

# Ernesto Ulloa Pérez

Salvador Novo 133, Mexico City – 206-310-0340 – ulloae@uw.com

## Education

---

PhD, Biostatistics University of Washington, <i>Seattle, WA</i>	2022
BS, Applied Mathematics Instituto Tecnológico Autónomo de México (ITAM), <i>Mexico City</i>	2014

## Research Interests

---

Causal inference; propensity score methods; vaccine post-marketing safety studies; electronic health record data; science communication

## Research Experience

---

<b>Postdoctoral Fellow, University of Pennsylvania</b> .....	
Biostatistics, Epidemiology, and Informatics Department, <i>Philadelphia, PA</i>	2022–
<b>Research Assistant</b> .....	
Kaiser Permanente Washington Health Research Institute, <i>Seattle, WA</i>	2015–2021
Fred Hutchinson Cancer Research Center, <i>Seattle, WA</i>	Summer 2016, Summer 2018
National Institute of Genomic Medicine, <i>Mexico City</i>	2014–2015
National Cancer Institute of Mexico, <i>Mexico City</i>	2014–2015
Aalto University, <i>Espoo, Finland</i>	Summer 2012
<b>Statistical Consultant</b>	
Statistical Consulting Services, University of Washington, <i>Seattle, WA</i>	March-June 2018
<b>Statistical Analyst</b>	
United Nations Development Program, <i>Mexico City</i>	2011–2013

## Teaching Experience

---

- Teaching Assistant, University of Washington, Advanced Regression Methods for Independent Data. 2017
- Lecturer ITAM, Applied Statistics I: Exploratory Data Analysis and Sampling. *Fall, 2014 & Spring, 2015*
- Teaching Assistant, ITAM, Statistics Student Faculty. 2012-2013

## Research Publications

---

1. Gasca NC, Reyes-Garza J, Lozano-Esparza S, Orozco-del Pino P, Olivas-Martinez A, **Ulloa-Pérez E**, Garbuno-Inigo A, Arroyo J. Effect of Mexico's vaccination program on Covid-19 cases, hospitalizations, and deaths among older adults in Mexico City.
2. **Ulloa-Pérez**, Marco Carone, Alex Luedtke, Improved Matching via Augmented Propensity Score Estimation. *Manuscript in preparation (available upon request)*
3. Jennifer C. Nelson, **Ernesto Ulloa-Pérez**, Onchee Yu, Andrea J. Cook, Michael L. Jackson, Ed Belongia, et al. (2022) Active Post-Licensure Safety Surveillance for Recombinant Zoster Vaccine Using Electronic Health Record Data *Accepted for publication*
4. Yeung, Kai, and **Ernesto Ulloa**. (2021) Incentivizing Prescription Drug Switching to Reduce Patient and Health Plan Spending: A Microsimulation Model Value in Health. PMID: 35227455
5. **Ernesto Ulloa-Pérez**, R Blasi, Emily Westbrook, Paula Lozano, Katie F Coleman & R Yates Coley. (2021) Pragmatic randomized study of targeted text message reminders to reduce missed clinic visits. The Perma-

nente Journal. In press.

6. Jennifer C. Nelson, **Ulloa-Pérez**, Jennifer Bobb & Judith C Maro. (2019) Leveraging the entire cohort in drug safety monitoring: A review of sequential surveillance methods that use regression or weighting to control confounding in a rare event setting. *Journal of Clinical Epidemiology*. PMID: 31108199
7. Kaur, D., **Ulloa-Pérez**, E., Gulati, R., & Etzioni, R. (2018). Racial disparities in prostate cancer survival in a screened population: Reality versus artifact. *Cancer*. PMID: 29370459
8. **Ulloa-Pérez**, E., Mohar-Betancourt, A., & Reynoso-Noverón, N. (2016). Estimation of the Cost-Effectiveness of Breast Cancer Screening Using Mammography in Mexico Through a Simulation. *Rev Invest Clin*, 184-91. PMID: 27623037
9. Regional Human Development Report Citizen Security with a Human Face: Evidence and Proposals for Latin America 2013-2014, United Nations Development Program

## Presentations

---

1. Joing Statistical Meetings *Remote* *August 2021*  
Improved Matching via Augmented Propensity Score Estimation
1. ENAR Conference of the International Biometrics Society, *Remote* *March 2020*  
Improved Matching via Augmented Propensity Score Estimation
2. University of Washington, Department of Biostatistics Student Seminar, *Seattle, WA* *May 2019*  
Challenges that Arose while doing Collaboration as a Junior Statistician
3. HIV Vaccine Trials Network, *Seattle, WA* *August 2019*  
Updates on Statistical Analysis for HIV-1 Risk Prediction in KwaZulu-Natal via SuperLearner
4. WNAR Conference of the International Biometrics Society, *Portland, OR* *June 2019*  
Improved Matching via Augmented Propensity Score Estimation
5. Vaccine Safety Datalink Annual Meeting, *Denver, CO* *April 2019*  
Whole Cohort Methods for Vaccine Surveillance in a Multi-site Rare Event Setting
6. University of Washington, Department of Biostatistics Student Seminar, *Seattle, WA* *May 2019*  
Improved Matching via Augmented Propensity Score Estimation
7. University of Washington, Causal Inference Working Group, *Seattle, WA* *November 2018*  
Optimal Matching for Observational Studies
8. WNAR Conference of the International Biometrics Society, *Edmonton, CA* *June 2018*  
Assessing Propensity Score Methods in Rare Outcome & Exposure settings
9. Department of Biostatistics Stat-Northwest Conference *Seattle, WA* *January 2018*  
The Impact of Obesity on the Risk of Hospitalization

## Service

---

- Department of Biostatistics, University of Washington, *Seattle, WA* *Sept 2018-2021*  
Equity, Diversity & Inclusion Committee, Alumni Committee
- Stat-Northwest Conference in Biostatistics, *Seattle, WA* *April 2018*  
Invited Panelist
- International Conference of Health Policy Statistics, *Charleston, S.C.* *January 10-12 2018*  
Invited Session Chair:  
*Improving the Use of Propensity Score Methods in Large Health Care Databases with Rare Outcomes*
- Instituto Tecnológico Autónomo de México, *Mexico City* *2011-2013*  
Editor and Fundraiser, *Laberintos & Infinitos*  
Student-run mathematics magazine for the general public

## Science Communication

---

- Mexicans in Statistics and Health, *March 2020-Present*  
Founder and Member of a Science Communication Group

Publications:

1. Susana Lozano-Esparza, Pedro Orozco del Pino, Natalie Gasca, Antonio Olivas, Jesús Arroyo, **Ernesto Ulloa**, Alfredo Garbuno (2021) "Las vacunas: qué son? y podemos confiar en ellas?", Taller de Datos, Nexos
2. Natalie Gasca, Susana Lozano-Esparza, Jesús Arroyo, Antonio Olivas, **Ernesto Ulloa** y Pedro Orozco del Pino (2020) "Pruebas COVID, qué son y para qué sirven?", Taller de Datos, Nexos
3. **Ernesto Ulloa**, Jesús Arroyo, Natalie Gasca, Susana Lozano-Esparza, Antonio Olivas, Pedro Orozco-del-Pino (2020) "Descifrar el Modelo Centinela", Taller de Datos, Nexos
4. Martínez A, **Ulloa EJ**, Solís J, López RI. "Small Polygon with Maximum Area" *Laberintos & Infinitos*, 2013
5. **Ulloa EJ**, Usi M. "A Model for Diabetes Detection" *Laberintos & Infinitos*, 2011

## Scholarships & Awards

---

*Health Policy Statistics Section* 2021  
American Statistical Association,  
JSM Student Paper Competition Award

*Top Scholar Award* 2015  
UW Department of Biostatistics, *Seattle, US*.  
Recruitment award for promising applicants

*SISG Scholarship* 2014  
University of Washington, *Seattle, US*.  
Summer Institute in Statistical Genetics. Received funding for three courses

*PROBEI Scholarship* 2014  
Programa de Becas de Inicio a la Investigación, *Mexico City*  
Research stipend award

*CONACYT Scholarship* 2014  
Consejo Nacional de Ciencia y Tecnología, *Mexico City*  
Research assistant scholarship

*ASCI Internship* 2012  
University of Aalto, *Espoo, Finland*  
Received funding for research internship

## Software & Programming Skills

---

**Advanced:** R, LaTeX

**Intermediate:** Stata, MATLAB

**Basic:** Java, C++, Html, SAS, SPSS

Contributed to GPStuff MATLAB Toolbox

## Other Activities

---

- Memberships: American Statistical Association (ASA), Western North American Region International Biometric Society (WNAR)
- Semi-parametric Reading Group Organizer *Jan-June, 2019*
- Fluent in Spanish. Intermediate level in French. Enjoy running, hiking, playing soccer, and chess.