6111 Severin Drive La Mesa, CA 91942

### **EDUCATION**

# University of Kansas Medical Center

Kansas City, KS

# MPH, Epidemiology

2017

GPA 3.85, Recipient of Mary Guinan Award for Excellence in Epidemiology and Infectious Disease Key coursework: Leadership in Public Health, Public Health Administration, Intro to Data Management Using RedCap and SAS, Infectious Disease Epidemiology, Advanced Epidemiology I and II

## University of Kansas

Lawrence, KS

# Ph.D., Microbiology

2016

GPA 4.0, Phi Kappa Phi Honor Society and Sigma Xi Honor Society, LeaderShape Institute Training Key coursework: Research Grant Proposal Preparation, Advanced Epidemiology Emerging Infectious Agents, Statistics for Experimenters I and II

## National Autonomous University of Mexico

Mexico City, MEX

B.S., Biomedical Research

2010

#### PROFESSIONAL EXPERIENCE

#### California Department of Public Health, Office of Binational Border Health

San Diego, CA

Program Coordinator, Border and Binational Programs

August 2019 – present

- Developed the annual Border Health Status Report to the California Legislature for data year 2019
- Designed work plans and led projects to address antibiotic resistance in border communities, in collaboration with Mexican health officials
- · Guest lecturer on the topic of antibiotic resistance for VIDAII course at San Diego State University
- Developed an initiative to identify binational populations in the state of California through public survey data
- Conducted activities related to the mentoring, training, monitoring, and evaluation of interns and other epidemiology staff when conducting disease surveillance activities
- Participated in border health meetings and work groups to represent the Office of Binational Border Health
- · Co-led the steering committee of the San Diego Border Health Collaborative
- · Held the border health seat for the Leadership Council of San Diego's Childhood Obesity Initiative
- · Worked closely with U.S. and Mexico health officials at the federal, state, and local levels
- Represented the California Department of Public Health in various government and academic settings
- · Co-led the COVID-19 epidemiological response of the Office of Binational Border Health
- Supervised management of databases for infectious disease cases and ensured timely report of binational incidents
- · Worked with other state agencies to address the COVID-19 surge in the region Mexicali-Imperial County
- Trained redirected staff to assist with COVID-19 response
- Developed and established reporting protocols for novel incident scenarios due to COVID-19

#### California Department of Public Health, Office of Binational Border Health

San Diego, CA

Surveillance Officer

November 2017 – August 2019

- · Managed multiple infectious disease surveillance projects of relevance to the California/Baja CA border region
- Collaborated with other offices and programs in the California Department of Public Health and County of San Diego, to identify gaps and develop new projects to improve the health of border residents
- Conducted data collection, analysis, and reporting for several enhanced surveillance projects for the Border Infectious Diseases Program

- Conducted case investigations for coccidioidomycosis and enteric diseases for the County of San Diego Health
   & Human Services Agency
- Oversaw and enhanced the notification protocol for binational infectious disease cases and outbreaks in the County of San Diego
- · Reported binational cases of infectious disease to CDC and Tijuana public health jurisdiction
- Optimized the quality of the data provided by epidemiologists for referral to a local Mexican public health department, state partners, and federal officials
- Trained phone duty investigators on a yearly and need-to basis regarding binational public health procedures and operational protocol for US-Mexico collaboration
- Designed and implemented a comprehensive analysis of binational cases reported to the state of California by local health jurisdictions
- Developed technical reports and protocols, researched literature, and prepared articles for publication and distribution to key partners
- Supervised BIDS intern and prepared his performance evaluation as required by the Master in Public Health program of San Diego State University
- · Provided guidance to interns and project assistants working on a wide range of border health projects
- Facilitated communication and coordination with public health partners on the California/Baja CA border region
- Presented at multiple regional and national conferences and meetings focused on the fields of public health,
   epidemiology, and disease surveillance
- Participated as an observer for a tabletop exercise on binational outbreak investigation, reporting, and collaboration of public health officials in Sonora, Mexico for Arizona's border health office
- Evaluated the relevance of past and present projects to align project outcomes with program mission of enhancing surveillance of infectious disease impacted by population mobility
- · Attended local, state, and federal meetings relevant to the Border Infectious Disease Surveillance program
- · Served as co-chair for a multiagency taskforce on food safety practices regarding raw dairy products
- Collaborated with program coordinator to draft budget to secure CDC-ELC funding for personnel, supplies, and travel expenses for 21 different projects on border infectious disease surveillance
- Participated in a disease prioritization project with CDC and used the identified border health priority issues to write annual grant proposals

### <u>Presentations</u>

National - 62nd Annual Coccidioidomycosis Study Group Meeting, Flagstaff, AZ

National - American Public Health Association Annual Meeting and Expo, San Diego, CA

Regional - San Diego Epidemiology Research Exchange, San Diego, CA

Local - Annual Communicable Disease Meeting, San Diego, CA

### Johnson County Department of Health and Environment, Disease Containment

Mission, KS

Intern

December 2016 – August 2017

- Used data from Kansas' National Electronic Disease Surveillance System to create disease cluster detection models
- · Carried out infectious disease investigations for reportable enteric and vaccine-preventable diseases
- · Completed site of outbreak visits, contact interviews and outreach activities for a regional mumps outbreak
- Trained in point-of-dispensing for the Public Health Emergency Program
- · Created bilingual outreach material for medical providers and county residents for mumps and measles
- · Improved investigation and report questionnaires for Hepatitis C and Cryptosporidium
- · Assisted in the planning and coordination of a regional infectious disease symposium
- · Attended local and regional meetings regarding HIPAA compliance and interdisciplinary partnerships

## <u>Presentations</u>

Regional - Kansas Infectious Disease Symposium, Kansas City, KS

June 2016 - November 2017

- Designed and implemented multiple projects in vaccinology, including a paradigm-shifting project on correlates of protection induced by vaccination
- · Coordinated research activities in microbiology and immunology of Shigella, Salmonella, and Chlamydia
- Supervised undergraduate students of underrepresented groups by monitoring their progress, setting career development goals, mentoring for grant proposal writing, and preparing their biannual performance evaluations
- Trained graduate research assistants for the Pharmaceutical Chemistry and Molecular Biosciences programs
- Established standard operating procedures for primary cell culture and immunological assays
- · Delivered several oral, rapid session, and poster presentations on projects related to vaccine development
- · Published scientific articles in peer-reviewed journals on Shigella and Salmonella projects

#### <u>Presentations</u>

National - American Society for Microbiology Microbe Annual Meeting, New Orleans, LA; award winner

National - Annual Biomedical Research Conference for Minority Students 2016, Tampa, FL; judge with full subsidy

# **SKILLS/QUALIFICATIONS**

#### Statistical Analysis

- SAS Univariate and bivariate analysis, linear and logistic regression, detrending, SQL, analysis of NHANES and
  passive surveillance data, survival analysis
- Excel and Access Descriptive analysis, pivot tables, graph creation, data collecting and management
- · GraphPad One-way, two-way ANOVA, survival analysis, ROC, area under the curve
- GIS Map creation, layer editing, visualization of survey case distribution

# Mentoring of students and interns

- Training Use of the five practices of exemplary leadership as proposed by Kouzes and Posner
- Planning Set learning goals and project objectives for optimal professional development
- · Leading Provide guidance and encourage discussion of results for project advancement
- Other Supervision of academic research projects and award proposals, support for applications to graduate school, focus on the development of resilience and independence skills

#### Languages

Native Spanish speaker, professional proficiency in English, elementary proficiency in French

## Publications

- List available at: https://scholar.google.com/citations?user=YSznuscAAAA]&hl=en
- 7 articles, 2 book chapters, 212 citations

#### **CURRENT COMMUNITY SERVICE ACTIVITIES**

Ronald McDonald House Charities of San Diego - Meal Program Volunteer

Full list of presentations, awards, and volunteer activities available upon request.