Contact Av. Javier Prado Oeste 1694 E-mail: cculqui@uw.edu Lima 15073, Peru Website: culquichicon.github.io Information Tel:  $+51\ 969212422$ Current PhD student in Epidemiology at the University of Washington School of Public Health. In-Background terested in causal inference methods applied on observational studies and randomized trials under time-variant settings. Besides, applying causal inference methods on cluster-randomized trials addressing PrEP initiation in Kenya. PART I: Education and career **EDUCATION** PhD in Epidemiology 2022-Present Department of Epidemiology, University of Washington, WA, USA. MSPH in Environmental Health and Epidemiology 2022 Rollins School of Public Health, Emory University, GA, USA. MD Medical Doctor 2017 National University of Piura, Piura, Peru. Honors and 2022 Scholarship, 14th Summer Institute in Statistics and Modeling in Infectious AWARDS Diseases (SISMID), University of Washington (UW), USA. (5R25GM089694). Awardee, Virtual Conference Scholarship, Society for Epidemiological Re-2021 search, USA. Scholarship, 13th SISMID - UW, USA. (5R25GM089694). 2021 2020 Fellow, "William H. Foege" Global Health Fellowship endowed by the Bill & Melinda Gates Foundation, US (OPP19761). Full-tuition scholarship for MSPH in EH-EPI at Emory University. 2020 Awardee, Rollins Earn and Learn (REAL) Program. Rollins School of Public Health. Emory University. 2020 Presidential scholarship, Peruvian National Scholarship and Educational Program (PRONABEC) (RJ1705-2020). Living expenses scholarship for MSPH in EH-EPI at Emory University. Scholarship, 12th SISMID - UW USA. (5R25GM089694). 2020 2020 Scholarship, Pan Lab, Population, Health and Environmental Research at Duke University. Funded by the NASA project "Malaria Early Warning System for the Amazon", USA. (NNX15AP74G). 2019 Scholarship, International scholarships program, XX Summer School of Public Health at Universidad de Chile, Chile. 2019 Top manuscript, Call for Criminological Phenomenon research. Peruvian Ministry of Justice and Human Rights. 2019 Scholarship, Pan Lab, Population, Health and Environmental Research at Duke University. Funded by CONCYTEC (E009-054-2019). 2019 Scholarship, XIX Summer School of Public Health at Universidad de Chile, Regional Geohealth- Hub, Fogarty International Center, National Institutes of Health (NIH), USA. (U2RTW010114). 2018 Fellowship, Global Health Leadership Academy, University of Texas Medical Branch, Galveston, Texas, USA. (PHS6097-304037). 2018 Scholarship, III Geohealth-Hub centered in Peru, Fogarty International Center, National Institutes of Health (NIH), USA. (U2RTW010114). 2017 Outstanding Scientific Records, National University of Piura (216-D-2017-MH/UNP). Professional EXPERIENCE 2022 -Research assistant, Public Health Sciences Division, Fred Hutchinson Center, Seattle, Present Research assistant, Prokopec Lab, Emory University, Atlanta, USA. 2020-222019-20Research associate, Division of Epidemiology, Institute for Health Technology Assessment and Research (IETSI), Social Health Security, Lima, Peru. 2019 Research associate, Division of Epidemiology, Peruvian National Institutes of Health, Lima, Peru. 2018-20Research associate, School of Health Sciences, National University of Piura, Piura,

Last update: April 14, 2022

Peru.

	2016–20	Research assistant, Emerge, Emerging Diseases and Climate Change Research Unit, Cayetano Heredia University, Lima, Peru.		
~	2018	Epidemiologist, Division of Epidemiology, Peruvian Air Force Unit N° 7, Piura, Peru.		
CLINICAL PRACTICE	2017-18	Physician, Peruvian Air Force Unit N° 7, Piura, Peru.		
Affiliated				
POSITIONS	2020–	Affiliated investigator, Emerge, Emerging Diseases and Climate Change Research Unit, Cayetano Heredia University, Lima, Peru.		
	2020-	Affiliated investigator, School of Health Sciences, National University of Piura, Piura, Peru.		
	2015–19	Affiliated investigator, Public Health and Infection Lab, Universidad Tecnológica de Pereira, Colombia.		
	2016	Trainee, Scientia Clinical and Epidemiological Research Institute, Trujillo, Peru.		
CAREER DEVELOPMENT	2020	Research scholar, Duke Global Health Institute, Duke University, NC, U.S. Funded by the NASA project "Malaria Early Warning System for the Amazon", USA. (NNX15AP74G)		
	2019	Research scholar, Duke Global Health Institute, Duke University, NC, USA. Funded by CONCYTEC Peru (E009-054-2019).		
	2018	Fellow, Global Health Leadership Academy, University of Texas Medical Branch, TX, USA.		
	2016-20	Research fellow, Peru Infectious Diseases Epidemiology Research Training Consortium (D43TW007393 NIH-Fogarty International Center), Cayetano Heredia University, Peru.		
	2015	Visiting scholar in Fungal Immunology, Universidade Católica de Brasília, Brazil.		
Certifications $2019-$		RENACYT scientist, Peruvian Council of Science, Technology, and Innovation (CONCYTEC) (ID: P0034512)		
	2017-	Medical doctor, Peruvian Medical Association (ID: 78955)		
Languages	Spanish:	Fluent, native speaker.		
	English:	Fluent, TOEFL IBT 91/120.		
	Portugues	,		
Computational				
SKILLS	Statistics and programming softwares: R Studio, Stata, Mata programming, and SAS.  Multilevel analysis: github.com/culquichicon/2016-Peruvian-Prison-Census  Nested models: github.com/culquichicon/Flu-vaccination-coverage  Longitudinal analysis: github.com/culquichicon/El-Nino-amendment  Latent class analysis: github.com/culquichicon/kap-biostats  Data management: REDCap, Open Data Kit, Survey Monkey.  Geographic information systems: ArcGIS, QGIS, R.  Technical Softwares: LATEX, Rmarkdown, Git.			
MEMBERSHIPS	2020- 2017-20 2017-19 2017-19	Member, Society for Epidemiological Research (SER) Member, American Society of Tropical Medicine and Hygiene (ASTMH). Member, European Society of Clinical Microbiology and Infectious Diseases (ESCMID). Member, International Epidemiological Association (IEA).		

### **PART II: Publications**

## Published

- 14. Local Burden of Disease HIV Collaborators. Subnational mapping of HIV incidence and mortality among individuals aged 15–49 years in sub-Saharan Africa, 2000–18: a modeling study. The Lancet HIV. 2021;8(6):e363-e75. doi: 10.1016/S2352-3018(21)00051-5. *Culquichicon C listed as a group-author*.
- 13. Local Burden of Disease Diarrhoea Collaborators. Mapping geographical inequalities in oral rehydration therapy coverage in low-income and middle-income countries, 2000-17. The Lancet Glob Health. 2020;8(8):e1038-e1060. doi: 10.1016/S2214-109X(20)30230-8. Culquichicon C listed as a group-author.
- 12. Araujo-Castillo RV, **Culquichicon C**, Solis Condor R. Burden of disease due to hip, knee, and unspecified osteoarthritis in the Peruvian Social Health Security system (EsSalud), 2016. F1000Res. 2020;9:238. doi: 10.12688/f1000research.22767.2.
- 11. Culquichicon C, Ramos-Cedano E, Helguero-Santin LM, Niño-Garcia R, Rodríguez-Morales AJ. Research trends in Carrion's disease in the last 60 years: A bibliometric assessment of Latin American scientific production. Infez Med. 2018. Infez Med. 2018; 26(1):28-36.

- Yepes-Echeverri MC, Acevedo-Mendoza WF, Marín-Rincón H, Culquichicon C, Cardona-Ospina JA, Rodríguez-Morales AJ. Mapping the residual incidence of taeniasis and cysticercosis in Colombia, 2009–2013, using geographical information systems: Implications in public health and travel medicine. Travel Med Infect Dis. 2018;22:51-7. doi: 10.1016/j.tmaid.2017.12.006
- 9. Ortega-Loubon C, Culquichicon C, Correa R. The Importance of Writing and Publishing Case Reports During Medical Training. Cureus. 2017; 9(12): e. doi:10.7759/cureus.
- 8. Culquichicon C, Helguero-Santin LM, Labán-Seminario LM, Cardona-Ospina JA, Aboshady O, Correa R. Massive open online courses in health sciences from Latin American institutions: A need for improvement?. F1000Research. 2017; 6:940. doi: 10.12688/f1000research.11626.1
- 7. Culquichicon C, Hernández-Pacherres A, Labán-Seminario M, Cardona-Ospina JA, Rodríguez-Morales AJ. Where we are after 60 years of Paragonimus research? A bibliometric assessment. Infez Med. 2017; 25(2):142-149.
- 6. Rodriguez-Morales AJ, **Culquichicon C**. The need for enhancing the message: Screening for Zika, STORCH, and other agents and co-infections should be considered and assessed. Am J Reprod Immunol.e12688-n/a. doi: 10.1111/aji.12688
- Culquichicon C, Cardona-Ospina JA, Patiño-Barbosa AM and Rodriguez-Morales AJ. Bibliometric analysis of Oropouche research: impact on the surveillance of emerging arboviruses in Latin America. F1000Research. 2017, 6:194. doi: 10.5256/f1000research.10936.d152949
- 4. Rodríguez-Morales AJ, **Culquichicon-Sanchez C**, Gil-Restrepo AF. Baja producción científica de decanos en facultades de medicina y salud de Colombia: ¿una realidad común en Latinoamérica? Salud Publica Mex.2016;58:402-3. doi: 10.21149/spm.v58i4.7809
- 3. Culquichicon-Sanchez C, Ramos-Cedano E. Becas de iniciación científica: un modelo integral de desarrollo en investigación para Latinoamérica. Rev Med Chil. 2016;144:683-4. doi: 10.4067/S0034-98872016000500022
- 2. Culquichicon-Sanchez C, Correa R, Flores-Guevara I, Espinoza Morales F, Mejia CR. Immune Thrombocytopenic Purpura and Gastritis by H. pylori Associated With Type 1 Diabetes Mellitus. Cureus. 2016;8(2):e512. doi: 10.7759/cureus.512
- Culquichicon-Sanchez C, Ramos-Cedano E, Chumbes-Aguirre D, Araujo-Chumacero M, Díaz Vélez C, Rodríguez-Morales AJ. Tecnologías de la Información y la Comunicación (TICs) en la vigilancia, prevención y control del dengue. Rev Chilena Infectol. 2015;32:363-4. doi: 10.4067/S0716-10182015000400019

#### PRE-PRINTS

1. Soto-Becerra P, **Culquichicon C**, Hurtado-Roca Y, Araujo-Castillo RV. Real-world effectiveness of hydroxychloroquine, azithromycin, and ivermectin among hospitalized COVID-19 patients: results of a target trial emulation using observational data from a nationwide healthcare system in Peru. medRxiv; doi: 10.1101/2020.10.06.20208066

### Under review

- 5. Ayora-Talavera G, Kirstein OD, Puerta-Guardo H, Barrera-Fuentes G, Ortegon-Abud D, Che-Mendoza A, Parra M, Culquichicon C, Pavia-Ruz N, Beheshti A, Trovão NS, Granja-Pérez P, Manrique-Saide P, Vazquez-Prokopec GM, Earnest JT. Prevalence of SARS-CoV-2 exposure in a pediatric cohort of unvaccinated children in Merida, Yucatán, México. The Lancet Global Health. 2021
- 4. Culquichicon C, Astudillo-Rueda D, Niño R, Martinez R, Merino-Tsui N, Levy K, Lescano AG. Post-traumatic stress disorder, food insecurity and social capital among mothers after the 2017 Coastal El Niño flooding in Piura, Peru: a mixed method study. Disaster Medicine and Public Health Preparedness. 2021.
- 3. Culquichicon C, Zapata-Castro L, Soto-Becerra P, Konda KA, Silva-Santisteban A, Lescano AG. Self-reported HIV in Peruvian inmates: results of the 2016 prison census. PLoS. 2021.
- 2. Delahoy MJ, Hubbard S, Mattioli M, Culquichicon C, Knee J, Brown J, Cabrera L, Barr DB, Ryan PB, Lescano AG, Gilman RH, Levy K. Chemical and microbiological drinking water risks for infants in coastal Peru. American Journal of Tropical Medicine and Hygiene. 2021.
- 1. Valladares-Garrido M, Araujo-Chumacero M, Cordova-Augurto J, **Culquichicon C**. Associated factors with scientific publication during medical training: evidence from 40 medical schools surveyed in Latin America and the Caribbean. F1000R. 2021.

### CONFERENCE PRESENTA-TIONS/ABSTRACTS

11. **Culquichicon C**, Lescano AG. Post-traumatic stress disorder, food insecurity and social capital among mothers after the 2017 Coastal El Niño floods in Piura, Peru: a mixed method assessment. 2019-20 Seminar series of the Center for Global Safe WASH. Emory University; Atlanta, US. 2019.

- Culquichicon C, Lescano AG. Impacts on nutritional status of infants before, during, and after the 2017 El Niño events. Peruvian National Academy of Science. El Niño scientific meeting; Piura, Peru, 2018. (Oral presentation)
- 9. Lescano AG, Culquichicon C. Post-traumatic stress disorder, food insecurity and social capital among mothers after the 2017 Coastal El Niño floods in Piura, Peru: a mixed method assessment. Peruvian National Academy of Science. El Niño scientific meeting; Piura, Peru, 2018. (Oral presentation)
- 8. Delahoy MJ, Mattioli M, Knee J, Altherr F, Hodge R, Jaramillo-Ramírez MR, Zevallos-Concha A, D'Souza PE, Panuwet P, **Culquichicon C**, Cabrera L, Barr DB, Ryan PB, Lescano AG, Brown J, Gilman RH, Levy K. Chemical and Microbiological Contamination of Drinking Water in Peruvian Households with Infants. American Society of Tropical Medicine and Hygiene 67th Annual Meeting; New Orleans, US. 2018. (Poster presentation)
- 7. Vasquez-Mejia A, Arica-Gutierrez JA, Pozo EJ, Villegas-Tirado S, Melendez-Maron M, Culquichicon C, Lescano AG. Constant spatial patterns of high density Aedes aegypti eggs and their correlation with surrounding roofed area obtained from satellite images. American Society of Tropical Medicine and Hygiene 67th Annual Meeting; New Orleans, US. 2018. (Poster presentation)
- Soto-Becerra P, Pezo A, Culquichicon C, Rusu C, Saona-Ugarte P. Caregivers' barriers about Zika risks communication to fertile women and pregnant in Piura-Peru, 2017. 10th TEPHINET Regional Scientific Conference of the Americas. Cartagena, Colombia, May15-18, 2018. (oral presentation)
- 5. Cardona-Ospina JA, Martinez-Pulgarin DF, **Culquichicon C**, Rodriguez-Morales AJ. Role of tetracycline in dengue immunomodulation a systematic and meta-analysis of clinical trials on IL-6 and TNF. 18th International Congress of Infectious Diseases. Buenos Aires, Argentina, March 1-5, 2018. (Poster presentation)
- 4. Culquichicon C, Soto-Becerra P, Konda KA, Carcamo CC, Lescano AG. Self-reported tuber-culosis, sexually transmitted diseases and HIV prevalence rates among Peruvian inmates: results from the 2016 prison census. IEA 21st World Congress of Epidemiology. Saitama, Japan, August 19-22, 2017. (Oral Presentation)
- 3. Cardona-Ospina JA, Martínez-Pulgarín DF, Culquichicon C, Rodríguez-Morales AJ. Tetracycline and doxicycline treatment for arboviruses infection: A systematic review and metanalysis. International Meeting on Emerging Diseases and Surveillance. Vienna, Austria, November 4-7, 2016. (Poster Presentation)
- 2. Culquichicon C, Cardona-Ospina J, Patiño-Barbosa A, Rodriguez-Morales A. Bibliometric analysis of Oropouche research: impact on the surveillance of emerging arboviruses in Latin America. IV Latin American Congress of Travel Medicine (SLAMVI). Buenos Aires, Argentina, October 6-7, 2016. (Oral Presentation)
- 1. Culquichicon C, Cardona-Ospina J, Patiño-Barbosa A, Rodriguez-Morales A. Bibliometric analysis of Oropouche research: impact on the surveillance of emerging arboviruses in Latin America. XI Encuentro Nacional de Investigación en Enfermedades Infecciosas de la ACIN. Medellín, Colombia, Noviembre 17-19, 2016. (Poster Presentation)

### PART III: Research experience

CURRENT RESEARCH

# Peer PrEP Referral + HIV Self-test Delivery for PrEP Initiation in Kenya (Peer-PrEP trial)

Supervisor: Dr. Katrina F. Ortblad.

Methods and analysis: data wrangling of complex longitudinal queries, and data analysis of cluster longitudinal data.

# $Entomological\ impact\ of\ targeted\ indoor\ residual\ spraying\ on\ Aedes\ aegypti\ age\ structure\ and\ abundance$

Thesis advisors: Drs. Gonzalo Vazquez-Prokopec and Betz Halloran.

Design: designed an secondary entomological endpoint evaluation of a cluster-randomized efficacy trial.

Methods and analysis: formal analysis of cluster longitudinal data.

Implementation: conducted ovariole dissections using the Polovodova method for age grading of mosquito populations.

Prevalence of SARS-CoV-2 exposure in a pediatric cohort of unvaccinated children in Merida, Yucatán, México

Investigators: Kirsten OD, Culquichicon C, Earnest JT, Vazquez-Prokopec GM

Methods and analysis: formal analysis of multilevel modeling with mixed effects for categorical outcomes.

COMPLETED RESEARCH

Urban factors associated with high-constant Aedes aegypti density using remote sensing image classification 2019–21

Funded by: Call for research grants 2019, ULADECH – Universidad Católica Los Ángeles de Chimbote, Peru.

Investigators: Lescano AG, Culquichicon C, Pan W.

Total Budget: USD \$60,000

Design: designed an adult prospective cohort study to evaluate arboviral diseases incidence while integrating urban ecological measures with entomological indexes, grant writing of awarded proposal, protocol design and implementation.

Methods and analysis: conducted baseline analysis and remote sensing tools implementation including unsupervised classification of impervious surfaces of neighborhoods in Piura.

Implementation: supervise enrollment of participants, and human and entomological baseline evaluations.

Real-world effectiveness of hydroxychloroquine, azithromycin, and ivermectin among hospitalized COVID-19 patients: results of a target trial emulation using observational data from a nationwide healthcare system in Peru 2020

Investigators: Soto P, Culquichicon C, Hurtado Y, Araujo RV

Design: designed a retrospective cohort study using electronic clinical records, protocol design and implementation.

Methods and analysis: co-conducted the formal analysis using propensity score matching and doubly robust estimates for causal survival effects following Hernan's protocol for a target trial emulation.

Persistent post-traumatic stress disorder and resilience on people affected by the 2017 Coastal El Niño in Piura and Lima, Peru 2019–20

Funded by: GloCal fellowship, Global Health Institute – University of California. Investigators: Valladares-Garrido M, Culquichicon C, Grelotti D, Lescano AG.

Total Budget: USD \$15,000 Role: Co-investigator.

Skills learned:

Design: designed a longitudinal population survey protocol, grant writing of awarded proposal, and protocol write-up.

Methods and analysis: conducted formal analysis for multilevel modeling of static exposure using mixed effects models.

Melioidosis surveillance and laboratorial capacity building in Peru

2019-20

Funded by: Department of special pathogens, CDC - Centers for Disease Control and Prevention,  $_{\rm LIS}\Delta$ 

Investigators: Lescano AG, Culquichicon C, Gavilán RG.

Total Budget: USD \$25,000 (PO3122)

Role: Co-investigator.

Role: Co-investigator.

Design: designed an ecological, and active surveillance study, grant writing of awarded proposal, protocol design and implementation.

Methods and analysis: modeling of categorical outcomes in cross-sectional studies.

Implementation: supervise field operations of veterinarian and health teams.

Mental health disorders among front-line health personnel during COVID-19 emergency response in Piura and Lambayeque, 2020 2020

Funded by: Call for COVID-19 emergency research, IETSI – Instituto de Evaluación de Tecnologías Sanitarias e Investigación.

Investigators: Diaz C, Sanchez-Reto M, Valladares-Garrido MJ, **Culquichicon C**, Grelotti D. Total Budget: USD \$12,000 Role: Co-investigator.

Design: designed a longitudinal study, grant writing of awarded proposal, and protocol design.

Methods and analysis: conducted an interim longitudinal analysis of a time static exposure using multilevel mixed effect models.

Arboviral diseases seroprevalence among pregnants during El Niño events in Piura: a nested case control into El Niño cohort study

Funded by: Fogarty International Center, Global Infectious Diseases. Peru Infectious Diseases Epidemiology Research Training Consortium.

Investigators: Culquichicon C, Zapata-Castro LE, Neyra K, Lescano AG.

Total Budget: USD \$5,000

Role: Investigator.

Role: Investigator.

Design: designed a nested case control within El Niño cohort study and protocol implementation

Methods and analysis: longitudinal modeling of categorical outcomes with static exposure. Implementation: enrolled pregnant women into El Niño cohort study, collected blood samples, and surveyed for baseline evaluations.

Post-traumatic stress disorder, food insecurity, and social capital after the 2017 coastal El Niño flooding among mothers from Piura, Peru: a mixed method study 2017

Funded by: Fogarty International Center, Global Infectious Diseases. Peru Infectious Diseases Epidemiology Research Training Consortium.

Investigators: Culquichicon C, Gilman RH, Levy K, Lescano AG.

Total Budget: USD \$5,000

Design: designed a panel study and protocol implementation.

Methods and analysis: clustered analysis of continuous and categorical outcomes with bootstraping.

Implementation: conducted and supervised field operations for 3 years of the cohort study.

Before, during and after El Niño Phenomenon: an infant cohort study in northern Peru addressing impact on nutritional status

2015–20

Funded by: Fogarty International Center, Global Infectious Diseases. Peru Infectious Diseases Epidemiology Research Training Consortium.

Investigators: Gilman R, Lescano A, Miranda JJ, Gonzales R.

Total Budget: USD \$32,000 Role: Fellow and coordinator of Piura field operations.

Design: writing of amendments to the original protocol and their implementation.

Methods and analysis: longitudinal modeling of continuous and categorial outcomes with static exposure.

Implementation: conducted and supervised field operations for 3 years of the cohort study.

# Research training and outbreak assessment among primary-care physicians to improve Zika surveillance in two Peruvian endemic areas 2017

Funded by: Zika Preparedness and Response Field Epidemiology Projects, Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET).

Investigators: Maguiña JL, Munayco C, Culquichicon C, Lescano AG.

Total Budget: USD \$10,000 Role: Co-investigator.

Implementation: delivered a module of epidemiological research concepts .

Enhancing guidelines and educational tools for health caregivers during the age of Zika 2017 Funded by: Zika Preparedness and Response Field Epidemiology Projects, Training Programs in Epidemiology and Public Health Interventions Network (TEPHINET).

Investigators: Soto-Becerra P, Rusu C, Culquichicón C, Lescano AG.

Total Budget: USD \$10,000 Role: Co-investigator.

Implementation: surveyed primary care health personnel and conducted in-depth interviews.

Post-traumatic stress disorder, infectious diseases and social capital level on farmworkers affected by the Hurricane Florence: a cross-sectional study in the Robeson County, North Carolina 2018 Funded by: Hurricane Florence – A Special Call for Quick Response Grant Proposals, Natural Hazards Center, University of Colorado Boulder.

Investigators: Arcury T, Sanders J, Culquichicon C, Mora D, Flores EC, Ferradas C, Lescano  $\Lambda C$ 

Total Budget: USD \$5,000 Role: Co-investigator.

Design: designed a cross-sectional population-based study, writing of awarded proposal, protocol design.

Methods and analysis: conducted formal modeling of continuous, and categorical with interaction assessment.

Consulting		
CONSCETING	2018	Case report of the current dengue surveillance system in Peru. Merck & Co.
	2018	Internal validity and sensitivity analysis of the Peruvian Nutrition Surveillance System, Peruvian National Institute of Health.
	2018	Epidemiological surveillance on public health course. Peruvian Ministry of Health.
	2018	Evaluation and monitoring of health interventions course. Peruvian Ministry of Health.
	2017-18	Systematic review on multi-sectoral approaches for prevention and control of vector-borne diseases. Pan American Health Organization in Peru.
SERVICE	0000	
	2020	Member of review board, Kaelin Prize for Epidemiological Research, Peruvian Social Health Security, Peru.
	2017-20	Member of advisory board, Scientific Society of Medical Students at UNP (SOCIEM-
	2011-20	UNP).
	2017	Member of organization board, VII Latin American Conference of American Society of
		Tropical Medicine and Hygiene.
	2016	Member of Institutional Review Board, Santa Rosa General Hospital, Piura, Peru.
Short		
COURSES	2021	E-values, Unmeasured Confounding, Measurement Error, and Selection
AND		Bias. Society for Epidemiological Research (SER), USA.
WORKSHOPS	2021	Introduction to parametric and semi-parametric estimators for causal in-
	2021	ference. SER, USA.
	2021 $2021$	Causal Mediation: Modern Methods for Path Analysis. SER, USA.  Causal inference for multiple time-point (longitudinal) exposures. SER, USA.
	2021	An introduction to directed acyclic graphs. SER, USA.
	2021	Confounding control for estimating causal effects. SER, USA.
	2021	Causal inference module, Summer Institute in Statistics and Modeling in Infectious
		Diseases (SISMID), University of Washington (UW), USA.
	2021	Spatial Statistics in Epidemiology, SISMID-UW, USA.
	2020	Statistics and Modeling with Novel Data Streams, SISMID-UW, USA.
	2020	Infectious Diseases, Immunology and Within-Host Models, SISMID-UW, USA.
	2020	Simulation-based Inference for Epidemiological Dynamics, SISMID-UW, USA.
	2020	Time series analysis for biomedical outcomes using R, Summer School of Public Health, Universidad de Chile, Chile.
	2020	Introduction to Bayesian analysis with health outcomes, Summer School of Public Health, Universidad de Chile, Chile.
	2019	Statistical analysis with missing data using multiple imputation, University
	2019	College London and Cayetano Heredia University, Peru.  Introduction to machine learning applied in health sciences, XX Summer School of
	2019	Public Health, Universidad de Chile, Chile.
	2019	Clinical trials design, XX Summer School of Public Health, Universidad de Chile, Chile.
	2019	Impact evaluation with quasi-experimental designs, XX Summer School of Pub-
	0010	lic Health, Universidad de Chile, Chile.
	2019	Introduction to Causal Inference, XX Summer School of Public Health, Universidad de Chile, Chile.
	2018	An introduction to causal inference, Universidad San Ignacio de Loyola, Peru.
	2018	Global Burden of Disease, University of Washington and Cayetano Heredia University, Peru.
	2018	Audited the Master's in Epidemiology, Cayetano Heredia University.
	2017	Network Meta-analysis and indirect comparisons workshop, Cochrane Network and Center of Excellence CIGES, Chile.
	2017	XII Field Epidemiology Course, Cayetano Heredia University, Peru.
	2017	International Course on Outbreak Investigation, Cayetano Heredia University.
	PART IV	: Teaching and editorial experience
Teaching	2022	Teaching assistant, EPI 504D "Fundamentals of Epidemiology", Emory University, USA.
	2021	Teaching assistant, EPI 536 "Applied data analysis", Emory University, USA.
	2021	Teaching assistant, EH 593R "Data analysis in environmental health", Emory University, USA.
	2018-19	Field instructor, Field Epidemiology course, Cayetano Heredia University, Peru.
	2018-19	Teaching assistant, Epidemiological Applications course, Masters and Doctoral Pro-
		gram in Epidemiological Research, Cayetano Heredia University, Peru.

2017-18 Lecturer, Epidemiologic concepts course, School of Health Sciences, National University

of Piura, Piura, Peru.

2016-17 Teaching assistant, Scientia Clinical and Epidemiological Research Institute Training

Program.

Peer

REVIEWER Publons Profile: https://publons.com/author/805745/carlos-culquichicon#profile

Journals: Annals of Clinical Microbiology and Antimicrobials, Cureus, International Archives of Medicine, Oncotarget, Revista de la Facultad de Medicina, Travel Medicine and Infectious Disease, Pan American Journal of Public Health, F1000Research, Journal of Medical Virology, Peruvian Journal of Experimental Medicine and Public Health, PeerJ.

#### PART V: References

References

Dr. Katrina F. Ortblad

Assistant professor

Public Health Sciences Division

Fred Hutchinson Cancer Research Center, USA.

E-mail: kortblad@fredhutch.org

Tel: +1 (206) 520-3800

Dr. Gonzalo Vazquez-Prokopec

Associate professor

Department of Environmental Sciences

Emory University, USA. E-mail: gmvazqu@emory.edu

Tel: +1 (404) 727-4217

Dr. Karen Levy

Associate professor

Department of Environmental and Occupational Health Sciences

University of Washington, USA.

E-mail: klevyx@uw.edu Tel: +1 (206) 543-4341

Dr. Andres G. Lescano

Associate professor

School of Public Health and Administration

Cayetano Heredia University, Peru. E-mail: andres.lescano.g@upch.pe

Tel: +51 947-619-799

Dr. Kyle Steenland

Professor

Gangarosa Department of Environmental Health

Emory University, USA. E-mail: nsteenl@emory.edu Tel: +1 (404) 712-8277

Dr. William Pan

Associate professor

Duke Global Health Institute

Duke University, USA.

E-mail: william.pan@duke.edu

Tel: +1 (919) 684-4108

Dr. Jay S. Kaufman

Professor

Department of Epidemiology, Biostatistics, and Occupational Health

McGill University, Canada. E-mail: jay.kaufman@mcgill.ca

Tel: +1 (514) 398-7341