

# DIAGNOSTIC SCIENCES (DS)

## Department Chairperson

**Paul Subar**

*Professor of Diagnostic Sciences*

## Faculty

Francoise Bason, Clinical Instructor, B.A., University of California, Berkeley, 1993 | D.D.S., University of the Pacific 1998

Michael Beckley, Assistant Professor, BS, Texas Christian University, 1992 | Certificate, University of the Pacific School of Dentistry, 2002 | D.D.S., Baylor College of Dentistry Texas A and M University, 1997

Kim Benton, Assistant Professor, D.D.S., Meharry Medical College School of Dentistry, 1988 | MPH, Capella University, 2018

John Berk, Instructor, D.D.S., University of California, San Francisco School of Dentistry

David Chambers, Professor, AB, Harvard University, 1965 | EdM, Harvard University, School of Education, 1966 | MBA, San Francisco State University, 1979 | PhD, Stanford University, School of Education

Wai Chan, Clinical Assistant Professor, B.Sc., University of the Pacific, 1976 | D.D.S., University of the Pacific Arthur A. Dugoni, 1979

Elisa Chavez, Professor, BS, Saint Mary's College of California, 1990 | Certificate, University of Michigan, 2000 | DDS, BS, University of California, San Francisco, School of Dentistry, 1994

Juin-Yeh Chou, Instructor, BS, University of San Diego, 2006 | Certificate, University of the Pacific, School of Dentistry, 2011 | DDS, University of the Pacific, School of Dentistry, 2010

Evelyn Cuny, Associate Professor, BA, St. Mary's College, 1998 | MS, St. Mary's College, 2001

Kristen DeSouza, Clinical Instructor, B.A., University of the Pacific, 2012 | D.D.S., University of the Pacific Arthur A. Dugoni, 2012

Nick Forooghi, Assistant Professor, B.A., San Jose State University, 1986 | J.D., Lincoln Law School, 2006

Terry Hoover, Professor/Vice-Chair, BA, Stanford University, 1968 | Certificate, Rotating Hospital Dental Internship, VA Hospital, Portland, OR, 1973 | D.D.S., University of California, San Francisco, 1972

Alice Huang, Instructor, B.Sc. University of the Pacific, 2016 | D.D.S., University of the Pacific, Arthur A. Dugoni, 2019

Lisa Itaya, Outcomes Assessment Liaison, B.Sc., California Polytechnic State University, 1987 | Certificate, University of the Pacific School of Dentistry, 2000 | DDS, University of the Pacific, 1998

Parvati Iyer, Assistant Professor, BDS, Madras Dental College (India), 1989 | DDS, University of Michigan, 1998 | M.Ed., Benerd College, | Other, AEGD, UCSF School of Dentistry, 1999

Justin Jellin, Instructor, BA, University of the Pacific, College of the Pacific, 2010 | DPT, University of the Pacific, Thomas J. Long School Pharmacy & Health Sciences, 2012

Vineet Khehra, Instructor, B.Sc., University of California, Los Angeles, 2016 | D.D.S., University of Pacific, 2021

Nancy Lee, Assistant Professor, B.Sc., University of California, Davis, 2006 | D.D.S., University of the Pacific, Arthur A. Dugoni School of Dentistry, 2011

Natasha Lee, Assistant Professor, BA, University of California, Santa Cruz, 1994 | D.D.S., University of the Pacific Dugoni School of Dentistry, 2000

William Lee, Clinical Assistant Professor, BS, University of Pittsburgh, 1993 | Cert, San Francisco VA Hospital, 1999 | D.D.S., State University of New York, Buffalo, 1998 | Fellowship, San Francisco VA Hospital, 2000

Lucinda Lyon, Professor, BS, University of Southern California, 1978 | D.D.S., University of the Pacific Arthur A. Dugoni School of Dentistry, 1986 | EdD, University of the Pacific, Benerd School of Education, 2009

Pedrom Mashaw, Assistant Professor, B.Sc., California Polytechnic State University, 2018 | D.D.S., University of the Pacific Arthur A. Dugoni, 2022 | Cert., Palo Alto Veterans Affairs Medical Center, 2023 | Cert., Stanford Medicine, School of Medicine, 2024

Stephen Mikulic, Assistant Professor, B.A., University of Arizona, 1971 | D.D.S., University of Southern California, 1975

Christine Miller, Associate Professor, BS, University of Oregon Health Sciences Center, 1975 | MA, University of the Pacific, 1994 | MHS, University of San Francisco, 1987

Nader Nadershahi, Professor, CERT, Palo Alto Veterans Administration Hospital, 1995 | DDS, University of the Pacific, 1994 | EdD, University of the Pacific, 2011 | MBA, University of the Pacific, 1999

Patrick Roetzer, Associate Professor, BS, University of Wisconsin, 1970 | Certificate, Veterans Administration Medical Center, 1975 | DDS, Marquette University, 1974

Eric Salmon, Data Scientist, BS, Harvey Mudd College, 1993 | B.S., Harvey Mudd College, 1993 | DDS, University of the Pacific, 1999 | D.D.S., UOP Dugoni School of Dentistry, 1999 | MS, University of the Pacific, 2017 | M.S., University of the Pacific, 2017

Monica Sasaki, Instructor, BS, California State University, Fresno, 1994 | MA, California State University, Fresno, 1996

Sajini Sasthri, Clinical Assistant Professor, B.S., UCLA, 2009 | D.M.D., University of Pennsylvania, 2014 | EN, Tufts University, 2018 | MPH, Imperial College, London, 2010

Jasjit Singh, Assistant Professor, B.Sc., Santa Clara University, 2017 | D.D.S., Touro College of Dental Medicine, 2023 | Advanced Education in General Dentistry, University of the Pacific, 2024

Paul Subar, Professor, BA, University of California, Santa Cruz, 1989 | D.D.S., University of California, Los Angeles School of Dentistry, 1993 | EdD, University of the Pacific Benerd School of Education, 2009 | Residency, UCLA Center for Health Sciences, 1994 | Residency, Veterans Administration Medical Center, 1995

Robert Verceles, Assistant Professor, BS, UC Davis, 1989 | D.D.S., UCSF, 1993

Lynne Wong, Assistant Professor, BS, San Francisco State University, 1998 | D.D.S., University of the Pacific, School of Dentistry, 2002 | Residency, University of the Pacific, 2004

Debra Woo, Director of Operations, Union City, BS, University of California, Davis, 1979 | D.D.S., University of the Pacific, Arthur A. Dugoni School of Dentistry, 1986 | MA, San Jose State University, 1983

Russell Woodson, Assistant Professor, BS, Arizona State University, 1976 | DDS, University of the Pacific, 1979 | MA, University of the Pacific, 1994

Craig Yarborough, Associate Dean, Institutional Advancement and Development

Andrew Young, Assistant Professor, BA, University of California, Berkeley, 2001 | Certificate, Department of Veterans Affairs (Northern California Health Care System), 2006 | Certificate, University of Medicine and Dentistry, New Jersey, 2008 | Certificate, University of California, San Francisco ( Pain Management Center), 2008 | DDS, University of California, San Francisco, 2005 | MSD, University of Medicine and Dentistry, New Jersey, 2009

Sinky Zheng, Director of Educational Innovation and Assessment

Janet Andrews, Assistant Professor, BS, University of the Pacific/ Marquette University, 1975 | D.D.S., University of the Pacific, 1983 | MA, University of the Pacific, 1979

Michael Lee, Clinical Instructor, B.Sc., San Francisco State University, 1989 | D.D.S., University of the Pacific Dental School, 2001

## Adjunct Faculty

Aisha Amin, Clinical Instructor, B.A., University of California, Davis, 2008 | D.M.D., A.T. Still University, 2013

Nelofer Ansari, Clinical Instructor, B.D.S, University of Bombay, Government Dental College and Hospital, 1977 | B.Sc., Elphinston College, 1973

Shabnam Baigzad, Clinical Instructor, B.A. University of California, Davis, 2016 | D.D.S., University of the Pacific Arthur A. Dugoni, 2022

Jan Brooks, Instructor, A.S., Chabot College, 2004 | B.Sc., Foothill College, 2022 | Certificate, University of the Pacific Arthur A. Dugoni School of Dentistry, 2016

Janet Cheong, Instructor, B.Sc., University of Iowa, 2002 | D.M.D., Harvard School of Dental Medicine, 2008

Norman Choy, Clinical Instructor, D.D.S., UCSF, 1975

Osleydis Diaz, Clinical Instructor, D.D.S., UCSF, 2008

Dyani Gaudilliere, Assistant Professor, BA, Stanford University, 2005 | DMD, Harvard School of Dental Medicine, 2009 | Other, University of California Berkeley, 2012

Andrew Griebel, Instructor, B.A., San Jose State University, 1984 | D.D.S., University of the Pacific, 1988

Garrick Hong, Instructor, B.A., University of California, Berkeley, 1998 | B.Sc., University of California, Berkeley, 1998 | D.D.S., University of California, San Francisco

Quang Huynh, Clinical Instructor, B.Sc., University of Iowa, 1991 | Certificate, UCSF, 2001 | D.D.S., University of Iowa, 1998 | M.S., UCSF, 2001

David Ichimura, Instructor, BS, California State University Long Beach, 1987 | DDS, USC School of Dentistry, 1992

Peter Jacobsen, Professor, University of California, San Francisco Dental School, 1976 | BA, Florida State University, 1967 | DDS, University of

California, San Francisco, 1977 | Fellowship, University of California, Berkeley, 1973 | PhD, University of California, San Francisco, 1972

Tripti Joshi, Instructor, BA, Haverford College, 2007 | D.M.D., Temple University, 2011

Linda Kuo, Instructor, BS, UC Berkeley, 2007 | DDS, University of the Pacific Arthur A. Dugoni School of Dentistry, 2013

Bonnie Lederman, Instructor, University of California, San Francisco, 2013 | BSc, Baltimore College of Dental Surgery Dental School, 1981 | DDS, Baltimore College of Denta Surgery Dental School, 1992

Gilberto Ledesma, Instructor, B.D.S., Matsumoto Dental University, 1991 | Certificate, Matsumoto Dental University, 1993 | Certificate, University of Medicine & Dentistry of New Jersey, 2010 | D.D.S., Japanese Ministry of Health, Labour and Welfare, 1991 | M.S.D., Indiana University School of Dentistry, 1999 | Other, American Dental Education Association (ADEA)/ Academy for Academic Leadership (AAL) Institute for Teaching and Learning (IRL), 2013 | Other, Indiana University School of Dentistry, 1996 | Ph.D., University of Washington, 2008

Michael Lee, Clinical Instructor, A.B., University of California, Berkeley, 1984 | D.D.S., University of the Pacific, 1987

Albert Lin, Assistant Professor, BS, University of Portland, 1976 | D.D.S., University of Pacific, 1994

Monica MacVane-Pearson, Instructor, B.S., Mount Allison University, 2001 | D.M.D., McGill University, 2005 | Cert. University of the Pacific Arthur A. Dugoni, 2006

Pawanjeet Pannu, Clinical Instructor, B.D.S, Baba Farid University of Health Sciences, Faridkot, 2004 | B.D.S, New York University College of Dentistry, 2010

Priyanka Raiyani, Clinical Instructor, B.D.S, Gujarat University, 2014 | Master of Dental Surgery, Gujarat University, 2018 | M.D.S., University of Washington, 2020

Brandon Rebottaro, Instructor, University of Central Florida, 1992 | D.D.S., University of the Pacific School of Dentistry, 1995

Ann Silvestri, Assistant Professor, BS, University of San Francisco, 1972 | Certificate, University Hospital School, The University of Iowa, 1979 | DDS, University of the Pacific, Arthur A. Dugoni, School of Dentistry, 1975 | MPA, Notre Dame de Namur University, Belmont, CA, 1999 | Other, Notre Dame des Victories High School, 1968

Ariane Terlet, Instructor, BA, UC Berkeley, 1980 | DDS, University of the Pacific, 1986

Nelson Tordilla, Clinical Instructor, B.Sc., Cornell University, 1992 | D.D.S., University of the Pacific, Arthur A. Dugoni School of Dentistry, 1999

Tiffany Tsurudome, Instructor, BS, University of California, Davis, 1994 | DDS, University of the Pacific School of Dentistry, 1999

Allen Wong, Professor, BA, University of the Pacific, 1983 | Certificate, University of the Pacific, Shool of Dentistry, 1987 | Certificate, University of the Pacific, School of Dentistry, 2001 | Certificate, Branemark Nobel Biocare, 2000 | D.D.S., University of the Pacific, School of Dentistry, 1986 | EdD, University of the Pacific, Gladys Bernerd School of Education, 2010

Colin Wong, Professor, BA, University of California, Berkeley, 1961 | DDS, University of the Pacific Arthur A. Dugoni School of Dentistry

Keivan Zoufan, Assistant Professor, B.D.S, University of Cartagena, 2006 | Certificate, University of California, San Francisco, 2019 | D.D.S., University of California, Los Angeles, 2016

## Course Descriptions

### Predocotoral Courses

#### **DS 101. Integrated Clinical Sciences I: Orientation to the Clinical Practice of General Dentistry. 13 Units.**

This course is the didactic component of a multi-disciplinary, year-long course designed to prepare students to treat patients and engage in community oral health events and programs. Together DS 101 and DS 106 focus on diagnostic sciences, behavioral sciences, periodontology, and prevention and community health care services and systems. Case-based simulations are supported by clinical exercises and practical exams. In addition whole patient health, medical implications of dental disease, professionalism, and odontogenesis are discussed.

#### **DS 102. Integrated Clinical Sciences I Concepts: Orientation to the Clinical Practice of General Dentistry. 9 Units.**

This is a didactic course designed to prepare students to treat patients in Pacific's Main Dental Clinic and engage in community oral health events and programs. The course focuses on Diagnostic Sciences, Behavior Sciences, Periodontology, Prevention and Community Health Care Services and Systems. Case-based simulations are supported by clinical exercises and practical exams. (IDS Quarters 1-2).

#### **DS 106. Integrated Clinical Sciences I: Orientation to Clinical Practice Lab. 4.5 Units.**

This course is a clinically-focused, multi-disciplinary course designed to prepare students to treat patients in Pacific's Main Dental Clinic and in community-based settings. This lab course is comprised of supervised case-based simulations, workshops, clinical exercises and visits to community sites. The focus is on the development of a comprehensive medical and dental database risk assessment; disease prevention strategies; diagnostic tests; oral pathology; electronic chart management; ergonomics; infection control; basic periodontal instrumentation; professional deportment; cultural sensitivity and communication with patients in the clinic and in community settings. Activities include a module on community health/social determinants of health and small group, case based discussions.

#### **DS 107. Intergrated Clinical Sciences I Lab: Orientation to Clinical Practice in General Dentistry. 4 Units.**

The Orientation to the Clinical Practice of General Dentistry Practicum is a clinically-focused, multi-disciplinary, one-quarter course designed to prepare students to treat patients in Pacific's Main Dental Clinic and in community-based settings. This lab/clinic course is comprised of supervised case-based simulations, workshops, clinical exercises and community sites. The focus is on the development of a comprehensive medical and dental database risk assessment; disease prevention strategies; diagnostic tests; oral pathology; electronic chart management; ergonomics; infection control; basic periodontal instrumentation; professional deportment; cultural sensitivity and communication with patients in the clinic and in community settings. (IDS Quarter 1).

#### **DS 160. Dental Radiology. 1 or 2 Unit.**

The application of radiation physics and biology, the assessment of image quality, the practice of radiation safety and prescribing protocols, and the study of radiographic techniques, anatomic landmarks, and the principles of radiographic interpretations for both two- and three-dimensional imaging. (Quarters 2-3).

#### **DS 166. Dental Radiographic Technique. 1 or 2 Unit.**

Instruction and practice using the extension cone paralleling radiographic technique including patient management, radiation safety, use of equipment, film placement, exposure, identification and mounting, and correction of technical error. (20 hours lab/clinic. Quarter 4.).

#### **DS 200. Practice Management I. 1 Unit.**

Introduces students to the study of fundamental concepts and terminology of the art and science of practice management as a basis for leadership and decisions in dental practice. Students will learn to track and evaluate key practice indicators, read financial reports, understand the importance of leading a team for efficient delivery of patient care, track and control overhead expenses, and set goals. (10 hours. Quarter 5.).

#### **DS 201. Integrated Clinical Sciences II: Application of Foundational Knowledge. 6 Units.**

This course continues the horizontal and vertical integration of content within the ICS strand and across other clinical disciplines. Seminars include assignments tailored to prepare students to treat patients with a wide variety of conditions including medical and developmental disabilities, psychological problems, and phobias. (Quarters 5-6.).

#### **DS 202. Integrated Clinical Sciences II: Application of Foundational Knowledge. 4 Units.**

This course builds on foundational clinical and biomedical material presented in first-year studies and in DS 201 through a multidisciplinary approach to basic science principles and clinical application. Topics will be presented in a lecture format as well as smaller seminar sessions, many of which are focused on case scenarios. There is also independent study time to prepare for these activities. Emphasis is placed on the integration of dental concepts, evidence, and critical thinking to deliver accurate diagnoses, prepare customized treatment plans and consider the need for inter-professional collaboration in the delivery of oral health care. Topics include advanced endodontic content, orofacial pain, ethics, patient management, community oral health and various clinical topics. (Quarter 7.).

#### **DS 212. Integrated Clinical Sciences II: Applied Clinical Sciences. 2 Units.**

Applied Clinical Sciences is an Integrated Clinical Sciences course that fosters critical thinking and lifelong learning among dental professionals. It emphasizes horizontal and vertical content integration within the ICS stand and other clinical disciplines, offering case-based lectures, exercises, and discussions to enhance students' diagnostic and technical proficiency. Through a blend of fundamental knowledge and active learning, students develop the ability to make accurate diagnoses and provide comprehensive patient care, informed by a deep understanding of oral health and overall patient wellness. Topics covered include biomedical sciences, evidence-based dentistry, ethics and professionalism, community oral health, clinical techniques, information specific to endodontics, oral surgery, sleep medicine, infection control, and safety, and orofacial pain. The course emphasizes evidence-based application in clinical diagnoses, treatment, and patient management to enhance the novice practitioner's adaptability in real-world patient care scenarios.

#### **DS 213. Integrated Clinical Sciences II: Applied Clinical Sciences. 3 Units.**

#### **DS 266. Clinical Dental Radiology. 2 Units.**

Study of preparation, evaluation, and interpretation of diagnostically acceptable intraoral radiographic and panoramic surveys for comprehensive care and emergency clinic patients. (Quarters 5-8.).

**DS 300. Practice Management II. 3 Units.**

Challenges students to apply knowledge of practice management concepts through utilization of a computerized business simulation. Includes preparation for career decisions in dentistry with a focus on practice transitions, associateships, dental benefit plan participation, marketing, debt management, retirement planning, patient billing and collections, scheduling for efficiency, basic accounting, tax planning, and development of business plans. (30 hours lecture. Quarter 11.).

**DS 301. Jurisprudence. 1 Unit.**

Prepares students for an understanding of the foundations of the law, its primary groupings and modes, and its application to the dentist and dental practice environment. Particular attention will be given to California dental law and risk management. (10 hours lecture. Quarter 12.).

**DS 302. Clinical Care of Complex Needs. 4 Units.**

Study of basic disease processes, epidemiology, demographics, treatment planning, principles of providing dental treatment for individuals with a wide variety of conditions including medical and developmental disabilities, problems associated with aging, psychological problems including dental phobia, hospital organization, joining a hospital staff, providing dental treatment and consultation in a hospital, and principles of general anesthesia. (20 hours lecture, 20 hours self-study and seminar. Quarters 9-11.).

**DS 303. Integrated Clinical Sciences III: Multidisciplinary Case Based Seminars. 6 Units.**

Multidisciplinary case based presentations of integrated material related to the practice of clinical dentistry. This three-quarter course builds on the foundational and clinical knowledge base of each student to evaluate and plan more complex treatment needs. (60 hours lecture/seminar. (Quarters 8-10).

**DS 307. Extramural Patient Care. 4 Units.**

Through a combination of didactic and clinical experiences, this course seeks to prepare the student for practice in community clinical settings where diverse patient populations may be encountered. Upon completion of the course, students will have developed the skills to: perform dental procedures in community-based practice settings, work with diverse patient populations, describe the social context of disease processes, develop social awareness and skills for treating underserved groups, describe dental delivery in a community clinic environment, and develop treatment alternative in clinics with limited resources (90 hours clinical rotations and 4 hours lecture/seminar. Quarters 9-12).

**DS 320. Prep for State Licensure. 0 Units.**

This course, available to students on an as-needed basis, includes a review of requirements and protocol as well as practical exercises in preparation for the Western Regional Examining Board and other licensing examinations.

**DS 394. Personalized Instructional Program. 2 Units.**

The PIP experience is an in-depth learning opportunity in an area of personal interest related to dentistry/healthcare. Students work with a mentor or advisor with knowledge in the student's area of interest. This experience is intended to increase student personal satisfaction and engagement. The experience requires documentation of a minimum of 10-15 hours for gaining foundational knowledge and a PIP work product (outcome) of 30 hours minimum.

**DS 399. Enriched Clinical Experience. 16-64 Units.**

This course provides students with an additional opportunity to enhance or enrich their skills in some or all clinical disciplines subsequent to the scheduled graduation date. These experiences are directed by the student's Group Practice Leader, who also recommends certification for graduation.

**Graduate Courses****DS 402. Statistical Methods I. 1 Unit.**

Residents learn the importance of data organization and evaluation, and statistical methods used in research. They apply this knowledge to their own research and enhance skills in the interpretation of quality research data. (Quarter 3.).

**DS 430. Advanced Oral Pathology I. 1 Unit.**

Organized into lectures and clinical-pathologic conferences, this course provides residents a firm foundation in endodontic pathology and clinical entities that may occur in patients but are unrelated to root canal treatment. (Quarter 2.).

**DS 499. Enriched Clinical Experience. 1-5 Units.****DS 502. Statistical Methods II. 1 Unit.**

Residents learn the importance of data organization and evaluation, and statistical methods used in research. They apply this knowledge to their own research and enhance skills in the interpretation of quality research data. (Quarter 7.).

**DS 530. Advanced Oral Pathology II. 1 Unit.**

Organized into lectures and clinical-pathologic conferences, this course provides residents a firm foundation in endodontic pathology and clinical entities that may occur in patients but are unrelated to root canal treatment. (Quarter 5.).