sang Yoo*

Mentors: Dr. Sean Lee, Dr. Mei Lu

ASC 1st place, Laboratory Category

**CDA Honorable mention, Scientific**

“Electromechanical Luxation: An Application of Dynamic Loading in the Tooth Extraction”

*Bryce Chun, Larina Chu, Michael Hiersche*

Mentors: Dr. Mei Lu, Dr. Alan Herford

ASC 2nd place, Laboratory Category

**CDA 1st place, Scientific Category**

“In-Vitro Comparison of Various Torque Drivers in Implant Prosthodontics”

*Sophia Sellas, Jeri Bullock, Christie Pogue*

Mentors: Dr. Jaime Lozada, Dr. Mei Lu

ASC 3rd place, Laboratory

**CDA 2nd place, Scientific Category**

“Uptake of Fluoride Foam: A Laboratory Study on Human Enamel”

*Stacy Stroup, Lauren Stewart*

Mentors: Dr. Wu Zhang, Ms. Joni Stephens

ASC 1st place, Laboratory (dental hygiene)

**1st place, Dental Hygiene Category**

“A Digital Instruction of Techniques and Principles of Mucoperiosteal Flaps”

*Filip Orban, Michael Knutson, Scott Arceneaux*

Mentors: Dr. Mei Lu, Dr. Wayne Tanaka

ASC 1st place, Educational Category

**CDA 1st place, Community/Education Category**

“Educational DVD of Oral Healthcare for Children Ages 5-8 Years Old”

*Michael Sacro, Junie Baldonado, Emilynda Quinones*

Mentors: Dr. Wesley Okumura, Dr. Mei Lu

ASC 2nd place, Education Category

**CDA 2nd place, Community/Education Category**

“Oral Hygiene during Orthodontic Treatment”

*Stephanie Calvillo, Isaac Penalba, Sheida Khazaii-Tabari*

Mentors: Dr. Leroy Leggitt, Dr. Mei Lu

ASC 3rd place, Education Category

**CDA Honorable Mention, Community/Education Category**



Adam Burr, Michael Gilman, and Patrick Hachee were the 2010 LLUSD first place winners for student research in the Clinical Category. They earned a second place award at the CDA.



Joohee Oh, Lily Cha, and Sang Yoo were the 2010 LLUSD first place winners for student research in the Laboratory Category. The team earned Honorable Mention from the CDA in the Scientific Category.



## STUDENT TABLE CLINIC RESEARCH PROJECTS

"Individualized Care Case Presentation"

*Pamela Slonaker, Hossai Tahmas, Sherwin Taylor*

Mentor: Dr. Adrian Mobilia

ASC 1st place, Educational Category (dental hygiene)

### CLINICAL CATEGORY 2010

"A Clinical Evaluation of Patients Receiving Night Guards to Determine if a Diagnosis of a Temporomandibular Disorder and Bruxism Was Made Prior to Treatment"

*Hanbit Chi, Michael Gardner, WooJung Park*

Mentors: Dr. Heidi Christensen, Dr. Susan Roche

"Two or More Canals in Mandibular Bicuspid"

*Christina Chun, Joanne Oh*

Mentor: Dr. David Jaramillo

"Competency of the Student Oral Healthcare Provider in Finding Soft Tissue Lesions during an Initial Exam- A Pilot Study"

*Steve Nelson, Devin Rentz, Kirillos Zakhary*

Mentor: Dr. Susan Richards

"Simple Effective Method for Repairing Oral Antrum Opening Extraction"

*Joseph W. Lee, Woody Utrapiromsuk*

Mentor: Dr. Mei Lu, Dr. Muna Soltan

"Inter-rater Agreement Among Board Certified Neuroradiologists Who Evaluated Cranial MRI Distortion Associated With Two Different Kinds of Stainless Steel Orthodontic Brackets"

*Andrew Corbett, Jeffrey Lam, Donovan Yapshing*

Mentor: Dr. Leroy Leggitt

"Periodontal Disease Awareness Survey"

*Scott Arceneaux, Mike Knutson, Filip Orban*

Mentors: Dr. Mei Lu, Dr. Wayne Tanaka

"Influence of Two Types of Stainless Steel Orthodontic Brackets on Cranial Magnetic Resonance Images"

*Jessica McGraw, Alexis LaRose*

Mentors: Dr. Leroy Leggitt, Dr. Anna Chen



Filip Orban, Michael Knutson, and Scott Arceneaux were the 2010 first place winners of the LLUSD Educational Category and first place winners of the CDA's Community/Education Category.

### LABORATORY CATEGORY 2010

"SEM Observation of Biofilm Growth on Bovine Dentin Disks and Potential Inhibition After Exposure to Root Canal Irrigants"

*Chris Chang, Ryan Holmes*

Mentor: Dr. David Jaramillo

"Effects of Different Irrigating Solutions on Biofilm Formation in Root Canals"

*Jonathan Basit, Daniel Guindi, Stevie Reynolds*

Mentor: Dr. David Jaramillo

"The Antimicrobial Effects of Isatis Tinctoria (Blue Root)"

*Eric Hull, Eric Joo, Michel Kim*

Mentor: Dr. Edward Ko

"Electromechanical Luxation: An Application of Dynamic Loading"

*Larina Chu, Bryce Chun, Michael Hiersche*

Mentors: Dr. Alan Herford, Dr. Mei Lu

"pH Comparison of Coconut Water and Leading Carbohydrate-Electrolyte Sport Drinks"

*Jane Kim, Jana Nation*

Mentor: Ms. Michelle Hurlbutt

"An In-Vitro Study of Xylitol's Effect on Candida Albicans"

*Karissa Clark, Lisa Ferguson, Lindsay Richards*

Mentors: Ms. Michelle Hurlbutt, Dr. Ray Aprecio

"The Efficacy of Varying Bleaching Tray Reservoirs"

*Rebecca Flaiz, Ashley Kitto, Kristen Sylvers*

Mentor: Dr. Sean Lee

"The Antimicrobial Effects of Aloe Vera Gel as Compared to Conventional Antimicrobials Used in Dentistry – An In-Vitro Study"

*Sheryleen Sampayan, Ralitza Varlakova*

Mentor: Dr. Adrian Mobilia



Stacy Stroup and Lauren Stewart won the 2010 LLUSD first place award in the Laboratory Category for dental hygiene students. They also won the CDA's first place award in the Dental Hygiene Category.

## STUDENT TABLE CLINIC RESEARCH PROJECTS

### EDUCATIONAL CATEGORY 2010

“A Digital Instruction of Techniques and Principles of Mucoperiosteal Flaps”  
*Scott Arceneaux, Mike Knutson, Filip Orban*  
Mentors: Dr. Mei Lu, Dr. Wayne Tanaka

“Simple Dental Translations”  
*Keijin Lee, Annie Suh*  
Mentor: Dr. Nikola Angelov

“Preparing for the Future: Baby’s First Tooth”  
*David Green, Jonathan Jackson, Matthew Wasemiller*  
Mentor: Dr. Bonnie Nelson

“Dental Office Designs”  
*Nathan Leiske, Klara Palhegyi, Brooks Pruehs*  
Mentor: Dr. Andrew Ordelheide

“‘Endo Condensed’: An Approach to Making Endodontic Laboratory Easier to Understand”  
*Clark Bassham, Justin Libby, Landon Libby*  
Mentor: Dr. Robert Handysides

“Local Anesthesia: Complications”  
*Kenneth Jang, Bryan Lee*  
Mentor: Dr. Holli Riter

“Instructional Video on Rapid Force Extrusions”  
*Albert Kang, Unyong Kim*  
Mentor: Dr. Fred Berry

“Anticipatory Guidance for Children’s Dental Health”  
*Rosemary Morgan, Karen Murillo, Jacqueline Quiroz*  
Mentors: Dr. Daniel Morgan, Dr. Bonnie Nelson

### 2011 WINNERS BY CATEGORY

“Sterilization of Used and Contaminated Implant Healing Abutments and Impression Copings: A Cost Benefit Analysis”  
*Vanessa Browne, Mike Flewelling, Mark Wierenga*  
Mentors: Drs. Neal Johnson, Mr. Raydolfo Aprecio, Dr. Paul Richardson, Dr. Nikola Angelov, Ms. Alisa Wilson  
ASC 1st place, Clinical Category  
**CDA 1st place, Clinical Category**

“Gender Differences of Multiple Canals in Mandibular Incisors Using CBCT”  
*Yehoon Ahn, Soon Rye Kwon*  
Mentor: Dr. David Jaramillo  
ASC 2nd place, Clinical Category  
**CDA 2nd place, Clinical Category**

“The Effects of Arginine Prophy Paste on Tooth Sensitivity Following Tooth Whitening”  
*Andrew Elmasri, Sarah Hopps, Thy Nguyen*  
Mentor: Dr. Sean Lee  
ASC 3rd place, Clinical Category

“Case Study of a Patient with Post-Polio Syndrome”  
*Trisha Aprecio, Chris Chu and Danae Davis*  
Mentors: Dr. Adrian Mobilia and Ms. Darlene Armstrong  
ASC 1st place, Clinical Category

“A Comparison Study: The Sealing Properties of Mineral Trioxide Aggregate and Root Repair Material”  
*Jung Yoon Chang, Dongjin Sah and Michelle Shin*  
Mentor: Dr. David Jaramillo  
ASC 1st place, Laboratory Category

“Comparing Marginal Accuracy of Metal Copings and All Ceramic IPS e.max Copings”  
*James Mashni, Artin Meserkhani, Quinn Montgomery*  
Mentor: Dr. Nadim Baba  
ASC 2nd place, Laboratory Category  
**CDA 3rd place, Scientific Category**

“Evaluation of Caries Risk Diagnostic Tools”  
*John Chae, Alex Matosian and Allan Reeder*  
Mentors: Dr. Brian Novy, Dr. Raydolfo Aprecio  
ASC 3rd place, Laboratory Category  
**CDA 1st place, Scientific Category**

“Measuring the Concentration Effect of Xylitol”  
*Erika Nelson, Angela Wakefield, Dulce Zavala*  
Mentor: Dr. Raydolfo Aprecio  
ASC 1st place, Laboratory Category (dental hygiene)  
**CDA 1st place, Dental Hygiene Category**



Michael Flewelling, Vanessa Browne, and Mark Wierenga were 2011 first place winners in LLUSD’s Clinical Category. The team also won first place in the CDA’s Clinical Category.



Jung Yoon Chang, Dongjin Sah, and Michelle Shin were the LLUSD first place winners in 2011 for Laboratory Category research.

## STUDENT TABLE CLINIC RESEARCH PROJECTS

“Antimicrobial Potential of Fluoride, Arginine and Triclosan on Three Oral Microorganisms”

*Ashley Eggeter, Suzanne Finch, Cynthia Gutierrez*

Mentors: Dr. Wu Zhang, Dr. Raydolfo Aprecio

ASC 2nd place, Laboratory Category (dental hygiene)

“The Antimicrobial Effects of a Novel Cranberry Extract Dentifrice”

*Julianne Asbury, Rebecca-Ann Roquiz, Caroline Schneider*

Mentors: Dr. Brian Novy, Dr. Raydolfo Aprecio

ASC 3rd place, Laboratory Category (dental hygiene)

“Learning axiUm: Facilitating the Transition from Classroom to Clinic”

*Nyeland Newel, Josh Renk, David Westerhaus*

Mentor: Dr. Heidi Christensen

ASC 1st place, Educational Category

**CDA 3rd place, Community/Education Category**

“Ergonomics and the Administration of Local Anesthesia in Dentistry”

*Chad Nosek, Geoff Robinson, Andrew Taylor*

Mentor: Dr. Barry Krall

ASC 2nd place, Educational Category

**CDA 1st place, Community/Education Category**

“Educational Materials on PNAM Appliance for Parents of Children with Orofacial Cleft”

*Brian Kang, Kiddee Poomprakobsri, Dave Srikureja*

Mentors: Dr. Wesley Okumura, Dr. Jung-Wei Chen

ASC 3rd place, Educational Category

**CDA 2nd place, Community/Education Category**

“Oral Health Instructions for Implant Patients”

*Shirin AghaMirkarimi, Rachel Morris, Jinwoo Pak*

Mentors: Dr. Jaime Lozada, Ms. Kristi Wilkins

ASC 1st place, Educational Category (dental hygiene)

“Oral Care Instructions for the Care Provider of a Patient with Alzheimer’s

*Yasaman Aryaee, Heather Dunn, Jessica Szutz*

Mentor: Dr. Ann Steiner

ASC 2nd place, Educational Category (dental hygiene)



Nyeland Newel, David Westerhaus, and Josh Renk won first place in LLUSD’s Educational Category for student research in 2011. The team won third place in the CDA’s Community/Education Category.

### CLINICAL 2011

“Comparison of Metals Available for Fabrication of Removable Partial Denture Frameworks”

*Asal Gardner, Bitu Kohan, Krissa Mickelwait*

Mentor: Dr. Nadim Z. Baba

“Diagnosis and Treatment Strategies for the Xerostomic Patient”

*Grace Roh, Carolyn Wahby, Eric Wong*

Mentor: Dr. Doyle Nick

“Chairside Caries Treatment Wheel”

*Myron Massey, Cameron Turner, Taylor Wilkens*

Mentors: Brian Novy, DDS; Udochukwu Oyoyo, MPH “Caries Susceptibility Testing”

*Mo DosSantos, Aaron Tenzer*

Mentor: Dr. Brian Novy, DDS

“The Case of the Invisible Styloid Process: Do NewTom CBCT Images Show All the Bone?”

*Ally Kim, Esther Kim, Morse Stonecypher*

Mentor: Dr. V. Leroy Leggett

“The Phone Call”

*Valeriy Denisov, David Schames, Scott Ellis*

Mentor: Dr. Steven Morrow

“A Case Study of a Probiotic Lozenge and Its Effect on Oral Bacteria”

*Raylin Dahlke, Jordyn Gascay, Merissa Garcia*

Mentors: Ms. Michelle Hurlbutt, Dr. Raydolfo M. Aprecio

“High Yield Dental Materials”

*Andy Lee, John Abdelmessih, Justin Mirande*

Mentor: Dr. Fred Berry

“Composite Preparation and Restoration (Class II, III, V)”

*Jinyong Chun, David Lee, Wookwon Park*

Mentor: Dr. Daniel Tan



Jinu Pak, Rachel Morris, and Shirin Agha Mirkarimi were awarded the LLUSD 2011 first place in the Educational Category for dental hygiene.



## STUDENT TABLE CLINIC RESEARCH PROJECTS

“A Multi-media User’s Guide to Undergraduate Level Exodontia”

*Patrick Ferguson, Dan Niemann, Dan Schlieder*

Mentor: Dr. Wayne Tanaka

### LABORATORY 2011

“Comparing Bonding Strength to Repair Porcelain by Using Self-adhesive Flowable Resin and Conventional Porcelain Repair Protocol”

*Hyun Jung (Kelly) Kim, Seulki (Sophia) Yang*

Mentor: Dr. Michael Meharry

“Evaluation of Caries Diagnostic Tests”

*John Chae, Alex Matosian, Allan Reeder*

Mentors: Dr. Brian Nový, Dr. Raydolfo M. Aprecio

“Effect of Arginine on Oral Bacterial Growth”

*Jessica Kubrock, Beau Snyder, Noelle Snyder*

Mentors: Dr. Raydolfo M. Aprecio, Ms. Michelle Hurlbutt, Dr. Brian Nový

“Evaluation of Pathogenic Bacterial Contamination on Phosphor Plates at LLUSD”

*Jennifer Cross, Elizabeth Ordelleide, David Roquiz*

Mentors: Dr. Raydolfo M. Aprecio, Dr. Heidi Christensen, Dr. Dwight Rice

“Bacterial Contamination of Hookah Water Pipes”

*Alex Chapman, Michele Mercer and Jasmin Miranda*

Mentors: Dr. Raydolfo M. Aprecio, Ms. Michelle Hurlbutt

“An In Vitro Observational Study on Dental Restorative Material Interfaces”

*Michael Duvall, Kyle Ewert, Michelle Kim*

Mentor: Dr. Brian Nový

“pH and Fluoride Levels of Drinking Water Sources”

*Angela Pineda, Soyoon Rhee, Rubilhyn Santos*

Mentors: Dr. Wu Zhang, Dr. Brian Nový

“The Inhibitory Effects of “Superfruit” Extract on Oral Microorganisms”

*Sydney Helton, Florie V. Mancilla, Michelle Rich*

Mentor: Dr. Raydolfo M. Aprecio

“Dentin Bonding With and Without Microairborne Particle Abrasion”

*Andrew Lewis, Paige Woods*

Mentor: Dr. Michael Meharry

“Hollow Plastic Sprue Versus Solid Plastic Sprue Efficiency of Melting Out Wax Patterns”

*Zach Schmidt, Brandon Schmid, Matthew Johnson*

Mentor: Dr. Gary Golden

### EDUCATIONAL 2011

“The Use of an Integrated Study Aid in Preparation for National Board Dental Examination Part I”

*Alberto Blackwood, Keri Wakefield*

Mentor: Dr. Kenneth Wright

“Pilates for the Dental Professional”

*Sara Proulx, Nancy Saucedo, Brooke Shibata*

Mentor: Ms. Marilyn Heyde

“The Day After: How to Repay Your Dental School Loans”

*James Feliz, Chris Jeon, Charles Lee*

Mentor: Dr. W. Patrick Naylor

“Video-based Learning: A New Strategy to axiUm Training?”

*James Iamsurey, Nathaniel Leng, Rupporn Priyawat*

Mentor: Dr. Heidi Christensen

“Oral Hygiene Instruction for Inmates in California Correctional Facilities”

*Emily Clawson, Mioara Gemanaru, Rebecca McCluskey*

Mentor: Ms. Kristi Wilkins

“Building a New Dental Practice – How to Get Started!”

*Ryan Chen, Brian Chu, Jeffrey Clark*

Mentor: Dr. W. Patrick Naylor

“Oral Health Care Instructions for Parents With Young Children”

*Nicole Harms, Dong Jun Jeong, Hae Suk Susan Kim*

Mentor: Dr. Elizabeth Robbins

“The Facts About Dental Implants”

*Bunsun (Elly) Kim, Hyun Joung (Caroline) Kim, Anita Lee*

Mentor: Dr. John Won

“A Simplified Educational Video: Root Canal Therapy”

*Jae Kim, Jin Kyung Shin, Todd Song*

Mentor: Dr. Robert Handsides

“Alternative Methods to Dental Anesthesia”

*Hyuni Lee, Eun Kyung No*

Mentor: Dr. Barry Krall

**School of Dentistry students who placed first, second, or third in the three categories of the School’s student research presentations went on to win disproportionately the prizes awarded at the annual meetings of the California Dental Association.**

**Not pictured are the 2011 first place winners for the Clinical Category: Trisha Aprecio, Danae Davis, and Chris Chu.**



Dulce Zauala, Angela Wakefield, and Erika Nelson took the 2011 LLUSD first place in the Laboratory Category award and first place in the CDA’s Dental Hygiene Category.

*School of Dentistry Faculty (by department)*

**This list represents all full-and-half-time faculty as of January 2010.**

**Administration**

Charles Goodacre – dean  
 Ronald Dailey  
 Fred Kasischke  
 Kathleen Moore  
 W. Patrick Naylor  
 Paul Richardson  
 Ronald Secor  
 Graham Stacey

Shelly Hayton  
 Marilyn Heyde  
 Michelle Hurlbutt  
 Shirley Lee  
 Patricia Lennan  
 Jonell Stephens  
 Colleen Whitt  
 Debra Zawistowski

**Orthodontics**

V. Leroy Leggett – director  
 Joseph Caruso – chair  
 James Farrage  
 Gabriela Garcia  
 Roland Neufeld  
 Kitichai Rungcharassaeng  
 R. David Rynearson

**Advanced Prosthodontics**

Mathew Kattadiyil – interim director  
 Myron Winer

**Endodontics**

Mahmoud Torabinejad – director  
 Robert Handysides – chair  
 Leif Bakland  
 David Jaramillo  
 Bonnie Retamozo

**Pediatric Dentistry**

Jung-Wei Chen – director  
 Bonnie Nelson – chair  
 Afsanch Matin  
 Wesley Okumura  
 Samah Omar

**Center for Dental Research**

Yiming Li – director  
 Steven R. Kurti, Jr.  
 So Ran Kwon  
 Sean Lee

**Implant Dentistry**

Jaime Lozada – director  
 Aladdin Al-Ardah  
 Joseph Kan  
 S. Alejandro Kleinman

**Periodontics**

Jeffrey Henkin – director/chair  
 Nikola Angelov  
 R. Leslie Arnett Jr.  
 Manoochehr Gothtasbpour Parsi  
 Martyn Green  
 Oliver Hoffmann  
 Yoon Kim  
 Sangmoo Lee  
 Leticia Lenoir  
 Adrian Mobilia  
 Erik Sahl  
 Dennis Smith  
 Chun Xiao Sun  
 Loredana Trica  
 Barbara Valadez  
 Klaus Wolfram

**Dental Anesthesiology**

Larry Trapp – director  
 Barry Krall – assoc. director  
 John Leyman – chair

**International Dentist Program**

Michael Fitzpatrick – director  
 Balsam Jekki

**Dental Educational Services**

Marjorie Arnett  
 Graciela Duran  
 Lincoln Edwards  
 William Hooker  
 H. Maynard Lowry  
 Lancelot McLean  
 Daniel Ninan  
 Udochukwu Oyoyo  
 Thomas Rogers  
 James Trott  
 Esther Valenzuela  
 Wu Zhang

**Oral Diagnosis, Radiology & Pathology**

Heidi Christensen – chair  
 Neal Johnson  
 Heidi Kohltfarber  
 Audrey Mojica  
 Dwight Rice  
 Susan Richards  
 Susan Roche  
 Erin Stephens  
 Lane Thomsen

**Restorative Dentistry**

Douglass Roberts – chair  
 Daniel Armstrong  
 Nadim Baba  
 Andrea Beckford  
 Horace Burnsed  
 Iris Choi  
 Kwang-Su Chung  
 Nathan Dinsbach  
 Mark Estey  
 Madelyn Fletcher-Stark  
 Ronald Forde  
 Gary Golden  
 Wendy Gregorius

**Dental Hygiene**

Kristi Wilkins – chair  
 Darlene Armstrong  
 Kellie Bergendahl  
 Sharon Boggs  
 David Brodeur  
 D. Darlene Cheek  
 Janeen Duff  
 Debra Friesen

**Oral & Maxillofacial Surgery**

Alan Herford – chair  
 Dean Jeffrey – director  
 Jeffrey Elo  
 Mei Lu  
 Rafik Rofael  
 Wayne Tanaka

William Heisler  
Rami Jekki  
Zina Johnston  
Soh Yeun Kim  
Jessica Kim  
Edward Ko  
Monica Lehnhof  
Michael Meharry  
Doyle Nick  
Brian Novy  
Holli Riter  
Michael Robbins  
Elizabeth Robbins  
Clyde Roggenkamp  
Daniel Tan  
Brent Shakespeare  
Scott Smith  
Ronald Sorrels  
Raghad Sulaiman  
Daniel Tan  
L. Parnell Taylor  
Fidel Torres  
Julian Tsai  
Robert Walter  
John Won  
Ronald Young

**Clinic Administration**

Sofia Fitzpatrick  
Gregory Mitchell  
Steven Morrow  
James Padgett  
Donald Gregg



Jonelle Stephens, EdS, MS, professor of dental hygiene, and Daniel Tan, DDS, professor of restorative dentistry, perform grand marshal duties at graduation.





Irene Longfellow, wife of the late Rodney Longfellow, SD'60, created the bronze sculpture, *Service to the World*, located in the main lobby of Prince Hall.

## BIENNIAL REPORT

### Dean

Charles J. Goodacre, SD'71, MSD

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