Fernando Alarid-Escudero

Assistant Professor
Department of Health Policy
Stanford University School of Medicine

117 Encina Commons, Room 117
Stanford, CA 94305
GitHub: feralaes
Google Scholar

Email: fernando.alarid@stanford.edu
ORCiD: 0000-0001-5076-1172
Scopus Author ID: 55821436300
ResarcherID: D-7418-2018

Employment

2022 -	*Assistant Professor*	Department of Health Policy Stanford University School of Medicine Stanford, CA, U.S.
2020 - 2022	*Assistant Professor*	Division of Public Administration Center for Research and Teaching in Economics (CIDE) Aguascalientes, Mexico
2018 - 2020	*Assistant Professor*	Drug Policy Program Center for Research and Teaching in Economics (CIDE) Aguascalientes, Mexico
2017 - 2018	*Post-Doctoral Associate*	Divisions of Health Policy & Management and Epidemiology University of Minnesota School of Public Health Minneapolis, MN, U.S.

Education

2017 *PhD, Health Services Research, Policy & Administration* — University of Minnesota School of Public Health
Area of Emphasis: Health Decision Sciences
Advisors: Karen M. Kuntz, ScD and Eva Enns, PhD
Thesis: Statistical and mathematical modeling to evaluate the cost-effectiveness of *Helicobacter pylori* screening and treatment strategies in Mexico in the setting of antibiotic resistance

2009 *MS, Economics* — Center for Research and Teaching in Economics (CIDE)

2006 *BS, Biomedical Engineering* — Universidad Autónoma Metropolitana, Iztapalapa (UAM-I)

Leadership Roles

2023- Co-Director, Stanford Data Science x Decision Science $[DS)^2$ Research Hub

2020- Co-Director, Stanford-CIDE Coronavirus Simulation Model (SC-COSMO) Research Group

2020- Director, Proyecto de Análisis de Decisiones en Contextos Inciertos (PADeCI)

2018- Co-founding member, Collaborative Network for Value of Information (ConVOI)

2015- Co-Director and co-founding member, Decision Analysis in R for Technologies in Health (DARTH)

Awards and Honors

2023 Best poster presentation from a junior investigator at the CISNET annual meeting

2023 Visiting Research Fellow. Centre for Health Economics, University of York

2022 Mexican National System of Researchers (SNI) Level II. Mexico's National Council of Science and Technology (CONACyT)

2021 Editorial Board of the Medical Decision Making (MDM) journals (Medical Decision Making and MDM Policy & Practice)

2020 Society for Medical Decision Making (SMDM) COVID-19 Decision Modeling Initiative (CDMI) Leader

2020 Top-Ranked Abstract, Society for Medical Decision Making's 2020 Annual Meeting

2019 Mexican National System of Researchers (SNI) Level I. Mexico's National Council of Science and Technology (CONACyT)

2019 Best short course at the 2018 SMDM North American Meeting for the short course titled "Hands-on Model Calibration in R"

2018 Catedrático CONACyT

2018 Elected as a Trustee of the Society for Medical Decision Making

2017 Top-Ranked Abstract, Society for Medical Decision Making's 2017 Annual Meeting

2017 Delta Omega Honorary Society in Public Health, Pi Chapter

2016 University of Minnesota Doctoral Dissertation Fellowship

2016 SMDM Lee B. Lusted Student Prize for Outstanding Student Research (Europe)

2016 University of Minnesota Best Presentation at School of Public Health's Research Day

2015 SMDM Lee B. Lusted Student Prize in Quantitative Methods and Theoretical Developments

2014 SMDM Lee B. Lusted Student Prize in Quantitative Methods and Theoretical Developments

2014 18th Minnesota Health Services Research Conference Second Place Student Paper Competition

2012 Mexico's CONACyT Doctoral Fellowship

2012 Fulbright-Garcia Robles Doctoral Fellowship

2012 University of Minnesota School of Public Health Doctoral Dean's Scholarship

2007 Mexico's CONACyT Graduate Fellowship for Masters Studies

Funding

- *Principal Investigator*, "Feasibility Study of a Country-Wide Colorectal Cancer Screening Program in Chile", Memorial Sloan Kettering Cancer Center (National Cancer Institute prime) CISNET JUICE grant as part of U01CA253913, 09/2022–08/2023.
- *Principal Investigator*, "An efficient nonparametric sampling of time to event for individual-level models", Brown University (National Cancer Institute prime) CISNET JUICE grant as part of U01CA265750, 09/2022–08/2023.
- *Investigator*, "Comparative modeling of gastric cancer disparities and prevention in the US and globally" (with Chin Hur, PI), Columbia University Medical Center (National Cancer Institute prime) U01CA265729, 09/2021–08/2026.
- *Investigator*, "Population Modeling of Bladder Cancer Detection and Control" (with Thomas Trikalinos, PI), Brown University School of Public Health (National Cancer Institute prime) U01CA265750, 09/2021–08/2026.
- *Subcontract Principal Investigator*, "Comparative Modeling of Effective Policies for Colorectal Cancer Control"' (with Ann Zauber, PI), Memorial Sloan-Kettering Cancer Center (National Cancer Institute prime) U01CA253913, 09/2020–08/2025.
- *Investigator*, "Comparative Modeling to Inform Cervical Cancer Control Policies" (with Jane Kim, PI), Harvard T.H. Chan School of Public Health (National Cancer Institute prime) U01CA253912, 09/2020–08/2025.

- *Subcontract Principal Investigator*, "Microsimulation Modeling to Compare the Effectiveness and Cost-Effectiveness of Nondrug Interventions to Manage Clinical Symptoms in Racially/Ethnically Diverse Persons with Dementia" (with Eric Jutkowitz, PI), National Institute On Aging of the National Institutes of Health R01AG060871, 07/2019–05/2023.
- *Co-Principal Investigator*, "Promoting better public policies on security and risk reduction for the imprisoned population in the context of COVID-19", Open Society Foundation (OSF) through the Drug Policy Program, CIDE, 10/2020–09/2021.
- *Principal Investigator*, "Establishing a dynamic decision-making system in real-time on the COVID-19 pandemic in Mexico City", awarded by the Society for Medical Decision Making (SMDM) COVID-19 Decision Modeling Initiative (CDMI), 08/2020–11/2020.
- *Principal Investigator*, "Establishing a dynamic decision-making system in real-time on the COVID-19 pandemic in Mexico and Latin America", Open Society Foundations (OSF), 04/2020–03/2021.
- *Principal Investigator*, "Expanding Stanford-CIDE COSMO Modeling Framework and Methodologies for COVID-19 Epidemic Modeling across Diverse Geographies and Populations", Stanford University, 04/2020–09/2021.
- *Principal Investigator*, "Proposal to establish a dynamic real-time decision-making system on the COVID19 pandemic in the state of Hidalgo, Model SC-COSMO", Secretary of Health of the Government of the State of Hidalgo, 04/2020–07/2020.
- *Co-Principal Investigator*, "Structural changes in the dynamics of lethal violence in Mexico over time", Drug Policy Program, 02/2020–01/2021.
- *Investigator*, "Improve CISNET Model Transparency and Accessibility" (Administrative Supplements to Existing NIH Grants and Cooperative Agreements, Parent Admin Supp – Clinical Trial Optional, with Chin Hur, PI), Columbia University (National Cancer Institute prime) PA-18-591 (supplement to U01CA199336-05), 08/2019–07/2020.
- *Investigator*, "Comparative Modeling of Colorectal Cancer: Informing Health Policies and Prioritizing Future Research"' (with Ann Zauber, PI), Memorial Sloan-Kettering Cancer Center (National Cancer Institute prime) U01CA199335, 09/2015–08/2020.
- *Investigator*, "Comparative Modeling to Inform Cervical Cancer Control Policies" (with Jane Kim, PI), Harvard T.H. Chan School of Public Health (National Cancer Institute prime) U01CA199334, 09/2015–08/2020.
- *Co-Investigator*, "Cost-effectiveness analysis of antiretroviral treatment initiation strategies in the presence of efavirenz resistance in HIV-positive individuals in Mexico" (with Eva Enns, PI), Center for Global Health and Social Responsibility, University of Minnesota, 08/2018–07/2019.
- *Co-Investigator*, "Cost-effectiveness analysis of UNEMES-EC model for multidisciplinary care of patients with diabetes mellitus type 2 (DM2)" (with Sandra G. Sosa Rubí, PI), CONACYT, 05/2017–02/2020.
- *Co-Principal Investigator*, "Cost-effectiveness of midwife-led care for low-risk pregnancies," (with Katy B. Kozhimannil, PhD, Co-PI), California Health Care Foundation. 12/2017–12/2018.
- *Principal Investigator*, "Extend HEEMOD to Encompass Value-Based Price (VBP) & Value of Information (VOI) Analyses," Policy Analysis, Inc. 09/2017–12/2017.
- *Principal Investigator*, "Cost-effectiveness of *H. pylori* screen-and-treat strategies for preventing gastric cancer and ulcers in Mexico," Doctoral Dissertation Fellowship, University of Minnesota. 09/2016–05/2017.

Peer-Reviewed Publications

*Denotes corresponding author, †denotes equal contribution, ‡denotes student or trainee author.

1. Zhao R, Sanstead E, **Alarid-Escudero F**, Huchko M, Silverberg M, Smith-McCune K, Gregorich SE, Leyden W, Kupperman M, Sawaya GF, Kulasingam S. Primary HPV screening compared with other cervical cancer screening strategies in women with HIV: A cost-effectiveness study. *AIDS*, 2024; In press.
2. McMahon M, Taylor C, Ward ZJ, **Alarid-Escudero F**, Camargo CM, Laszkowska N, Roa J, Yeh JM. *Helicobacter pylori* infection in the United States beyond NHANES: A scoping review of seroprevalence estimates by racial and ethnic groups. *The Lancet Regional Health - Americas*, 2024; In press.
3. Taylor C, McMahon M, Ward ZJ, **Alarid-Escudero F**, Camargo CM, Roa J, Yeh J. Birth cohort and age-specific trends in global *Helicobacter pylori* seroprevalence: a scoping review. *The Lancet Regional Health - Americas*, 2024; Online first.
4. Galárraga O, Chivardi C, Gras-Allain N, **Alarid-Escudero F**, Gandhi M, Mayer KH, Operario D. Incentivizing adherence to pre-exposure prophylaxis for HIV prevention: a randomized pilot trial among male sex workers in Mexico. *The European Journal of Health Economics*, 2024; Online First.
5. Pineda-Antunez C‡, Seguin C, van Duuren L, Knudsen AB, Davidi B, Nascimento de Lima P, Rutter C, Kuntz KM, Lansdorp-Vogelaar I, Collier N, Ozik J, **Alarid-Escudero F***. Emulator-based Bayesian calibration of the CISNET colorectal cancer models. *Medical Decision Making*, 2024;44(5):543-553.
6. Nascimento de Lima P, van den Puttelaar R, Knudsen AB, Hahn AI, Kuntz KM, Ozik J, Collier N, **Alarid-Escudero F**, Zauber AG, Inadomi JM, Lansdorp Vogelaar I, Rutter CM. Characteristics of a cost-effective blood test for colorectal cancer screening. *Journal of the National Cancer Institute*, 2024; Online First.
7. van den Puttelaar R, Nascimento de Lima P, Knudsen AB, Rutter CM, Kuntz KM, de Jonge L, **Alarid-Escudero F**, Lieberman D, Zauber AG, Hahn AI, Inadomi JM, Lansdorp Vogelaar I. Effectiveness and Cost-Effectiveness of Colorectal Cancer Screening With a Blood Test That Meets the Centers for Medicare & Medicaid Services Coverage Decision. *Gastroenterology*, 2024;167(2):368-377.
8. Arrospide A, Ibarrondo A, Blasco-Aguado R, Larrañaga I, **Alarid-Escudero F**, Mar J. Using age-specific rates for parametric survival function estimation in simulation models. *Medical Decision Making*, 2024;44(4):359-364.
9. **Alarid-Escudero F***, Andrews J, Goldhaber-Fiebert JD. Effects of Mitigation and Control Policies in Realistic Epidemic Models Accounting for Household Transmission Dynamics. *Medical Decision Making*, 2024;44(1):5-17.
10. Sereda Y, **Alarid-Escudero F**, Bickell NA, Chang SH, Colditz GA, Hur C, Jalal H, Myers ER, Layne TM, Wang SY, Yeh JM, Trikalinos TA. Approaches to developing de novo cancer population models to examine questions about cancer and race in bladder, gastric, and endometrial cancer and multiple myeloma: the Cancer Intervention and Surveillance Modeling Network incubator program. *Journal of the National Cancer Institute Monographs*, 2023;2023(62):219-230.
11. van den Berg DMN, Nascimento de Lima P, Knudsen AB, Rutter CM, Weinberg D, Lansdorp Vogelaar I, Zauber AG, Hahn AI, **Alarid-Escudero F**, Maerzluft CE, Katsara A, Kuntz KM, Inadomi JM, Collier N, Ozik J, van Duuren LA, van den Puttelaar R, Harlass M, Seguin CL, Davidi B, Pineda-Antunez C, Feuer EJ, de Jonge L. NordICC trial results in line with expected colorectal cancer mortality reduction after colonoscopy: A modeling study. *Gastroenterology*, 2023;165(4):1077-1079.e2.
12. Peña-Ruiz S‡, Unar-Munguía M, Colchero A, **Alarid-Escudero F**, Pérez-Escamilla R. Breastfeeding is associated with the intelligence of school-age children in Mexico. *Maternal & Child Nutrition*, 2023;19(4):e13534.

13. Jutkowitz E, Pizzi LT, Shewmaker P, **Alarid-Escudero F**, Epstein-Lubow G, Prioli KM, Gaugler JE, Gitlin LN. Cost-Effectiveness Of Non-Drug Interventions That Reduce Nursing Home Admissions For People Living With Dementia. *Alzheimer's & Dementia: The Journal of the Alzheimer's Association*, 2023;19(9): 3867-3893.
14. **Alarid-Escudero F**[*], Krijkamp EM[‡], Enns EA, Yang A, Hunink MGM, Pechlivanoglou P, Jalal H. A Tutorial on Time-Dependent Cohort State-Transition Models in R using a Cost-Effectiveness Analysis Example.*Medical Decision Making*, 2023;43(1):21-41. Download R code from: https://github.com/DARTH-git/cohort-modeling-tutorial-timedep.
15. **Alarid-Escudero F**[*], Krijkamp EM[‡], Enns EA, Yang A, Hunink MGM, Pechlivanoglou P, Jalal H. An Introductory Tutorial on Cohort State-Transition Models in R Using a Cost-Effectiveness Analysis. *Medical Decision Making*, 2023;43(1):3-20. Download R code from: https://github.com/DARTH-git/cohort-modeling-tutorial-intro
16. Weyant C[‡], Lee S, Chin E, **Alarid-Escudero F**, Goldhaber-Fiebert JD. The Dynamics of Respiratory Infectious Diseases in Incarcerated and Free-Living Populations: A Simulation Modeling Study. *Medical Decision Making*, 2022;43(1):42-52.
17. **Alarid-Escudero F**[*], Knudsen AB, Ozik J, Collier N, Kuntz KM. Characterization and valuation of the uncertainty of calibrated parameters in microsimulation decision models. *Frontiers in Physiology (Computational Physiology and Medicine)*, 2022;13(780917):1-12.
18. Wolff HB[‡], Qendri V, Kunst N, **Alarid-Escudero F**, Coupé VMH. Methods for communicating the impact of parameter uncertainty in a multiple strategies cost-effectiveness comparison. *Medical Decision Making*, 2022;42(7):956-968.
19. **Alarid-Escudero F**[*], Schrag D, Kuntz KM. CDX2 biomarker testing and adjuvant therapy for stage II colon cancer: An exploratory cost-effectiveness analysis. *Value in Health*, 2022;25(3):409-418. Download accompanying `cdx2cea` R package here. Accompanying editorial can be accessed here.
20. Chin ET[‡], Leidner D, Zhang Y, Long E, Prince L, Schrag SJ, Verani JR, Wiegand RE, **Alarid-Escudero F**, Goldhaber-Fiebert JD, Studdert DM, Andrews JR, Salomon JA,. Effectiveness of Coronavirus Disease 2019 (COVID-19) Vaccines Among Incarcerated People in California State Prisons: Retrospective Cohort Study *Clinical Infectious Diseases*, 2022;75(1):e838-e845.
21. Kuntz KM, **Alarid-Escudero F**, Swiontkowski M, Skaar DD. Prioritizing research informing antibiotic prophylaxis guidelines for knee arthroplasty patients. *JDR Clinical & Translational Research*, 2022;7(3):298-306.
22. **Alarid-Escudero F**[*], Gracia V[‡], Luviano A[‡], Roa J[‡], Peralta Y, Reitsma MB, Claypool AL, Salomon JA, Studdert DM, Andrews, JR, Goldhaber-Fiebert JD, SC-COSMO Modeling Consortium. Dependence of Covid-19 policies on end-of-year holiday contacts in Mexico City Metropolitan Area: A Modeling Study. *Medical Decision Making Policy & Practice*, 2021;6(2):1-14. Download accompanying `sccosmomcma` R package here.
23. Lopez Mendez M[‡], Ospina Escobar AM, Iskandar R, **Alarid-Escudero F**[*]. Age-Specific Rates of Onset of Cannabis Use in Mexico. *Addictive Behaviors*, 2021;122(107038):1-8. Access preprint
24. Ryckman T[‡], Chin ET[‡], Prince L, Leidner D, Long E, Studdert DM, Salomon JA, **Alarid-Escudero F**, Andrews, JR, Goldhaber-Fiebert JD. Outbreaks of COVID-19 Variants in U.S. Prisons: A Mathematical Modeling Analysis of Vaccination and Re-Opening Policies. *The Lancet Public Health*, 2021;6(10):e760-e770 (Online First). See accompanying comment.
25. Chin ET[‡], Leidner D, Ryckman T[‡], Liu Y, Prince L, **Alarid-Escudero F**, Andrews JR, Salomon JA, Goldhaber-Fiebert JD, Studdert DM. Covid-19 Vaccine Acceptance in California State Prisons. *New England Journal of Medicine*, 2021;385(4):374-376.
26. Caro-Vega Y, **Alarid-Escudero F**, Enns EA, Sosa-Rubí SG, Chivardi C, Piñeirúa-Menendez A, García-Morales C, Reyes-Terán G, Sierra-Madero JG, Ávila-Ríos S. Retention in Care, Mortality, Loss-to-Follow-Up, and Viral Suppression among Antiretroviral Treatment-Naïve and Experienced Persons Participating in a Nationally Representative HIV Pre-Treatment Drug Resistance Survey in Mexico. *Pathogens*, 2021; 10(12):1569.

27. Chin ET[‡], Ryckman T[‡], Prince L, Leidner D, **Alarid-Escudero F**, Andrews, JR, Salomon JA, Studdert DM, Goldhaber-Fiebert JD. COVID-19 in the California State Prison System: an Observational Study of Decarceration, Ongoing Risks, and Risk Factors. *Journal of General Internal Medicine*, 2021;36(10): 3096–3102.

28. Jalal H, Trikalinos T, **Alarid-Escudero F**. BayCANN: Streamlining Bayesian Calibration with Artificial Neural Network Metamodeling. *Frontiers in Physiology (Computational Physiology and Medicine)*, 2021;12(66231):1-13.

29. Lansdorp-Vogelaar I, Meester RGS, Laszkowskab M, **Alarid-Escudero F**, Ward Z, Yeh J. Cost-effectiveness of prevention and early detection of gastric cancer in western countries. *Best Practice & Research Clinical Gastroenterology*, 2021;50–51(101735):1-8.

30. Peterse EFP, Meester RGS, Jonge LDe, Omidvari A-H, **Alarid-Escudero F**, Knudsen AB, Zauber AG, Lansdorp-Vogelaar I. Comparing the cost-effectiveness of innovative colorectal cancer screening tests. *Journal of the National Cancer Institute*, 2021;113(2):154-161.

31. Fung H, Martinez L, **Alarid-Escudero F**, Salomon JA, Studdert DM, Andrews JA, Goldhaber-Fiebert JD, SC-COSMO Modeling Group. The household secondary attack rate of SARS-CoV-2: A rapid review. *Clinical Infectious Diseases*, 2021;73(S2):S138-S145.

32. **Alarid-Escudero F**[*], Kuntz KM. Potential bias associated with modeling the effectiveness of healthcare interventions in reducing mortality using an overall hazard ratio. *PharmacoEconomics*, 2020; 38(3):285-296. Download accompanying `dshr` R package here.

33. Kunst NR, **Alarid-Escudero F**, Aas E, Coupé VMH, Schrag D, Kuntz KM. Estimating population-based recurrence rates of colorectal cancer over time in the United States. *Cancer Epidemiology, Biomarkers & Prevention*, 2020;29(12):2710-2718.

34. Huang RJ, Koh H, Hwang JH, Abnet CC, **Alarid-Escudero F**, Amieva MR, Bruce MG, Camargo MC, Chan AT, Choi IJ, Corvalan A, Davis JL, Deapen D, Epplein M, Greenwald DA, Hamashima C, Hur C, Inadomi JM, Ji HP, Jung HY, Lee E, Lin B, Palaniappan LP, Parsonnet J, Peek RM, Piazuelo MB, Rabkin CS, Shah SC, Smith A, So S, Stoffel EM, Umar A, Wilson KT, Woo Y, Yeoh K. A Summary of the 2020 Gastric Cancer Summit at Stanford University. *Gastroenterology*, 2020;159(4):1221-1226.

35. Sosa-Rubí, S., Contreras-Loya, D., Pedraza-Arizmendi, D., Chivardi-Moreno, C., **Alarid-Escudero, F.**, López-Ridaura, R., Serván-Mori, E., Molina-Cuevas, V., Casales, G., Espinos-López, C., González-Roldán, J. F., Silva-Tinoco, R., Seiglie, J., & Gómez-Dantés, O. (2020). Cost-effectiveness analysis of a multidisciplinary health-care model for patients with type-2 diabetes implemented in the public sector in Mexico: A quasi-experimental, retrospective evaluation. *Diabetes Research and Clinical Practice*, 2020;167(108336):1-8.

36. Krijkamp E[†], **Alarid-Escudero F**[†*], Enns EA, Pechlivanoglou P, Hunink MGM, Yang A, Jalal H. A Multidimensional Array Representation of State-transition Model Dynamics *Medical Decision Making*, 2020;40(2):242-248. The accompanying R code can be downloaded here.

37. Holt HK, Kulasingam S, Sanstead EC, **Alarid-Escudero F**, Smith-McCune K, Gregorich SE, Silverberg M, Huchko MJ, Kuppermann M, Sawaya G Discussing Cervical Cancer Screening Options: Outcomes to Guide Conversations Between Patients and Providers. *Medical Decision Making Policy & Practice*, 2020;5(2):1-7.

38. Kunst NR, Wilson E, Glynn D, **Alarid-Escudero F**, Baio G, Brennan A, Fairley M, Goldhaber-Fiebert JD, Jackson C, Jalal H, Menzies N, Strong M, Thom H, Heath A, on behalf of theCollaborative Network for Value of Information (ConVOI). Computing the Expected Value of Sample Information Efficiently: Practical Guidance and Recommendations for Four Model-Based Methods. *Value in Health*, 2020;23(6):734-742. Access preprint

39. Heath A, Kunst NR, Jackson C, Strong M, **Alarid-Escudero F**, Goldhaber-Fiebert JD, Baio G, Menzies N, Jalal H. Calculating the Expected Value of Sample Information in Practice: Considerations from Three Case Studies. *Medical Decision Making*, 2020;40(3):314-326. Access preprint

40. Burger EA, de Kok IMCM, Groene E, Killen J, Canfell C, Kulasingam S, Kuntz KM, Matthijsse S, Regan C, Simms K, Sy S, **Alarid-Escudero F**, Vaidyanathan V, van Ballegooijen M, Kim JJ. Estimating the Natural History of Cervical Carcinogenesis Using Simulation Models: A CISNET Comparative Analysis. *JNCI Journal of the National Cancer Institute*, 2020;112(9):955-963.

41. Attanasio LB, **Alarid-Escudero F**, Kozhimannil KB. Midwife-led care and obstetrician-led care for low-risk pregnancies: A cost comparison *Birth*, 2020;47(1):57-66.

42. **Alarid-Escudero F***, Krijkamp E, Pechlivanoglou P, Jalal H, Kao SY, Yang A, Enns EA. A need for change! A coding framework for improving transparency in decision modeling. *PharmacoEconomics*, 2019;37(11):1329-1339. The coding template is implemented in the R package `darthpack`. PubMed version

43. **Alarid-Escudero F***, Enns EA, Kuntz KM, Michaud TL, Jalal H. "Time Traveling Is Just Too Dangerous" But Some Methods Are Worth Revisiting: The Advantages of Expected Loss Curves Over Cost-Effectiveness Acceptability Curves and Frontier. *Value in Health*, 2019;22(5):611-618. Use these methods with the R package dampack.

44. Sawaya G, Sanstead E, **Alarid-Escudero F**, Smith-McCune K, Gregorich SE, Silverberg M, Leyden W, Huchko MJ, Kuppermann M, Kulasingam S Estimated Quality of Life and Economic Outcomes Associated With 12 Cervical Cancer Screening Strategies: A Cost-effectiveness Analysis. *JAMA Internal Medicine*, 2019;179(7):867-878.

45. Kunst N, **Alarid-Escudero F**, Paltiel D, Wang SY. A value of information analysis of research on the 21-gene assay for breast cancer management. *Value in Health*, 2019;22(10):1102-1110.

46. Jutkowitz E, **Alarid-Escudero F***, Kuntz KM, Jalal H. The Curve of Optimal Sample Size (COSS): a Graphical Representation of the Optimal Sample Size from a Value of Information Analysis. *PharmacoEconomics*, 2019;37(7):871-877. Download code here.

47. Sathianathen NJ, **Alarid-Escudero F**, Kuntz KM, Lawrentschuk NL, Bolton DM, Murphy DG, Kim SP, Konety BR. A Cost-effectiveness Analysis of Systemic Therapy for Metastatic Hormone-sensitive Prostate Cancer. *European Urology Oncology*, 2019;2(6):649-755. Download code here.

48. Sathianathen NJ, Konety BR, **Alarid-Escudero F**, Lawrentschuk NL, Bolton DM, Murphy DG, Weight CJ, Kuntz KM. Cost-effectiveness Analysis of Active Surveillance Strategies for Men with Low-risk Prostate Cancer. *European Urology*, 2019;75(6):910-917.

49. **Alarid-Escudero F***, MacLehose RF, Peralta Y, Kuntz KM, Enns EA. Non-identifiability in model calibration and implications to medical decision making. *Medical Decision Making*, 2018;38(7):810-21.

50. Easterly CA‡, **Alarid-Escudero F***, Enns EA, Kulasingam S. Revisiting Assumptions about Age-Based Mixing Representations in Mathematical Models of Sexually Transmitted Infections. *Vaccine*, 2018;36(37):5572-5579. Download code here.

51. **Alarid-Escudero F***, Enns EA, MacLehose R, Parsonnet J, Torres J, Kuntz KM. Force of infection of *H. pylori* in Mexico: Evidence from a national survey using a hierarchical Bayesian model. *Epidemiology and Infection*, 2018;146(8):961-9.

52. Sathianathen NJ, Kuntz KM, **Alarid-Escudero F**, Lawrentschuk NL, Bolton DM, Murphy DG, Weight CJ, Konety BR. Incorporating biomarkers into the primary prostate biopsy setting: a cost-effectiveness analysis. *The Journal of Urology*, 2018;200(6):1215-1220.

53. Krijkamp EM, **Alarid-Escudero F**, Enns EA, Jalal H, Hunink MGM, Pechlivanoglou P. Microsimulation modeling for health decision sciences using R: A tutorial. *Medical Decision Making*, 2018;38(3):400-422. Download code here.

54. Jalal H, **Alarid-Escudero F**. A Gaussian Approximation Approach for Value of Information Analysis. *Medical Decision Making*, 2018;38(2):174-188. Download code here.

55. Jutkowitz E, **Alarid-Escudero F**, Choi HK, Kuntz KM, Jalal H. Prioritizing Future Research on Allopurinol and Febuxostat for the Management of Gout: Value of Information Analysis. *PharmacoEconomics*, 2017;35(10):1073-1085.

56. **Alarid-Escudero F***, Blaes A, Kuntz KM. Trade-offs between efficacy and cardiac toxicity of adjuvant chemotherapy in early-stage breast cancer patients: Do competing risks matter? *The Breast Journal*, 2017;23(4):401-9.
57. Jalal H, Pechlivanoglou P, Krijkamp E, **Alarid-Escudero F**, Enns EA, Hunink, MGM. An Overview of R in Health Decision Sciences. *Medical Decision Making*, 2017;37(7):735-746.
58. Drake C, Higuera L, **Alarid-Escudero F**, Feldman R. A kinked health insurance market: Employer-sponsored insurance under the Cadillac tax. *American Journal of Health Economics*, 2017;3(4):455-76. Available at SSRN: https://ssrn.com/abstract=2925303
59. Kozhimannil KB, Hardeman RR, **Alarid-Escudero F**, Vogelsang C, Blauer-Peterson C, Howell EA. Modeling the cost-effectiveness of doula care for reducing preterm birth and cesarean delivery. *Birth*. 2016;43(1):20-27.
60. **Alarid-Escudero F**, Sosa-Rubí SG, Fernández B, Galárraga O. Cost-benefit analysis: HIV/AIDS prevention in migrants in Central America. *Salud Pública de México*. 2013;55(S1):S23-30.
61. **Alarid-Escudero F***, Solís-Escalante T., Melgar E., Valdés-Cristerna R., Yánez-Suárez O. Registro de seńales de EEG para aplicaciones de interfaz cerebro computadora (ICC) basado en Potenciales Evocados Visuales de Estado Estacionario (PEVEE). *CLAIB 2007 IFMBE Proceedings*, 2007;18:87–90.

Book Chapters

1. Kunst N, Wilson E, Tuffaha H, Jackson C, Welton N, Jalal H, **Alarid-Escudero F**. Value of Information: Success Stories. In: *Value of Information for Healthcare Decision Making*. Edited by Anna Heath, Christopher Jackson, and Natalia Kunst, Chapman and Hall/CRC (2024), New York. DOI: 10.1201/9781003156109.
2. **Alarid-Escudero F**, Gulati R, Rutter CM. Validation of Microsimulation Models Used for Population Health Policy. In: *Complex Systems and Population Health*. Edited by Yorghos Apostolopoulos, Kristen Hassmiller Lich, and Michael Kenneth Lemke, Oxford University Press (2020). DOI: 10.1093/oso/9780190880743.003.0017.

Preprints

1. **Alarid-Escudero F***, Gracia V, Wolf M, Zhao R, Easterly CW, Kim JJ, Canfell K, de kok IMCM, Barnabas RV, Kulasingam S. State-level disparities in cervical cancer prevention and impact on outcomes in the U.S.: A modeling study.. medRxiv 2024.06.11.24308795v1. 2024.
2. Garibay-Treviño DU‡, Jalal H, **Alarid-Escudero F***. A Fast Nonparametric Sampling (NPS) Method for Time-to-Event in Individual-Level Simulation Models. medRxiv 2024.04.05.24305356v1. 2024.
3. Hirsch S, Liu YE, **Alarid-Escudero F**, Andrews JR, Studdert D, Goldhaber Fiebert JD. Inequalities in Health Risks and Outcomes Faced by Mexico's Incarcerated Population. 11 January 2024, PREPRINT (Version 1) available at Research Square [https://doi.org/10.21203/rs.3.rs-3831065/v1]
4. Luviano A‡, Jalal H, Miranda A, Madrazo A, Reich M, **Alarid-Escudero F***. Towards a Public Health Approach to Homicides in Mexico. 2020. Available at SSRN: https://ssrn.com/abstract=3795313

Other Publications

1. Velázquez S, Roa J, Padilla A, **Alarid-Escudero F**, on behalf of PADeCI. ¿Qué tan abiertos son los "datos abiertos" de vacunación en México? (text in Spanish). Animal Político - El Contagio; June 23, 2021.
2. Gracia V, **Alarid-Escudero F**, on behalf of PADeCI. Evolución de la epidemia de COVID-19 en México y proyecciones de SC-COSMO (text in Spanish). Animal Político - El Contagio; April 1, 2021.

3. Gracia V, **Alarid-Escudero F**, on behalf of PADeCI. ¿Disminuimos la sana distancia en Aguascalientes? Proyecciones de SC-COSMO (text in Spanish). Animal Político - El Contagio; October 24, 2020.
4. Díaz Zepeda H, Luviano A, Peralta Y, **Alarid-Escudero F**, on behalf of PADeCI. Modelando el COVID-19. ¿Para qué nos sirve? (text in Spanish). Animal Político - El Contagio; June 22, 2020.
5. Peralta Y, Luviano A, Cardona Arias JM, Goldhaber-Fiebert JD, **Alarid-Escudero F**, on behalf of PADeCI. Otra mirada a tiempos de duplicación (text in Spanish). Animal Político - El Contagio; May 20, 2020.
6. Luviano A, Cardona Arias JM, Peralta Y, Goldhaber-Fiebert JD, **Alarid-Escudero F**, on behalf of PADeCI. Tiempos de duplicación (text in Spanish). Animal Político - El Contagio; May 13, 2020.
7. **Alarid-Escudero F**, on behalf of PADeCI. El Contagio (text in Spanish). Animal Político - El Contagio; May 4, 2020.
8. **Alarid-Escudero F**, Iskandar R, Trikalinos T. Mathematical Policy Models as a Tool to Improve Decision Making in Settings when Evidence is Not Sufficient. SMDM Spring Newsletter; 2019.
9. **Alarid-Escudero F**, Decision Analysis in R for Technologies in Health (DARTH) workgroup. Health Decision Sciences in the Era of Open-source Software. SMDM Newsletter; 2016.
10. Angeles G, Gutiérrez JP, **Alarid-Escudero F**. Evaluación Externa del Programa Oportunidades 2010 en Zonas Urbanas (2002-2009): Efectos de Oportunidades en Salud y Nutrición. Mexico City: Secretaría de Desarrollo Social; 2011.

Software development

Contributor

- A multi-compartment susceptible-exposed-infectious-recovered-susceptible-vaccinated (MC-SEIRSV) modeling framework, allowing non-exponentially distributed duration in Exposed and Infectious compartments, that tracks within-household and community transmission, GitHub repository.
- A Tutorial on Time-Dependent Cohort State-Transition Models in R using a Cost-Effectiveness Analysis Example, GitHub repository.
- An Introductory Tutorial on Cohort State-Transition Models in R Using a Cost-Effectiveness Analysis Example, GitHub repository.
- Stanford-CIDE Coronavirus Simulation Model (SC-COSMO) in Mexico City Metropolitan Area (MCMA), GitHub repository.
- dampack: an R package for decision-analytic modeling, R package on CRAN. Download developer version from GitHub.
- cdx2cea: an R package that implements the cost-effectiveness analysis (CEA) of testing average-risk Stage II colon cancer patients for the absence of CDX2 biomarker expression followed by adjuvant chemotherapy, R package on GitHub.
- dshr: an R package that implements the methods to derive disease-specific hazard ratios (dsHR) from overall hazard ratios (oHR), R package on GitHub.
- darthtools: an R package that contains tools developed by the Decision Analysis in R for Technologies in Health (DARTH) workgroup to construct model-based cost-effectiveness analysis in R, R package on GitHub.
- A Multidimensional Array Representation of State-transition Model Dynamics. GitHub repository.
- darthpack: a coding framework for model-based cost-effectiveness and decision analysis, R package and repository template on GitHub.

- Hands-on model calibration in R, tutorial on GitHub
- mixage - A Package to estimate age mixing in heterosexual populations, R package on GitHub.
- Microsimulation in R: A tutorial, GitHub repository.
- heRomod - A Package for Health Economic Modeling, R package on GitHub.

Teaching Material

- Hands-on Model Calibration in R: A guided tutorial
  - Random Search and Nelder Mead Calibration
  - Bayesian calibration
- Estimation of Transition Matrices
- R tutorial with corresponding PSA dataset

Teaching Experience

Instructor

2024 HRP 263: Advanced Decision Science Methods and Modeling in Health (co-instructor with Dr. Goldhaber-Fiebert)
Ph.D. in Health Policy
Stanford University, Stanford, CA, USA

2024 HRP 203: Methods for Reproducible Population Health and Clinical Research (co-instructor with Drs. Rose, Federico, Goodman, Malicki, and Mathur)
M.S., and Ph.D. in Health Policy
Stanford University, Stanford, CA, USA

2020-21 Quantitative Methods 1
Bachelors in Public Policy (LPP)
CIDE Región Centro, Aguascalientes, Mexico

2019-21 Statistics
Masters in Methods for Public Policy Analysis (METPOL)
CIDE Región Centro, Aguascalientes, Mexico

2020 Decision Sciences Methods
Masters in Methods for Public Policy Analysis (METPOL) / Masters in Administration and Public Policy (MAPP)
CIDE Región Centro, Aguascalientes, Mexico

2011-12 Advanced Topics in Health Economics (co-instructor with Dr. Sosa-Rubí)
Masters in Health Economics
INSP, Cuernavaca, Morelos, Mexico

2011 Mathematical Statistics II
Masters in Health Economics
INSP, Cuernavaca, Morelos, Mexico

2011 Applications in Mathematical Statistics I
Masters in Health Economics
INSP, Cuernavaca, Morelos, Mexico

2010 Applications in Biostatistics
Masters in Health Economics
INSP, Cuernavaca, Morelos, Mexico

Workshops and short courses

2024 Model Calibration: Overview and Advanced Topics. Invited workshop for the PhD students at the Center for Health Decision Sciences at Harvard University, Boston, MA

2024 DARTH Advanced Decision Modeling in R Course, Hospital for Sick Children (SickKids), Toronto, ON, Canada.

2023 Introduction to Building and Calibrating Simulation Models in R, Mt Hood/SMDM Asia 2023, Kuala Lumpur, Malaysia.

2023 Model Calibration in R, The Professional Society for Health Economics and Outcomes Research (ISPOR) (virtual short course)

2023 NORCHER Seminar and Hands-on Workshop: Handling Decision Uncertainty in Health Economic Modelling, University of Oslo, Norway, Oslo.

2022 Model Calibration in R, The Professional Society for Health Economics and Outcomes Research (ISPOR) (virtual short course)

2021 Decision Modeling for Public Health, CDC Prevention Effectiveness Fellowship Program. (November)

2021 Hands-on Model Calibration in R, 43rd Annual North American Meeting of SMDM, Virtual meeting (short course)

2021 Cost-Effectiveness and Decision Modeling using R Workshop (August)

2021 Introduction to Value of Information, CISNET 2021 Mid-year meeting. A virtual workshop (June)

2020 Decision Modeling for Public Health, CDC Prevention Effectiveness Fellowship Program. A 7-day virtual workshop (November)

2020 Hands-on Model Calibration in R, 42nd Annual North American Meeting of SMDM, Virtual meeting (short course)

2020 Decision Modeling in R: A 5-day course, Virtual workshop led by The Hospital for Sick Children, Toronto, Canada (July)

2020 Advanced Decision Modeling in R: A 3-day workshop, Virtual workshop led by The Hospital for Sick Children, Toronto, Canada (April)

2019 Decision analysis and simulation modeling to evaluate public policies, 1st School of Statistical Modeling for Social Sciences (EMECS), CIMAT, Aguascalientes.

2019 Hands-on Model Calibration in R, 41st Annual North American Meeting of SMDM, Portland, OR (short course)

2019 Optimal Research Design Using Value of Information, 41st Annual North American Meeting of SMDM, Portland, OR (short course)

2019 Cost-Effectiveness and Decision Modeling using R, University of Minnesota School of Public Health, Minneapolis, MN, USA.

2019 Cost-Effectiveness and Decision Modeling using R, Escuela de Salud Pública de la Universidad de Chile, Santiago de Chile, Chile.

2019 The Use of Decision Analysis in Drug Policy, Diploma in Drug Policy, Health and Human Rights 2019, Center for Research and teaching in Economics, Aguascalientes, Aguascalientes, Mexico (guest lecture)

2019 Introduction to Decision Modeling and Cost-Effectiveness Analysis, Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico City, Mexico (half-day workshop)

2018 Hands-on Model Calibration in R, 40th Annual North American Meeting of SMDM, Montreal, Canada (short course) [Awarded best short course of the academic meeting]

2018 Value of Information Analysis using Regression Metamodeling, 40th Annual North American Meeting of SMDM, Montreal, Canada (short course)

2018 Cost-Effectiveness and Decision Modeling using R, University of Minnesota School of Public Health, Minneapolis, MN, USA.

2018 Decision Modeling using R, Leiden University Medical Center, Leiden, the Netherlands

2018 Decision Modeling using R, Merck, North Wales, PA

2018 Decision Modeling using R, The Hospital for Sick Children, Toronto, Canada (April)

2018 Decision Modeling using R, University of Oslo, Oslo, Norway

2017 Value of Information Analysis using Regression Metamodeling, 39th Annual North American Meeting of SMDM, Pittsburgh, PA (short course)

2017 Decision Modeling using R, 39th Annual North American Meeting of SMDM, Pittsburgh, PA (short course)

2017 Decision Modeling using R, The Hospital for Sick Children, Toronto, Canada (February and October)

2016 Value of Information Analysis using Regression Metamodeling, 38th Annual North American Meeting of SMDM, Vancouver, Canada (short course)

2016 Decision Modeling using R, 38th Annual North American Meeting of SMDM, Vancouver, Canada (short course)

2016 Introduction to R, 38th Annual North American Meeting of SMDM, Vancouver, Canada (pre-meeting course)

2016 Introduction to R, Annual European Meeting of SMDM, London, UK (pre-meeting course)

2016 Decision Modeling using R, Annual European Meeting of SMDM, London, UK (short course)

2015 Value of Information Analysis using Regression Metamodeling, 37th Annual North American Meeting of SMDM, St. Louis, MO, USA (short course)

2014 Sensitivity Analysis using Linear Regression Metamodeling, 36th Annual North American Meeting of SMDM, Miami, FL, USA (short course)

2011 Workshop on Impact Evaluation of Population, Health and Nutrition Programs. MEASURE Evaluation, INSP, Cuernavaca, Morelos, Mexico

2011 Advanced Monitoring and Evaluation Workshop for the Caribbean Region: Assessing the Effectiveness and Impact of HIV & AIDS Programmes 2011, Montego Bay, Jamaica

2011 Workshop on longitudinal data analysis and program evaluation, National Institute for Educational Assessment and Evaluation (INEE), Mexico City, Mexico

Teaching Assistant

2014 Advanced Methods in Health Decision Sciences (TA), University of Minnesota

2013 Decision Analysis for Health Care (TA), University of Minnesota

2009 Panel Econometrics and Time Series (TA), Center for the Study of Public Finances, Mexico City, Mexico

Guest Lecturer

2023 Analysis of Costs, Risks, and Benefits in Healthcare
Lecture: Modeling Cancer Dynamics and Control Policies
Instructors: Margret Brandeau
Institution: Department of Management Science and Engineering, Stanford University

2022 Analysis of Costs, Risks, and Benefits in Healthcare
Lecture: Probabilistic Sensitivity Analysis
Instructors: Jeremy D. Goldhaber-Fiebert, PhD, and Joshua Salomon, PhD
Institution: Stanford University School of Medicine

2022 Economic Evaluation of Health Care programs
Lecture: Decision Modeling in R
Instructor: Victoria L. Philips, PhD
Institution: Emory University Rollins School of Public Health

2016-17, 18, 21 Advanced Methods in Health Decision Sciences
Lecture: Calibration
Instructor: Karen M. Kuntz, ScD
Institution: University of Minnesota School of Public Health

2016-8 International Health Systems
Lecture: Health care decision making in Mexico: The role of HTA and economic evaluation
Instructor: Lynn Blewett, PhD
Institution: University of Minnesota School of Public Health

2017 Topics in Industrial Engineering
Lecture: R Tutorial on Markov Models and Calibration
Instructor: Diana M. Negoescu, PhD
Institution: University of Minnesota School of Engineering

2017 Cost-effectiveness Analysis in Health Care
Lecture: Value of Information
Lecture: TreeAge Pro 1: Decision Trees and Cost-Effectiveness Analysis
Lecture: TreeAge Pro 2: Sensitivity Analysis
Lecture: TreeAge Pro 3: Markov Models
Lecture: TreeAge Pro 4: Probabilistic Sensitivity Analysis
Instructor: John A. Nyman, PhD
Institution: University of Minnesota School of Public Health

2016-7 Synthesis and Application of Methods in Epidemiologic Research
Lecture: Force of infection of *H. pylori* in Mexico: Evidence from a national survey
Instructor: Richard F. MacLehose, PhD
Institution: University of Minnesota School of Public Health

2015 Advanced Methods in Health Decision Sciences
Lectures: Estimating probabilities from the literature
ROC analysis: Estimation
Instructor: Karen M. Kuntz, ScD
Institution: University of Minnesota School of Public Health

Other

2008-09 Physics and Mathematics (High School Teacher), New Continent High School, Mexico City, Mexico

Conference Presentations

"An efficient nonparametric sampling method of time to events accounting for time-varying covariates"

- 45th Annual North American Meeting of the Society for Medical Decision Making, Philadelphia, Pennsylvania, US, 2023

"Bayesian calibration of a novel discrete-event simulation model of bladder cancer in the US"

- 45th Annual North American Meeting of the Society for Medical Decision Making, Philadelphia, Pennsylvania, US, 2023

"An efficient nonparametric sampling method of time to event for individual-level models"

- R for trial and model-based cost-effectiveness analysis, 2023

"Effects of Mitigation and Control Policies in Realistic Epidemic Models Accounting for Household Transmission Dynamics"

- 43rd Annual North American Meeting of the Society for Medical Decision Making, Virtual meeting, 2021

"Dependence of Covid-19 Policies on End-Of-Year Holiday Contacts in Mexico City Metropolitan Area: A Modeling Study"

- INFORMS Healthcare Conference, Virtual Conference, 2021

"Accounting for Household Transmission Dynamics in Realistic Epidemic Models" (North American top-rated abstract)

- 42nd Annual North American Meeting of the Society for Medical Decision Making, Virtual meeting, 2020

"Establishing a Dynamic Decision-Making System in Real-Time on the COVID-19 Pandemic in Mexico City", presented at the Panel Discussion 1: Decisional context – how to work with different types of decision makers

- 42nd Annual North American Meeting of the Society for Medical Decision Making, Virtual meeting, 2020

"'Dampack': A Flexible R Package for Analyzing and Visualizing Cost-Effectiveness Analysis Results"

- 41st Annual North American Meeting of the Society for Medical Decision Making, Portland, OR, 2019

"Optimizing Adjuvant Treatment for Stage II Colon Cancer: A Biomarker-based Cost-effectiveness Analysis"

- INFORMS Healthcare Conference, Cambridge, MA, 2019

"Optimizing HIV Treatment Initiation in the Context of Resistance in Mexico"

- INFORMS Healthcare Conference, Cambridge, MA, 2019

"Quantification and Valuation of Uncertainty of Calibrated Parameters in Decision Models"

- 40th Annual North American Meeting of the Society for Medical Decision Making, Montreal, Canada, 2018

"Cost-Effectiveness Analysis of Population Screening and Treatment of *Helicobacter pylori* in the Setting of Antibiotic Resistance in Mexico"

- International Conference of Health Policy Statistics (ICHPS), Scottsdale, AZ, 2023
- "40th Annual North American Meeting of the Society for Medical Decision Making, Montreal, Canada, 2018

"Management of Care for Low-Risk Pregnancies By Midwives Vs. Obstetricians: A Decision Analysis"

- 40th Annual North American Meeting of the Society for Medical Decision Making, Montreal, Canada, 2018 (poster)

"The DARTH initiative: Promoting the Use of Open-Source Software in Medical Decision Making"

- 17th Biennial European Conference of the Society for Medical Decision Making, Leiden, The Netherlands, June 2018

"Open-source software for building health economic models"

- ISPOR 2018, Baltimore, MD

"Population-Level Antibiotic Treatment Policies in the Setting of Antibiotic Resistance: A Mathematical Model of Mass Treatment of Helicobacter pylori in Mexico"

- Epidemics[6] - International Conference on Infectious Disease Dynamics, Sitges, Barcelona, Spain, 2017
- 39th Annual North American Meeting of the Society for Medical Decision Making, Pittsburgh, PA, 2017 (top-rated abstract)

"Non-Identifiability in Model Calibration and Implications for Medical Decision Making"

- 39th Annual North American Meeting of the Society for Medical Decision Making, Pittsburgh, PA, 2017

"A Hybrid Assessment to Rank Strategies in the Presence of Uncertainty"

- 39th Annual North American Meeting of the Society for Medical Decision Making, Pittsburgh, PA, 2017 (poster)

"CDX2 Biomarker Testing and Adjuvant Therapy for Stage II Colon Cancer: A Cost-Effectiveness Analysis"

- 39th Annual North American Meeting of the Society for Medical Decision Making, Pittsburgh, PA, 2017 (poster)

"Bayesian hierarchical models to estimate the force of infection of *Helicobacter pylori* in Mexico: Evidence from a national survey"

- 50th Annual meeting of the Society for Epidemiologic Research, Seattle, WA, 2017 (poster)

"A Mathematical model of *H. pylori* infection and resistance in Mexico"

- Doctoral Research Showcase, University of Minnesota, Minneapolis, MN, 2017 (poster)

"On the opportunity cost of non-rigorous or irrelevant research: Implications for economic evaluation"

- 38th Annual North American Meeting of the Society for Medical Decision Making, Vancouver, Canada, 2016

"Bayesian prediction of prevalence of human papillomavirus in young girls in the US from aggregated data using exponentially damped polynomial models"

- 38th Annual North American Meeting of the Society for Medical Decision Making, Vancouver, Canada, 2016 (poster)

"Comparison of calibration methods for natural history simulation models"

- 38th Annual North American Meeting of the Society for Medical Decision Making, Vancouver, Canada, 2016
- 16th Biennial European Conference of the Society for Medical Decision Making, London, UK, June 2016 [Lee B. Lusted student award winner]

"Introducing the curve of optimal sample size (COSS): A graphical representation of optimal sample size by willingness-to-pay threshold"

- 37th Annual North American Meeting of the Society for Medical Decision Making, St. Louis, MO,2015 (poster) [Lee B. Lusted student award winner]

"Calibration of piecewise Markov models using a Bayesian change-point analysis through an iterative convex optimization algorithm"

- ISPOR 5th Latin America Conference, Santiago, Chile, 2015 (poster)
- INFORMS Healthcare Conference, Nashville, TN, 2015
- 36th Annual North American Meeting of the Society for Medical Decision Making, Miami, FL, 2014 (poster) [Lee B. Lusted student award winner]

"Estimating relative survival for screen- and symptom-detected colorectal cancer patients"

- 19th Minnesota Health Services Research Conference, Minneapolis, MN, 2015

"Potential bias associated with modeling the effectiveness of treatment using an overall hazard ratio"

- 36th Annual North American Meeting of the Society for Medical Decision Making, Miami, FL, 2014 (poster)

"Health care decision making in Mexico: The role of health technology assessment and economic evaluation"

- 36th Annual North American Meeting of the Society for Medical Decision Making, Miami, FL, 2014 (poster)

"Trade-offs between efficacy and cardiac toxicity of adjuvant chemotherapy in early-stage breast cancer patients: Do competing risks matter?"

- 18th Minnesota Health Services Research Conference, Minneapolis, MN, 2014 [Second place student paper competition]
- AcademyHealth Annual Research Meeting, San Diego, CA, 2014 (poster)
- 35th Annual North American Meeting of the Society for Medical Decision Making, Baltimore, MD, 2013 (poster)
- 4th Annual Masonic Cancer Center Research Symposium, University of Minnesota, Minneapolis, MN, 2013

"Registro de señales de EEG para aplicaciones de interfaz cerebro computadora (ICC) basado en potenciales evocados visuales de estado estacionario (PEVEE)"

- Latin-American Congress of Biomedical Engineer (CLAIB), Margarita Island, Venezuela, 2007

Invited Talks

Panel Member at the CISNET Model Accessibility and Open-Source Discussion

- CISNET mid-year meeting, Common Day, NCI, Rockville, MD, 2024

On Biases and Heterogeneity in Value of Information Analysis using Individual-Level Models

- Invited seminar for the Center for Health Decision Sciences at Harvard University, Boston, MA, 2024 (*CHDS seminars feature national and international decision science experts*)

On Biases and Heterogeneity in Value of Information Analysis using Individual-Level Models

- Invited seminar for the Department of Health Policy at Stanford University School of Medicine University, Stanford, CA, 2024

Análisis de políticas de salud oncológicas en México desde la perspectiva de las ciencias de la decisión (*Analysis of cancer health policies in Mexico from a decision sciences perspective*)

- Invited seminar for the Ciclo de Seminarios de Investigación y Control de Cáncer, Centro de Investigación de Salud Poblacional (CISP), Instituto Nacional de Salud Publica (INSP), Cuernavaca, Morelos, Mexico, 2024

Cost-effectiveness analysis of population screening and treatment of *Helicobacter pylori* in the setting of antibiotic resistance in Mexico

- Invited session: The Pipeline from Cancer Data to Cancer Policy Goes through Cancer Modeling, International Conference on Health Policy Statistics (ICHPS), Scottsdale, AZ, 2023

Panel member at the global health interest group panel discussion session

- Invited talk for the multiple myeloma group, CISNET annual meeting, NCI, Rockville, MD, 2023

An efficient nonparametric sampling method of time to events accounting for time-varying covariates

- Invited talk for the multiple myeloma group, CISNET annual meeting, NCI, Rockville, MD, 2023

Informing Cancer Health Policy with Decision Modeling

- Population Sciences Program, Stanford Cancer Institute, Stanford University, Stanford, CA, 2023

Sampling time to event with time-varying covariates

- CISNET mid-year meeting, The Fred Hutch Cancer Center, Seattle, WA, 2023

H. pylori Generator Updates

- CISNET mid-year meeting, The Fred Hutch Cancer Center, Seattle, WA, 2023

On Biases and Heterogeneity in Value of Information Analysis Using Individual-Level Models

- Centre for Health Economics (CHE), University of York, CHE Seminar, 2023

"Opportunity Cost of Non-Rigorous & Non-Transferable Research: Implications for Cost-Effectiveness Analysis,"

- University of Washington's CHOICE Institute Graduate Seminar, Seattle, WA, 2023

Characterization and Valuation of the Uncertainty of Calibrated Parameters in Microsimulation Decision Models

- Invited talk for the multiple myeloma group, CISNET annual meeting, NIH, Bethesda, MD, 2022

Model updates: Cancer of the Bladder in R Analytic Simulator (COBRAS) model

- CISNET annual meeting, NIH, Bethesda, MD, 2022

H. pylori infection generator for the U.S.

- CISNET annual meeting, NIH, Bethesda, MD, 2022

Sensitivity and identifiability analyses for efficient calibration of health policy models

- CISNET annual meeting, NIH, Bethesda, MD, 2022

Decision modeling for healthcare economic evaluation

- 1st Conference on Data Science, Division of Basic Sciences and Engineering of UAM-I, 2022

CDX2 Biomarker Testing and Adjuvant Therapy for Stage II Colon Cancer: An Exploratory Cost-Effectiveness Analysis

- Journal Club, Open Source Models, Special Interest Group, ISPOR, 2022

Quantification and valuation of uncertainty of calibrated parameters in decision models

- Centre for Health Economics (CHE), University of York, CHE Seminar, 2022

Model Accessibility Efforts in the CISNET CRC Group and Beyond

- CISNET annual meeting, Virtual Meeting, 2021

H. pylori infection generator

- CISNET annual meeting, Virtual Meeting, 2021

Updates on the CISNET CERVIX Collaborative (C3) model

- CISNET annual meeting, Virtual Meeting, 2021

Symposium on the Applications of Mathematics in the area of Public Health (Panelist)

- 54th National Congress of the Mexican Mathematical Society, Virtual meeting, 2021

Open Science and Model Transparency in the context of Covid-19 Pandemics (Symposium chair)

- 43rd Annual North American Meeting of the Society for Medical Decision Making, Virtual meeting, 2021

An update on addressing disparities in cervical cancer using the CISNET CERVIX Collaborative (C3) model

- CISNET mid-year meeting, Virtual Meeting, 2021

Establishing a Dynamic Decision-Making System in Real-Time on the COVID-19 Pandemic in Mexico City

- COVID-19 Decision Models: Connecting modelers and decision makers (An SMDM webinar), 2021

Evaluation of COVID-19 mitigation strategies in Mexico City: A mathematical model-based health policy analysis

- International Health Institute (IHI) Global Health Conversation, Brown University, 2020

Policy Comparison of Non-Pharmaceutical Interventions in Mexico City Metropolitan Area: An SC-COSMO model-based analysis

- 1st International Forum of Applied Mathematics, Guerrero Autonomous University, Chilpancingo de los Bravo, Guerrero, Mexico, 2020

One Who Hesitates is Lost: Creation of the SC–COSMO Working Group and Modeling COVID–19 in Mexico

- CISNET annual meeting, Virtual Meeting, 2020

CISNET exemplar model

- CISNET mid-year meeting, Virtual Meeting, 2020

Addressing disparities in cervical cancer using the CISNET CERVIX Collaborative (C3) model

- CISNET mid-year meeting, Virtual Meeting, 2020

Deep-Bayesian Artificial Neural Network (D-BANN) Metamodel

- CISNET mid-year meeting, Virtual Meeting, 2020

Modeling Gastric Cancer Into The 21st Century

- 1st Gastric Cancer Summit at Stanford, Stanford University, CA, 2020
- Stanford Health Policy Seminar, Stanford University, CA, 2020

CISNET CERVIX Collaborative (C3) model overview

- CISNET annual meeting, Bethesda, MA, 2019

"Quantification and Valuation of Uncertainty of Calibrated Parameters in Decision Models"

- Academic seminar at the Center for Research in Mathematics (CIMAT), Guanajuato, Guanajuato, Mexico, 2019

"The recommended methods for decision making in the presence of uncertainty are not ideal. Could we do better?"

- CIDE's academic seminar, 2019

"The use of high-performance computing for uncertainty quantification and value of information analysis"

- INFOTEC's weekly seminar, 2019
- CISNET Programmers Group webinar, 2018

"The DARTH initiative: Promoting the Use of Open-Source Software in Medical Decision Making,"

- Erasmus University, Rotterdam, The Netherlands, 2018
- Queen's University, Belfast, Northern Ireland, 2018 [A webinar part of Northern Ireland's ISPOR Student Chapter]

"Value of Information analysis of CRC screening strategies using the SimCRC model,"

- CISNET mid-year meeting, Ann Arbor, MI, 2018

"Value of Information Analysis: The why, what and how"

- CISNET Junior Investigators webinar, 2018

"Exploring the cost-effectiveness of *Helicobacter pylori* screening and treating strategies in Mexico in the setting of antibiotic resistance: A modeling study"

- National Institute of Public Health, Cuernavaca, Mexico, 2017
- National Institute of Health Sciences and Nutrition "Salvador Zubirán", Mexico City, Mexico 2017
- National institute of Respiratory Diseases, Mexico City, Mexico 2017

"Calibration methods: An overview and a case study of cancer relative survival"

- Fred Hutchinson Cancer Research Center, Seattle, WA, 2017
- CISNET Junior Investigators webinar, 2017

"Characterizing uncertainty of deep model parameters of the SimCRC model," CISNET mid-year meeting, Stanford, CA, 2017

"Comparative effectiveness of *H. pylori* antibiotic treatment strategies in Mexico: A simulation model approach," University of Minnesota School of Public Health, Health Policy and Management Seminar Series, Minneapolis, MN, 2017

"Opportunity Cost of Non-Rigorous & Non-Transferable Research: Implications for Cost-Effectiveness Analysis," University of Minnesota School of Public Health Research Day, Minneapolis, MN, 2017

"Statistical methods to inform a dynamic transmission model of *Helicobacter pylori* in Mexico"

- Institute of Technology Assessment (ITA) Massachussets General Hospital (MGH) , PCORT Seminars, Boston, MA, 2017
- The Center for Evidence Synthesis in Health, Brown University School of Public Health, Providence, RI, 2017

"Simplifying Value of Information Analysis With A Gaussian Approximation Approach," The Canadian Centre for Health Economics (CCHE), University of Toronto, Toronto, Canada, 2017 (co-presented with Hawre Jalal, PhD)

"Probabilistic sensitivity analysis: Characterizing parameter uncertainty," CISNET annual meeting, Rockville, MD, 2016

"A graphical representation of optimal sample size by willingness-to-pay threshold: Introducing the curve of optimal sample size (COSS)," CISNET Training Component: Training the next generation of modelers, CISNET mid-year meeting, Boston, MA, 2016

"Disentangling the differences between screen & symptom detected cancers in SEER relative survival," CISNET mid-year meeting, Minneapolis, MN, 2014

"Health care decision making in Mexico: The role of HTA and economic evaluation," Toronto Health Economics and Technology Assessment Collaborative (THETA), THETA Rounds, University of Toronto, Toronto, Canada, 2014

"Trade-offs between efficacy and cardiac toxicity of adjuvant chemotherapy in early-stage breast cancer patients. Do competing risks matter?", Cancer Prevention and Control Seminar, Masonic Cancer Center, University of Minnesota, Minneapolis, MN, 2013

"Mexican migrants to the U.S.: What happens to the health insurance of families staying behind?", Seminar on Evaluation of Health Programs and Policies, INSP/Mexican School of Public Health, Cuernavaca, Morelos, Mexico, 2012

"Oportunidades and urban population's health: Trend analysis on health indicators (2002-2009)", Seminar on Evaluation of Health Programs and Policies, INSP/Mexican School of Public Health, Cuernavaca, Morelos, Mexico, 2011

"Mobile populations and prevention of HIV & STIs", Seminar on Evaluation of Health Programs and Policies, INSP/Mexican School of Public Health, Cuernavaca, Morelos, Mexico, 2009

Journal Reviewer Experience

(year of first review indicated)

(2016) Medical Decision Making (MDM)

(2018) Health Services Research (HSR)

(2018) PharmacoEconomics

(2018) Value in Health (ViH)

(2018) Statistics in Medicine

(2019) Epidemiology and Infection

(2020) The European Journal of Health Economics

(2020) Clinical Gastroenterology and Hepatology

(2020) Medical Decision Making - Policy & Practice (MDM-PP)

(2021) Latin American Economic Review (LAER)

(2021) Health Economics

(2023) Health Care Management Science

Academic, Professional and Service Activities

R for Health Technology Assessment (HTA) scientific committee

Member (2021-)

Opioid Use Disorder Modeling Group

Member (2020-)

Cancer Intervention and Surveillance Modeling Network (CISNET)

Investigator colorectal cancer site (2017-)

Investigator cervical cancer site (2017-)

Graduate research assistant colorectal site (2013-2017)

Society for Medical Decision Making (SMDM)

Elected trustee (2018-2021)

Chair of Global Health Interest Group (2017-)

Member of Special Committee on Policy for Meeting Conduct and Inclusion (2019)

Member of Membership Committee (2019-2020)

Member of Career Development Committee (2014-2016): Co-chair of trainee activities, such as one-to-one mentoring, mentoring meet-and-greet (mix and mingle), trainee luncheon and speed mentoring

Member of Strategic Planning Committee (2014-2015)

Annual North American Meeting Abstract Reviewer (2015-)

Member (2013-)

Academic Consortium for Research in HIV and Tuberculosis (CISIDAT) in Mexico

Member (2018-)

University of Minnesota, Health, Policy & Management Student Group

Graduate-faculty student representative (2016-2017) (organizing committee)

Chair of logistics (2014-2015) (organizing committee)

Chair of social activities (2013-2014) (organizing committee)

Division-related activities, such as: Assist with designing and implementing the PhD student online directory, meet with prospective and admitted students, answer questions from a student's perspective, assist with assigning office spaces to PhD students

AcademyHealth

AcademyHealth Annual Research Meeting Abstract Review Committee (methods section) (2016)

International Society for Pharmacoeconomics and Outcomes Research (ISPOR)

ISPOR 4th Latin America Conference in Buenos Aires, Argentina, Abstract Reviewer (2013)

Universidad Autónoma Metropolitana, Iztapalapa (UAM-I)

Founding member of the student association of biomedical engineering (2005)

Advising/Committee Member

PhD's advisor

Selina Junyi Pi, PhD in Biomedical Data Science, 2027 (expected), Department Of Biomedical Data Science, Stanford University School of Medicine,

Lidia Sarahi Peña Ruiz, "Association between breastfeeding and intelligence in school-aged girls and boys and estimation of economic benefits in adult life in Mexico." PhD in Population Nutrition, 2022, Mexican School of Public Health

PhD theses committees

Mauricio Enrique Baeza Paredes, "Analysis of cost-effectiveness and impact on equity through an economic simulation model of the incorporation of new health technologies to the cardiovascular health program to control patients with type 2 diabetes mellitus in Chile." PhD in Public Health, 2023, University of Chile School of Public Health

Fernando Saldaña García, "Mathematical modeling approaches in epidemiology: within host-dynamics, control strategies, and cost-effectiveness analysis." PhD in Applied Mathematics, 2020, Center for Research in Mathematics (CIMAT)

Master's students advisor

Hirvin Azael Diaz Zepeda, "Covid-19 excess morality and a cost-effective analysis of different treatments." Master of Science in Methods for the Analysis of Public Policies (METPOL), 2021, Center for Research and Teaching in Economics (CIDE)

Diego Rodolfo Sánchez Rojas, "The effect of the Covid-19 epidemic in Mexico on labor market dynamics and the decision to implement a policy." Master of Science in Methods for the Analysis of Public Policies (METPOL), 2021, Center for Research and Teaching in Economics (CIDE)

Antonio Guzmán Fernández, "Municipality-level variation of Covid-19 mortality in Mexico: A Hierarchical analysis." Master of Administration and Public Policy (MAPP), 2021, Center for Research and Teaching in Economics (CIDE)

Mario Enrique Carranza Barragán, "Temporal analysis of violence in Mexico during the period 2006-2011 based on hierarchical Bayesian models." Master of Science in Probability and Statistics, 2021, Center for Research in Mathematics (CIMAT)

Andrea Luviano, "Health impact estimation of a colorectal cancer screening strategy implementation in Mexico." MPH in Health Policy, 2019, Harvard T.H. Chan School of Public Health

Daniel Alejandro Pedraza Arizmendi, "Cost-benefit analysis of the model UNEMES-EC in a period of 10 years (mid-term) and 20 years (long-term) in Mexico." MSc Health Economics, 2019, Mexican School of Public Health

Master's and undergraduate theses committees

James C. Dickerson, "The Cost and Cost-Effectiveness of Treating HER2 low Metastatic Breast Cancer." Master's in Health Policy, 2024, Department of Health Policy Stanford University School of Medicine

David Ulises Garibay Treviño, "The impact of the safe intersections program: A longitudinal perspective." Master of Science in Methods for the Analysis of Public Policies (METPOL), 2021, Center for Research and Teaching in Economics (CIDE)

Gabriela Arroyo Carmona, "Estimation of the impact of the closure of non-essential economic activities on the hours worked in Mexico in the face of the COVID-19 pandemic." Master of Science in Methods for the Analysis of Public Policies (METPOL), 2021, Center for Research and Teaching in Economics (CIDE)

Rodolfo Larios Alvarez, "Low-risk delivery care for doctors and midwives: A cost-effectiveness analysis." MPH Health Administration, 2018, Mexican School of Public Health

Caleb Easterly, "Mathematical Modeling of Human Papillomavirus: Questioning Assumptions About Sexual Behavior." BA Applied Mathematics, 2017, Macalester College

José Luis Alcántara Zamora, "Cost-effectiveness of care of patients with diabetes mellitus in Unidades Médicas De Especialidades En Enfermedades Crónicas (UNEMES-EC)." MSc Health Economics, 2016, Mexican School of Public Health

Carlos Guerrero, "Analysis of the decisions of initiating and ceasing smoking in Mexico: a Behavioral Economics approach." MSc Health Economics, 2014, Mexican School of Public Health

Juan Jose Herrera Patiño, "Impact of regulating the sale of antibiotics in Latin America: Interrupted time series." MSc Health Economics, 2014, Mexican School of Public Health

Expert Advisor - Various Media Interviews Requested

Publications-International

Stanford Health Policy

Duff-Brown, B. (2021, August 9) Tackling COVID-19 Among Prison Populations in California and Beyond. *Stanford Health Policy*. Retrieved from https://healthpolicy.fsi.stanford.edu/news/tackling-covid-19-among-prison-populations-california-and-beyond

Bloomberg News

(2021, July 09) México crea un 'oasis de vacunas' en su intento por reabrir la frontera con EU. *Bloomberg*. Retrieved from https://www.elfinanciero.com.mx/bloomberg/2021/07/09/mexico-crea-un-oasis-de-vacunas-en-su-intento-por-reabrir-la-frontera-con-eu/

Stanford Health Policy

Duff-Brown, B. (2021, May 27) Meeting the Moment: Department of Medicine 2021 Annual Report. *Stanford Health Policy*. Retrieved from https://healthpolicy.fsi.stanford.edu/news/meeting-moment-stanford-department-medicine-2021-annual-report

Stanford Medicine

Duff-Brown, B. (2021, May 25) COVID-19 Modeling Team at Forefront of Pandemic Projections and Planning. *Stanford Medicine*. Retrieved from https://medicine2021report.stanford.edu/ar2021/covid-19-modeling-team/

Stanford Health Policy

Duff-Brown, B. (2021, March 10) A Story One Year in the Telling: the Stanford COVID Modeling Project. *Stanford Health Policy*. Retrieved from https://healthpolicy.fsi.stanford.edu/news/covid-modeling-project

Aljazeera News

Abdalla, J. (2021, February 13). Mexico's vaccination campaign stalls, AMLO still won't wear mask. *Aljazeera News*. Retrieved from https://www.aljazeera.com/news/2021/2/13/mexico-vaccination-campaign-stalls-amlo-still-wont-wear-mask

The Washington Post

Melesio, L. (2021, January 17) La estrategia de vacunación contra COVID-19 en México es muy lenta. El gobierno debe apresurarla. *The Washington Post*. Retrieved from https://www.washingtonpost.com/es/post-opinion/2021/01/17/vacunacion-covid-19-mexico-calendario-rapidez/

Bloomberg News

Villamil, J. & Navarro A. (2020, December 22) Mexico City Covid Outbreak Will Overwhelm Hospitals, Study Says. *Bloomberg*. Retrieved from https://www.bloomberg.com/news/articles/2020-12-22/mexico-city-covid-outbreak-will-overwhelm-hospitals-study-says

BBC

Nájar, A. (2020, May 29) Coronavirus en México: las dudas que genera que el país entre en "la nueva normalidad" aunque siga en su fase de más contagios y muertes. *BBC*. Retrieved from https:// www.bbc.com/mundo/ america-latina-52845004

The Washington Post

Melecio, L. (2020, May 24) Ciudad de México se ha salvado del colapso, reabrir sin pruebas puede cambiarlo todo. *The Washington Post*. Retrieved from https://www.washingtonpost.com/es/post-opinion/2020/05/24/ciudad-de-mexico-se-ha-salvado-del-colapso-reabrir-sin-pruebas-puede-cambiarlo-todo/

Agencia EFE

(2020, May 24) Epidemiólogos ven riesgo de repunte de COVID en "nueva normalidad" mexicana. *Agencia EFE*. Retrieved from https://www.efe.com/efe/usa/mexico/epidemiologos-ven-riesgo-de-repunte-covid-en-nueva-normalidad-mexicana/50000100-4254239

Minnesota Public Radio

Tong, S. (2020, May 18) U.S. automakers press Mexican partners to restart, rejoin supply chain. *Market Place, Minnesota Public Radio*. Retrieved from https://www.marketplace.org/2020/05/18/u-s-automakers-pressure-mexican-partners-to-restart-rejoin-industry-supply-chain/

Bloomberg News

Navarro, A. (2020, May 16) Experts Doubt Mexican Government's Claims on Falling Curve. *Bloomberg*. Retrieved from https://www.bloomberg.com/news/articles/2020-05-16/mexico-risks-new-wave-of-pandemic-by-opening-economy-now?sref=BpddPzIk

Aljazeera News

Abdalla, J. (2020, May 13) Mexico announces 'new normality' in plan to reopen economy. *Aljazeera News*. Retrieved from https://www.aljazeera.com/news/2020/5/13/mexico-announces-new-normality-in-plan-to-reopen-economy

The New York Times

Ajmed, A. (2020, May 8) Hidden Toll: Mexico Ignores Wave of Coronavirus Deaths in Capital. *The New York Times*. Retrieved from https://www.nytimes.com/2020/05/08/world/americas/mexico-coronavirus-count.html

The Financial Times

Webber, J. (2020, May 6) The pandemic tests tempers and tolerance in Mexico. *The New York Times*. Retrieved from https://www.ft.com/content/2603c504-8eab-11ea-a8ec-961a33ba80aa

Publications-National

Reforma

Morales, A. (2021, April 16). *Reforma*. Retrieved from https://www.reforma.com/preven-20-mil-contagios-mas-por-vacaciones/ar2164457

Serendipia

Contreras, E.L. (2020, December 23). Demanda hospitalaria en la ZMVM aumentará tras fiestas decembrinas: proyección *Serendipia*. Retrieved from https://serendipia.digital/2020/12/demanda-hospitalaria-en-la-zmvm-aumentara-tras-fiestas-decembrinas-pro/

Reforma

Mireles, O. (2020, December 23). Alerta estudio: Covid colapsará hospitales de CDMX *Reforma*. Retrieved from https://www.reforma.com/alerta-estudio-covid-colapsara-hospitales-de-cdmx/ar2094746

Univisión

Mireles, O. (2020, November 19). Un sombrío hito: México supera las 100,000 muertes por covid-19 en medio de críticas a la gestión de AMLO y con un crudo invierno en puerta México. *Univisión*. Retrieved from https://tinyurl.com/ybr3uw6n

Newsweek

Romo, A. (2020, October 23). Estiman investigadores hasta 12 mil casos de Covid-19 en Aguascalientes sin cambios en distanciamiento social. Newsweek México. *Newsweek*. Retrieved from https://newsweekespan investigadores-hasta-12-mil-casos-de-covid-19-en-aguascalientes-sin-cambios-en-distanciamiento-social/

La Razón

Mora, K. (2020, October 7). Publica CIDE cuatro proyecciones de la pandemia. En el peor escenario, prevén 112 mil muertes en ZMVM. *La Razón*. Retrieved from https://www.razon.com.mx/ciudad/peor-escenario-preven-112-mil-muertes-zmvm-407972

Tercera Vía

(2020, October 7). Presentan nuevo modelo de proyecciones para contagios y muertes de #COVID19 en la Zona Metropolitana del Valle de México. *Tercera Vía*. Retrieved from https://terceravia.mx/2020/10/presentan nuevo-modelo-de-proyecciones-para-contagios-y-muertes-de-covid19-en-la-zona-metropolitana-del-valle-de-mexico/

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Mireles, O. (2020, October 6). Proyectan un millón de contagios en ZMVM. *Reforma*. Retrieved from https://www.reforma.com/aplicaciones/articulo/default.aspx?id=2044183

Eje Central

Hernández, E. (2020, October 6). Proyectan hasta 112 mil muertes en el Valle de México. *Eje Central*. Retrieved from https://www.ejecentral.com.mx/proyectan-hasta-%E2%80%A8112-mil-muertes-en-el-valle-de-mexico/

Reforma

Sánchez, I. (2020, June 1). ¿Cuándo acabará?. *Reforma*. Retrieved from https://www.reforma.com/cuando-acabara-la-pandemia-de-covid-19/ar1955739?v=6

El Heraldo de México

Juárez, G & Sarmiento, S. (2020, May 18). Levantar restricciones en mayo generará pico de contagios en junio: Fernando Alarid. *El Heraldo de México*. Retrieved from https://heraldodemexico.com.mx/nacional/202 restricciones-en-mayo-generara-pico-de-contagios-en-junio-fernando-alarid-176929.html

El Universal

Méndez, O. (2020, May 9). Modelo SC-COSMO prevé cresta de dispersión el 21 de junio. *El Universal*. Retrieved from https://www.eluniversal.com.mx/nacion/modelo-cosmo-preve-cresta-de-dispersion-el-21-de-junio

Sin Línea Mx

Atarrabia, H. (2020, May 8). El libelo del New York Times. *Sin Línea Mx*. Retrieved from https://sinlineamx.com/el libelo-del-new-york-times/

Animal Político

Daen, A. (2020, May 5). 'Los vigilantes': expertos en datos evalúan la forma en que Salud ha informado sobre COVID-19 en México. *Animal Político*. Retrieved from https://www.animalpolitico.com/2020/05/salud-datos-pandemia-expertos-covid-coronavirus/

Publications-Statewide

LJA

Guzmán, A. (2020, December 22). Hospitalizaciones del 2021 dependen de lo que hagamos en las fiestas decembrinas. *LJA*. Retrieved from https://www.lja.mx/2020/12/hospitalizaciones-del-2021-dependen-de-las-fiestas-decembrinas/

El Heraldo de Aguascalientes

(2020, October 23). Se rompió el récord de decesos por día. *El Heraldo de Aguascalientes*. Retrieved from https://www.heraldo.mx/se-rompio-el-record-de-decesos-por-dia/

LJA

Rodríguez Loera, C. (2020, October 23). Modelo SC-COSMO presentó sus proyecciones sobre Covid-19 para Aguascalientes. *LJA*. Retrieved from https://www.lja.mx/2020/10/modelo-sc-cosmo-presento-sus-proyecciones-sobre-covid-para-aguascalientes/

El Diario de Aguascalientes

Rodríguez Loera, C. (2020, October 18). Mujeres en México tardan mucho en ser diagnosticadas de cáncer de mama. *El Diario de Aguascalientes*. Retrieved from https://www.eldiario.digital/2020/10/18/mujeres-en-mexico-tardan-mucho-en-ser-diagnosticadas-de-cancer-de-mama/?fbclid=IwAR0bVSEb-ChhRWMDkT6c2YLZzyJk

LJA

Rodríguez Loera, C. (2020, October 19). En México se diagnostica cáncer de mama tardíamente. *LJA*. Retrieved from https://www.lja.mx/2020/10/en-mexico-se-diagnostica-cancer-de-mama-tardiamente/

LJA

(2020, October 6). ¿Cuál es el futuro de la zona metropolitana del valle de México ante la pandemia de Covid-19?. *LJA*. Retrieved from https://www.lja.mx/2020/10/cual-es-el-futuro-de-la-zona-metropolitana-del-valle-de-mexico-ante-la-pandemia-de-covid-19/

LJA

Rodríguez Loera, C. (2020, August 29). Bajar la velocidad de contagios de covid-19 es aún muy importante: investigadores PADeCI. *LJA*. Retrieved from https://www.lja.mx/2020/08/bajar-la-velocidad-de-contagios-de-covid-19-es-aun-muy-importante-investigadores-padeci/

LJA

Rodríguez Loera, C. (2020, May 4). Se conforma en Aguascalientes el proyecto PADeCI con investigadores del CIDE. *LJA*. Retrieved from https://www.lja.mx/2020/05/se-conforma-en-aguascalientes-el-proyecto-padeci-con-investigadores-del-cide/

Television, Film and Radio

El Heraldo Noticias

Martín Mendoza, J. (2020, December 25). Profesor-investigador del CIDE, advirtió del próximo colapso en los hospitales de la Ciudad de México debido al #COVID19 *El Heraldo Noticias*. Retrieved from https://tinyurl.com/yd6f3z2b

El Financiero Bloomberg

Espinosa, F. (2020, December 24). ¿Qué le espera a México el próximo año en materia de contagios por COVID-19? *El Financiero Bloomberg*. Retrieved from https://www.elfinanciero.com.mx/tv/cobertura-especial-coronavirus-en-mexico/que-le-espera-a-mexico-el-proximo-ano-en-materia-de-contagios-por-covid-19

IMER Noticias

(2020, December 24). Capacidad hospitalaria del Valle de México sería rebasada tras fiestas decembrinas. *IMER Noticias*. Retrieved from http://noticias.imer.mx/blog/entrevista-capacidad-hospitalaria-del-valle-de-mexico-seria-rebasada-tras-fiestas-decembrinas/

Univisión

Espinosa, F. (2020, October 31). Un sombrío hito: México supera las 100,000 muertes por Covid-19 en medio de críticas a la gestión de AMLO y con un crudo invierno en puerta. *Univisión*. Retrieved from https://tinyurl.com/ybr3uw6n

Radio BI

Gutiérrez, R. (2020, October 31). Más allá de la noticia: nuevo semáforo COVID, estadísticas y medidas sanitarias. *Radio BI*. Retrieved from https://www.facebook.com/watch/?v=833683554112447

CNN en Español

Aristegui, C. (2020, August 17).Los factores que los gobiernos deberían considerar para una reapertura. *CNN en Español*. Retrieved from https://tinyurl.com/y9fz3e6n

UNO TV

Aristegui, C. (2020, May 13).Qué dicen los diversos modelos matemáticos sobre el coronavirus en México. *UNO TV*. Retrieved from https://www.unotv.com/noticias/portal/tecnologia/detalle/modelos-matematicos-sobre-el-coronavirus-en-mexico-868345/

CNN en Español

Aristegui, C. (2020, May 13). "Si México relaja la mitigación, tendríamos un repunte de casos de coronavirus", dice investigador. *CNN en Español*. Retrieved from https://cnnespanol.cnn.com/video/fernando-alardid-cide-medidas-confinamiento-covid19-amlo-semaforo-nueva-normalidad-mexico-aristegui/

Pensando en México

(2020, May 7). El momento de la epidemia: Tendencias y decisiones en los días críticos. *Pensando en México*. Retrieved from https://www.pscp.tv/PensandoEnMX/1lPJqVLvgWZxb?t=4s

MVS News

Vega, F. (2020, May 5). ¿Cuándo será el pico de contagios por Covid-19 en CDMX? *MVS News*. Retrieved from https://mvsnoticias.com/podcasts/en-directo-con-ana-francisca-vega/cuando-sera-el-pico-de-contagios-por-covid-19-en-cdmx/

Milenio TV

Alanís Zurutuza, E. (2020, May 4). Hemos creado un modelo que funciona a base de ecuaciones. *Milenio TV*. Retrieved from https://twitter.com/mileniotv/status/1257486384958304256?s=20

Milenio TV

Alanís Zurutuza, E. (2020, April 21). Elisa Alanís platica con el Dr. Fernando Alarid respecto al modelo de simulación que se está implementando en Stanford de coronavirus y su importancia en México. *Milenio TV*. Retrieved from https://twitter.com/mileniotv/status/1252778245793210373?s=20

References

Karen M. Kuntz, ScD
Professor
Division of Health Policy & Management
University of Minnesota School of Public Health
kmkuntz@umn.edu, (612) 625-9333

Jeremy D. Goldhaber-Fiebert, PhD
Professor
Centers for Health Policy/Primary Care and Outcomes Research
Stanford University
jeremygf@stanford.edu, (650) 721-2486

Shalini Kulasingam, PhD
Professor
Division of Epidemiology & Community Health
University of Minnesota School of Public Health
kulas016@umn.edu, (612) 624-7554

Thomas Trikalinos, MD, PhD
Professor
Departments of Health Services, Policy & Practice/Biostatistics
Brown University School of Public Health
thomas_trikalinos@brown.edu, (401) 863–6917