

Karen L Ferran, Ph.D., M.S.P.H.
2147 Via Mar Valle
Del Mar, CA 92014
(Home) 858-350-0451/ (Cell) 858-699-4935
klferran@gmail.com

ACADEMIC DEGREES

- Ph.D. University of California, San Diego, Community and Family Medicine Joint Doctoral Program with San Diego State University, Graduate School of Public Health, San Diego California
2003, Public Health- Epidemiology
- M.S.P.H. University of California, Los Angeles, California 1986, Public Health- Infectious Disease Epidemiology
- B.S. University of Massachusetts, Amherst, Massachusetts 1980, Microbiology
- B.S. University of Massachusetts, Amherst, Massachusetts 1980, Public Health- Environmental Health
-

TEACHING EXPERIENCE

Fall 2017 - present **Lecturer**
Scientific Writing for Epidemiology
Graduate School of Public Health
San Diego State University

Created course content to guide graduate students through the process of developing and writing their thesis or manuscript for publication in a peer reviewed journal. Held regular conferences with students. Course topics included idea development and organization, generating a research hypothesis, principles of scientific writing and revising, plagiarism, and citation management.

Fall 2012- present **Lecturer**
SAS Data Analysis
PH 620 (Fall) and PH629 (Fall and Spring) (previously PH700A)
Graduate School of Public Health
San Diego State University

Karen L. Ferran, Ph.D., M.S.P.H.

Designed 3 courses that introduce students to data management and analysis using SAS statistical software. Course material include readings, lectures, laboratory demonstrations, laboratory exercises, and oral presentations. Through exercises, quizzes and final projects, students learn basic and advanced SAS syntax to evaluate and manage data and conduct analyses using statistical tests taught in PH602 and PH627 coursework. These courses emphasis epidemiology methods including consideration of appropriate study design, identification of confounding variables and interactions; selection of appropriate analyses given research question and design; and correct interpretation of results.

Fall 2012 - present **Lecturer**
PH700A SPSS Data Analysis
Graduate School of Public Health
San Diego State University

Designed an introductory course that introduces students to data management and basic statistical analyses using SPSS software. Course materials include readings, lectures, laboratory demonstrations, laboratory exercises and an oral presentation. Through exercises and final projects students learn basic SPSS programming to visual and manage data and conduct statistical analyses taught in PH602.

Spring 2011 – present **Lecturer**
PH649 Border and Global Health Surveillance
Graduate School of Public Health,
San Diego State University

Developed curriculum to provide students with a strong foundation in public health surveillance with a focus on global and U.S./Mexico border infectious disease surveillance. Topics included International Health Regulations and global health diplomacy, design of surveillance programs; selected surveillance strategies including notable practices and achievements; One Health; evaluation of disease surveillance systems; and challenges to global public health surveillance.

Fall 2006-2011 **Lecturer, Part-time**
SPPS 206 Biostatistics
Skaggs School of Pharmacy and Pharmaceutical Sciences
University of California, San Diego

Taught basic biostatistical concepts, statistical tests, and appropriate application of statistical methods relevant to pharmacy and pharmaceutical research. Topics covered included one- and two-sample hypothesis testing, nonparametric tests, hypothesis testing for categorical

Karen L. Ferran, Ph.D., M.S.P.H.

data, simple linear regression, correlation, analysis of variance, statistical equivalence and statistical errors in the literature.

Summer 2008 & 2009 **Lecturer, Part-time**
Fall 2008 PH700A Seminar in Advanced Epidemiology Research Design:
Scientific Writing for Epidemiology
Graduate School of Public Health
San Diego State University

Created course content to guide graduate students through the process of developing and writing their thesis proposal. Held regular conferences with students. Course topics included idea development and organization, generating a research hypothesis, finding useful publicly available datasets, principles of scientific writing and revising, plagiarism, and citation management.

Spring 2005-2009 **Lecturer, Part-time**
Fall 2007 & 2008 PH 602 Biostatistics
Graduate School of Public Health
San Diego State University

Taught basic biostatistical methods for healthcare, biomedical, and public health research. Topics covered included probability, one- and two-sample hypothesis testing, nonparametric two-sample hypothesis testing, hypothesis testing for categorical data, simple linear regression, correlation, and analysis of variance.

Fall 2002 **Teaching Assistant**
SPPS 206 Biostatistics
School of Pharmacy and Pharmaceutical Sciences
University of California, San Diego
La Jolla, California

Facilitated weekly labs. Assisted students with STATA software and understanding of basic statistical tests, assumptions, and application.

Fall 2000 **Graduate Assistant**
PH 628 Biostatistics
Graduate School of Public Health
San Diego State University

Graded all assignments and exams of graduate students enrolled in an advanced multivariate statistics course.

STUDENT SUPERVISION/ADVISING

Dates	Name	Program/School	Role
Fall-Summer 2020	Nora Satybaldiyeva	Epidemiology/SDSU	Manuscript Committee Chair
Fall-Spring 2020	Tom Kocher, MD	Epidemiology/SDSU	Capstone Committee Member
Fall-Spring 2020	Charles Martin, DO	Epidemiology/SDSU	Manuscript Committee Chair
Fall 2017 -	Erin Delker, MPH	Epidemiology/ JDP SDSU/UCSD	Doctoral Dissertation Committee Member
Fall-Spring 2019	Andria Blackwell	Epidemiology /SDSU	Manuscript Committee Chair
Fall-Spring 2019	Erin Reilly	Epidemiology /SDSU	Manuscript Committee Chair
Fall-Spring 2019	Kate Chae, MD	Epidemiology /SDSU	Manuscript Committee Chair
Fall-Fall 2019	Nhat Thai	Epidemiology /SDSU	Manuscript Committee Chair
Fall-Spring 2019	Caitlyn Price	Epidemiology /SDSU	Capstone Committee Member
Fall-Spring 2019	Kelly Red	Epidemiology /SDSU	Capstone Committee Member
Fall-Spring 2019	Aarti Gupta, DDS	Epidemiology/SDSU	Manuscript Committee Member
Fall 2019- Summer 2020	Katie Martin	Epidemiology/SDSU	Manuscript Committee Chair
Fall-Spring 2019	Jessica Sibal	Health Promotion and Behavior / SDSU	Manuscript Committee Member
Fall -Spring 2018	Nora Barin	Epidemiology /SDSU	Capstone Committee Member
Fall -Spring 2018	Meg Flanagan	Epidemiology /SDSU	Capstone Committee Member
Fall -Spring 2018	Christine Nguyen	Epidemiology /SDSU	Capstone Committee Member
Fall -Spring 2018	Ursula Alexander	Epidemiology /SDSU	Capstone Committee Member
Fall-Spring 2019	Eli Prompradit	Epidemiology /SDSU	Practicum supervision/ Capstone Committee Chair
Fall-Spring 2019	Alyssa Carroll	Epidemiology /SDSU	Practicum supervision/ Manuscript Committee Chair
Fall-Spring 2018	McKayla Smith	Epidemiology /SDSU	Practicum supervision / Manuscript Committee Chair
Fall-Spring 2018	Daniel Gelbach	Epidemiology /SDSU	Practicum supervision / Manuscript Committee Chair
Fall-Spring 2018	Amish Talwar, MD	Epidemiology /SDSU	Manuscript Committee Chair
Fall-Spring 2017	Brandon Hugueley	Epidemiology /SDSU	Chair Capstone Committee
Fall-Spring 2017	Sarah Stous	Epidemiology //SDSU	Capstone Committee Member
Fall-Spring 2017	Nichelle Brown	Epidemiology /SDSU	Capstone Committee Chair
Fall-Spring 2017	Nicole Glass	Epidemiology /SDSU	Capstone Committee Member
Fall-Spring 2017	Chris Coyne, MD	Epidemiology /SDSU	Manuscript committee member
Fall 2016	Alexandra Benitez	Health Promotion/SDSU	Practicum supervision
Fall 2016	Diamonne Mitchell	Health Management & Policy/ SDSU	Practicum supervision
Fall-Spring 2016	Eileen Natuzzi, MD	Epidemiology /SDSU	Manuscript committee member
Spring 2016	Tiffani Barham	Public Health/UCSD	Practicum supervision

Karen L. Ferran, Ph.D., M.S.P.H.

Fall 2015	Rolando Barajas	Epidemiology /SDSU	Practicum supervision
Fall 2015	Tinny Chakma, MD	Epidemiology/National Univ	Practicum supervision
Fall 2015	Sarah Han	Public Health/UCSD	Practicum supervision
Fall 2015	Jonathan Slowey	Public Health/UCSD	Practicum supervision
Fall-Spring 2015	Shanon Stous	Epidemiology /SDSU	Thesis committee member
Fall-Spring 2015	Daniel Walker	Epidemiology /SDSU	Thesis committee member
Fall-Spring2014	Tasi Rodriguez	Epidemiology /SDSU	Thesis committee member
Fall-Spring2012	Casey Dunne	Epidemiology /SDSU	Thesis committee member
Fall -Spring 2012	Christy Lopez	Epidemiology /SDSU	Thesis committee member
Fall -Spring 2012	Hannah Works	Epidemiology /Intern/SDSU	Thesis committee member Supervision
Fall 2012	Dustin Williamson	Urban Planning /UCSD	Practicum supervision
Spring 2012	Kristine Ortwine	Epidemiology /SDSU	Practicum supervision
Spring 2011	Melanie Harris	Epidemiology /SDSU	Practicum supervision
Fall 2010	Sarah Marikos	Epidemiology //SDSU	Practicum supervision
Spring 2010	Marisa Mierwa	Global Emergency Preparedness & Response /SDSU	Thesis committee member
Spring 2009	Christine Selder	Social work /SDSU	Thesis committee member

PROFESSIONAL EXPERIENCE

June 2002 – Sept 2019 Lead Consultant, BetaStatistics, LLC, San Diego CA

Advise clients on research design strategies, study methods and documentation, data collection and biostatistical analyses, data interpretation and presentation. Evaluated moderate-large datasets and research objectives and methods to guide clients in the appropriate selection of statistical procedures. Constructed analyzable datasets, performed statistical analyses using SAS or SPSS. Worked with team members to derive in-depth understanding of data findings. Wrote professional reports and presentations. Assisted clients in preparing grant proposals, abstracts for scientific meetings and manuscripts.

May 2009- Jan 2013 Chief Epidemiologist/Program Manager

Early Warning Infectious Disease Surveillance (EWIDS) Program
California Department of Public Health Contract
Fiscal Agent: San Diego State Research Foundation/Institute of
Public Health May 2009-October 2011, Grossmont Cuyamaca
Community College District November 2011 – January 2013

Karen L. Ferran, Ph.D., M.S.P.H.

Provided leadership and expertise for the EWIDS program and active management of the contract. Developed strategic plans, statements of work and detailed project schedules that establish tasks and milestones based on the contract, resource allocation, program evaluation, and reporting. Prepared progress reports, task based-budgets, contract and budget amendments (contract budget totals range: \$500,000 - \$1.8 million per year), and employee performance evaluations. Directly managed budgets and the hiring, training and supervision of personnel and ensured program objectives were met. Mentored junior staff and interns and provided epidemiological support on a broad range of issues to enhance cross-border public health capabilities, information exchange and early warning infectious disease detection systems. Acted as a liaison between private healthcare, state, local and federal public health agencies during binational outbreak investigations. Created and delivered scientific reports and presentations to senior-level state and federal audiences and at scientific/ professional meetings. Established One Border One Health, a binational multi-disciplinary collaborative to strengthen surveillance for emerging infectious diseases along the US/Mexico border.

1997-1999

Project Director

Principle Investigators: Kathryn Hollenbach, Ph.D.
Family and Preventive Medicine
University of California, San Diego
San Diego, California

Managed day-to-day operations of a research project examining the cost, clinical outcomes and quality of life of women undergoing high dose chemotherapy with stem cell transplant for advanced breast cancer. Prepared IRB submissions and assisted in the development/selection of study tools, instruments and protocols and ensured compliance with confidentiality requirements and standards. Performed subject recruitment, data collection, data management, analysis and manuscript and report preparation.

1995-1997

Clinical Outcomes Analyst – Project Manager

Department of Outcomes Research
Scripps Clinic and Research Foundation
La Jolla, California

Assisted physicians and staff in the development of strategies and implementation of outcomes clinical research studies to inform healthcare decisions. Aided in the identification and evaluation of new clinical quality measurement methods and metrics. Coordinated research projects and performed statistical analyses of clinical trials, patient-centered, clinical and financial outcomes data. Worked with information technology services to develop a data warehouse for research purposes. Created and presented performance reports to Board of Trustees.

1994-1995

Clinical Outcomes Analyst

Department of Health Care Delivery Research.
ScrippsHealth, La Jolla, California

Karen L. Ferran, Ph.D., M.S.P.H.

Worked as part of a multi-disciplinary team to develop and produce HEDIS, CRISP and other performance reports. Designed, implemented, and monitored protocols to measure patient satisfaction, interviewed new hires and trained staff to conduct telephone surveys, closely monitored staff progress and compliance with privacy/confidentiality requirements. Conducted field surveys to collect medical record data to measure quality of care measures such as immunization and mammography rates, and worked with information technology to abstract and aggregate selected procedure utilization rates and maternal health indicators. Performed quality assurance studies to validate data. Conducted data analyses and prepared reports.

1990-1994

Epidemiologist

Quality Resource Management
Scripps Mercy (formerly Mercy Healthcare)
San Diego, California

Responsible for the infectious disease surveillance, prevention, and control program within the hospital, emergency room, and outpatient clinics. Maintained surveillance for hospital-acquired infections and reportable diseases, instituted compiling and reporting risk adjusted surgeon-specific infection rates, ensured compliance with OSHA regulations on the prevention of transmission of tuberculosis and blood-borne pathogens, trained new hires and staff annually, and routinely presented infection rates and quality assurance studies to medical committees. Successfully navigated two JCAHO accreditations.

1989-1990

Program Administrator, Laboratory Assurance Program

Principle Investigator: Michael Peddecord, Dr.P.H.
Graduate School of Public Health
San Diego State University
San Diego, California

Managed day-to-day activities and staff of a CDC funded research project using HIV-1 testing as a model to develop and evaluate methods of monitoring and improving the quality of laboratory testing and reporting. Oversaw data collection, management and analysis. Prepared progress reports and manuscripts for publication in peer-reviewed journals.

1986-1988

Epidemiologist

CIGNA Hospital of Los Angeles
Los Angeles, California

Responsible for the administration of the infection control and employee health programs.

1986-1988

Project Manager

Principle Investigator: Janis Giorgi, Ph.D.

Karen L. Ferran, Ph.D., M.S.P.H.

Dept. of Microbiology & Immunology
University of California, Los Angeles School of Medicine
Los Angeles, California

Coordinated research projects evaluating the alterations in lymphocyte subsets in HIV-1 and EBV infections.

1985-1986

Study Coordinator

Principle Investigator: Roger Detels, MD and Barbara Visscher, MD
Department of Epidemiology
UCLA School of Public Health
Los Angeles, California

Conducted a case-control study of behavioral risk factors for AIDS. Responsibilities included subject recruitment and face-to-face interview of 125 AIDS cases and 125 controls.

1983-1985

Student Professional Worker

Immunization Project
Los Angeles County Department of Health Services
Los Angeles, California

Coordinated the distribution of vaccines among County clinics, evaluated childhood immunization levels and maintained system of active disease surveillance.

1983-1985

Laboratory Assistant

Department of Epidemiology
UCLA School of Public Health
Los Angeles, California

Established and maintained a mosquito colony infected with a protozoan under investigation for its efficacy as a biological control agent.

1980-1982

Research Assistant

Department of Cardiovascular Research
Brigham & Women's Hospital
Boston, Massachusetts

Performed tissue culturing and beta-receptor studies examining the effects of propranolol on chick embryo heart cells.

PUBLICATIONS AND CONFERENCE PRESENTATIONS

Erin R Reilly, K Ferran, H Lemus, E. Lederman. **Demographics, Clinical Characteristics, and Management of Detainees with Syphilis in US Immigration and Customs Enforcement Health Services Corps-Staffed Facilities, 2014 to 2018.** Poster Presentation at the Epidemiology Exchange Conference, San Diego, April 2019.

Andrea M Blackwell, G Tomkus, P Farabaugh, M Rios, B Stephen, H Lemus, K Ferran, E Lederman. **Sexually Transmitted Infection Opt-Out Testing in an Immigration Detention Setting: A Pilot Study.** Epidemiology Exchange Conference, San Diego, April 2019

Conrad HB, Hollenbach KA, Gehlbach, D, Ferran KL, Barham TA, Carstairs KL. **The Impact of Behavioral Health Patients on a Pediatric Emergency Department's Length of Stay and Left Without Being Seen.** *Pediatric Emergency Care*, 2018;34(8);584-587

Smith ML, Ferran K, Gehlbach DL, Yaphochkun K, Bryl AW, Hollenbach KA. **Intranasal fentanyl vs intravenous opioid use and length of stay in pediatric emergency patients with extremity deformities.** 8th Annual Epidemiology Research Exchange, San Diego, CA & Rady Children's Hospital 9th Annual Pediatric Research Symposium, May 2018.

Gehlbach DL, Ferran KL, Conrad H, Cowell A, Smith ML, Hollenbach KA. **Race/Ethnicity and Head Computed Tomography Use in a Pediatric Emergency Department.** Rady Children's Hospital 9th Annual Pediatric Research Symposium, San Diego, CA May 2018.

Coyne C, Le V, Brennan JJ, Castillo EM, Shatsky RA, Ferran K, Brodine S and Vilke GM. **Application of the MASCC and CISNE Risk-Stratification Scores to Identify Low-Risk Febrile Neutropenic Patients in the Emergency Department.** *Ann Emerg Med*. Advance online publication. Doi:org/10.1016/j.annemergmed.2016.11.007.

Natuzzi ES, Joshua C, Shortus M, Reubin R, Dalipanda T, Ferran K, Aumua A, and Brodine S. **Defining Population Health Vulnerability Following an Extreme Weather Event in an Urban Pacific Island Environment: Honiara, Solomon Islands.** *Am J Trop Med Hyg* 16-0177; Published online April 18, 2016.

Stous S, Varan A, Freiman J, Brodine S, Ferran K, Joseph R, Watermen S, Schneider D, Lederman E. **Self-report of past varicella zoster virus infection among immigrant detainees: A useful tool for infection control?** Poster presentation at the Infectious Disease Society of America ID Week 2015, San Diego, CA, October 2015.

Pezzoli K, Kozo J, Ferran K, Wooten W, Rangel Gomez G and Al-Delaimy WK. **One Bioregion/One Health: An Integrative Narrative for Transboundary Planning along**

Karen L. Ferran, Ph.D., M.S.P.H.

the US–Mexico Border, *Global Society*, Vol. 28 (2014):4, 419-440, DOI:
[10.1080/13600826.2014.951316](https://doi.org/10.1080/13600826.2014.951316)

Marikos S, Ferran K, Iniguez-Stevens E, Monge Navarro FJ. **Establishment of a One Health Surveillance Initiative in the CA/Baja CA Border Region**. *Online J Public Health Inform.* 2013; 5(1):e205.

Ferran K, Marikos S, Iniguez-Stevens E, Ortwine K. **Establishing a regional disease surveillance network for emerging pathogens along the California-Baja California border: Cross disciplinary, organizational and international boundaries**. Accepted for presentation at the 141st Annual Meeting of the American Public Health Association, Boston, MA, November 2013

Marikos S, Ferran K, Iniguez-Stevens E, Monge Navarro FJ. **Establishment of a One Health Surveillance Initiative in the CA/Baja CA Border Region**. Poster presentation at the International Society for Disease Surveillance Annual Conference, San Diego, CA, December 2012

Iniguez-Stevens E, Marikos S, Ferran K. **A Binational Influenza Surveillance Network- California/Baja California**. Presentation at the International Society for Disease Surveillance Annual Conference, San Diego, CA, December 2012

Marikos S, Ferran K, Iniguez-Stevens E, Gurfield N. **Raccoons in San Diego County as Sentinels for West Nile Surveillance**. Presentation at the International Society for Disease Surveillance Annual Conference, San Diego, CA, December 2012

Ortwine K, Ferran K, Iniguez-Stevens E. **A Binational Model of Collaboration for Enhancing Cross-Border ID Surveillance**. System showcase presentation at the International Society for Disease Surveillance Annual Conference, San Diego, CA, December 2012

Marikos S, Ferran K, Armenta R, Iniguez-Stevens E, Gurfield N. **Enhancing Preparedness for Potential Zoonotic Threats in the Southern California Border Region: Animal Service Providers Network Database**. Presentation at the Dynamic of Preparedness Conference, Pittsburgh, PA October 2012.

Marikos S, Ferran K, Engelke H, Iniguez-Stevens E. **One Border One Health: an innovative approach to regional preparedness Strategies for addressing emerging and re-emerging pathogens along the California – Baja California border**. Presentation at the Dynamic of Preparedness Conference, Pittsburgh, PA October 2012.

Ferran K, Marikos S, Iniguez-Stevens E. **One Border One Health: Addressing Disease Emergence Through Binational One Health Strategies**. Poster presentation at the National Environmental Health Association (NEHA) Annual Conference, San Diego, CA June 2012.

Karen L. Ferran, Ph.D., M.S.P.H.

Iniguez-Stevens E, Ferran K, Marikos S, Kriner P. **Evaluation of School Absenteeism Data for Enhanced Detection of Influenza Activity in Imperial County, California.**

Presentation at the U.S.-Mexico Binational Infectious Disease Conference, Austin, TX, May 2012.

Laboratory Bioterrorism Response Capabilities in the California – Baja California Region. Bejarano V, Iniguez-Stevens E, Marikos S, Harris, Santibanez M, Vazquez-Erlbeck M, Ferran K, Kriner P. Presentation at the U.S.-Mexico Binational Infectious Disease Conference, Austin, TX, May 2012.

Perez-Lockett K, Ferran K, Dulin P, McCotter O, Iniguez-Stevens, E, Hernandez Santillan NA, Suarez Perez RA, Magana R, Castano TJ. **Development and Dissemination of the Borderwide Regional Influenza Surveillance Network Report.** Presentation at the U.S.-Mexico Binational Infectious Disease Conference, Austin, TX, May 2012.

Frausto J., Chalita M., Wong L., Bejarano V., Nava M.L., Bazan C., Martinez S., Terriquez J., Iniguez-Stevens E., Vazquez-Erlbeck M., Ferran K. **California/Baja California Border Outpatient Provider Influenza-Like-Illness Surveillance Network.** Poster presented at the U.S.-Mexico Binational Infectious Disease Conference, El Paso, TX, June, 2011.

Ferran K.L., Armenta R., Marikos S., Gurfield N., Iniguez-Stevens E. **Animal Service Provider Network Database and Directory.** Poster presented at the U.S.-Mexico Binational Infectious Disease Conference, El Paso, TX, June, 2011.

Alva H., Banicke A.A., Lacy-Martinez C., Perez-Lockett K., Dulin P., Hernandez S., Murtaza-Rossini M., Ferran K., Iniguez-Stevens E. **Enhancing the United States-Mexico Epidemiological Information Exchange.** Poster presented at the U.S.-Mexico Binational Infectious Disease Conference, El Paso, TX, June, 2011.

Gurfield, N, Grewal, S, Doggett D, Ferran K, LaFreniere R. **Detection of Spotted Fever Group *Rickettsia* and *Borrelia burgdorferi* in San Diego County Rabbit Ticks.** Proceedings and Papers of the Mosquito and Vector Control Association of California 2011: Volume 79.

Gurfield N, Doggett D, Grewal S, LaFreniere R, Ferran K. **First Detection of Spotted Fever Group *Rickettsia* and *Borrelia burgdorferi* in rabbit ticks from San Diego County.** Poster presented at The San Diego Microbiology Group Annual Meeting May 2011.

Iniguez-Stevens E., Vejarano B., Wong L., Nava M.L., Bazan C., Frausto J., Silva M., Vazquez-Erlbeck M., Ferran K., Welton M., Dang A., Leiva M.E. **Baja California/California Border Outpatient Provider ILI Surveillance Network.** Poster presented at the U.S.-Mexico Binational Infectious Disease Conference, San Antonio, TX, June, 2010.

Ferran, K. **Hypertension and mortality in women with a history of new onset hypertension during pregnancy.** Dissertation and presentation: San Diego Epidemiology Research Exchange, May 2003.

Meisenberg BR, Ferran K, Hollenbach K, Brehm T, Jollan J, Piro LD. **Reduced charges and costs associated with outpatient autologous stem cell transplantation.** Bone Marrow Transplantation, 1998; 21 (9): 927-32.

Peddecord KM, Hofherr LK, Benenson AS, Ferran KL, Li Z, Garfein RS, Francis DP, Taylor RN, Schalla WO. **Sources of Influence in Changing Policies and Procedures for HIV-1 Testing.** Clinical Laboratory Science 1993; 6(6) 359-365.

Hewitt DJ, Peddecord KM, Francis DP, Benenson AS, Hofherr LK, Ferran KL, Garfein RS, Gerber RA. **Content and Design of Laboratory Report Forms for Human Immunodeficiency Virus Type 1 Antibody Testing.** American Journal of Clinical Pathology 1992; 98:56-61.

Francis DP, Peddecord KM, Ferran KL, Benenson AS, Hofherr LK, Garfein RS, Schalla WO, Taylor RN. **Use of the Nominal Group Process for the Improvement of the Laboratory Performance in Human Immunodeficiency Virus Type 1 Antibody Testing.** Clinical Laboratory Management Review 1992; 6(6) 537-538,543-546.

Peddecord KM, Benenson AS, Hofherr LK, Francis DP, Garfein RS, Ferran KL, Taylor RN, Schalla WO, Ascher MS. **Analytic Results of Human Immunodeficiency Virus Type 1 Testing Using Blind Proficiency Testing.** Clinical Laboratory Science 1992; 5(3) 165-71.

Hofherr LK, Peddecord KM, Benenson AS, Garfein RS, Francis DP, Ferran KL, Taylor RN. **Methods for a Model Blind Proficiency Testing System.** Clinical Laboratory Science 1992; 5(3) 160-64.

Peddecord KM, Benenson AS, Hofherr LK, Garfein RS, Francis DP, Hewitt DJ, Ferran KL, Schalla WO, Hearn TL. **Identification of Non-analytic Issues in HIV-1 Antibody Testing Using Blind Proficiency Testing.** Clinical Laboratory Science 1992; 5(3): 172-76.

Peddecord KM, Benenson AS, Ferran KL, Hofherr LK, Francis DP, Hewitt DJ, Li Z. **Evaluation of HIV-1 Reporting Practices of Participant Laboratories in the SDSU Laboratory Assurance Program's Open and Blind Proficiency Surveys.** Poster Presentation: Fifth Consensus Conference on Testing for Human Retroviruses, Kansas City, March 6-8, 1990.

Peddecord KM, Benenson AS, Ferran KL, Hofherr LK, Francis DP, Hewitt DJ, Li Z. **HIV-1 Reporting Practices of Participant Laboratories in Laboratory Assurance Program's Blind and Open Proficiency Surveys.** Presentation: National AIDS Conference, San Francisco 1989.

Karen L. Ferran, Ph.D., M.S.P.H.

Peddecord KM, Benenson AS, Hofherr LK, Ferran KL, Francis DP, Ascher MS. **HIV-1 antibody testing: A model for evaluating laboratory performance.** Poster Session: 117th annual meeting of the American Public Health Association, Chicago, October 22-26, 1989.

Peddecord KM, Benenson AS, Hofherr LK, Ferran KL. **The application of health care technology in practice—The ideal versus the standard of practice: The case of HIV antibody testing. Presentation:** Annual Meeting of International Society on Technology Assessment in Health Care. London, June 5-8, 1989.

Ferran, K. 1986. **An enzyme linked immunosorbent assay for the detection of Amblyospora californica (Microspora: Amblyosporidiae) infection the mosquito Culex tarsalis.** Master's thesis, University of California, Los Angeles.

INVITED PRESENTATIONS

One Health and Emerging Pathogens, Guest Lecture UCSD Introduction to Public Health, May 29, 2019

One Health and Emerging Pathogens, Guest Lecture UCSD Introduction to Public Health, March 8, 2017 and December 1, 2017

Statistical Power and Sample Size, Presentation to Rady Children's Hospital Emergency Department Faculty, San Diego, CA August 19, 2016

One Health and Emerging Pathogens, Guest Lecture SDSU PH621 Epidemiology of Infectious Diseases, October 15, 2015 and November 20, 2014

Zombie Rule #1: Understanding Emerging Infectious Diseases and One Health Concepts, Presentation to High Tech High Students, San Diego, CA March 3, 2013

Emerging and Re-Emerging Infectious Diseases and One Border One Health, Guest Lecture SDSU PH621 Epidemiology of Infectious Diseases, Sept 27, 2012

Emerging and Re-Emerging Infectious Diseases, One health and the California-Baja California Border Region, Presentation at High Tech High San Diego Teachers Orientation August 6, 2012

Birds, Bugs and Disease in a Borderless World. Presentation at the Tijuana River National Estuarine Research Reserve, Imperial Beach, CA July 2012.

California Early Warning Infectious Disease Surveillance, Presentation to Western University School of Veterinary Medicine Faculty, Pomona, CA January 4, 2012

Karen L. Ferran, Ph.D., M.S.P.H.

Bioterrorism and Emerging Pathogens, Guest Lecture PH700A Emergency Preparedness and Response, April 22, 2010

CERTIFICATIONS

U.S. Department of Homeland Security FEMA, **National Incidence Management System IS00700 and Incident Command System IS-00100**, September 2010
Certification Board of Infection Control and Epidemiology, **Certificate in Infection Prevention and Control**, November 1993

AWARDS

San Diego State University School of Public Health Teaching Excellent Award 2019
San Diego State University School of Public Health Outstanding Faculty Award 2019
Society for Biochemistry and Molecular Biology (ASBMB) HOPES Grant 2012 (\$2000)
One Health: Disease Diagnostics, Surveillance and Emerging Infectious Diseases.American. Brinda Rana, University of California San Diego, Karen Ferran, CDHP/EWIDS, Nikos Gurfield, San Diego County Environmental Health.
San Diego Epidemiology Research Exchange 2003 Student Research Award
San Diego State University Shared Vision Award 1999-2003
U.S. Dept. of Health and Human Services Traineeship, 1983-1985

PROFESSIONAL ACTIVITIES AND AFFILIATIONS

Member Society of Epidemiologic Research
Member, American Public Health Association
Associate Member, Council of State and Territorial Epidemiologists (CSTE) 2010-2013
CSTE Border International Health Subcommittee 2012-2013
Associate Member, Association of Professionals in Infection Control (APIC)
Member, International Society for Infectious Diseases
Chair, Education Committee, Association of Professionals in Infection Control and Epidemiology (APIC), San Diego and Imperial Counties, 1994
President, APIC, San Diego and Imperial Counties Chapter, 1995
Member, California APIC Coordinating Council 1994-1996
Legislative Representative, APIC, San Diego and Imperial Counties, 1996
Phi Kappa Phi National Honor Society

COMMUNITY ACTIVITIES

Member, One Health Commission 1HOPE Tertiary Education Workgroup 2019 - present
Member, Board of Directors, Project Wildlife 2013-2014
Member, Board of Directors, Wish Transportation, Inc 2009-2011
Member, Board of Directors, Ferran Technology, Inc 2015-2016
President, Board of Directors, Chandlers Cove Townhome Association 1998-2008
Vice President, Board of Directors, Chandlers Cove Townhome Association 2017-present

REFERENCES

Kathryn Hollenbach, Ph.D
President, BetaStatistics, LLC
Tel (858)-755-4545
Mobile (858)395-5122
khollenbach@ucsd.edu

Suzanne Lindsay, PhD
Retired, Assistant Professor
Graduate School of Public Health
San Diego State University
619-594-8945
slindsay@mail.sdsu.edu

Mauricio E. Leiva, Retired Chief
California Office of Binational Border Health
California Department of Public Health
Mobile (916) 903-6788
mleiva@teal.net

Michael Peddecord, DrPH
Division of Health Management and Policy
Professor Emeritus
Consultant-San Diego County Immunization Partnership
Graduate School of Public Health
San Diego State University
mpeddeco@mail.sdsu.edu
Tel. (619) 594-4779

Raul E. Sotomayor, MPH, MSA
Branch Chief, Strategic Capacity Building
Division of International Health Security
Office of Policy and Planning
Assistant Secretary for Preparedness and Response
U.S. Department of Health and Human Services
200 Independence Ave. S.W., Room 638G;
Washington D.C. 20201
Tel. (202) 401-5837; Cell (202) 438-8970;
Fax (202) 260-5520
Raul.Sotomayor@hhs.gov