

Education

Stanford University, School of Medicine	
Ph.D. Health Policy , Decision Sciences track	2022 - (<i>expected 2027</i>)
Center for Research and Teaching in Economics (CIDE), Mexico	
M.Sc. Environmental Economics	2015 - 2017
Master's thesis: <i>Ex-ante</i> and <i>ex-post</i> willingness to pay for recreational services: the case of Aguascalientes, Mexico.	
Autonomous University of San Luis Potosi (UASLP), School of Engineering, Mexico	
B.S. Environmental Engineering	2008 - 2014
CentraleSupélec (formerly known as École Centrale Paris), France	
Engineer's Degree (Diplôme d'ingénieur) , double bachelor's degree program with UASLP	2011 - 2013

Research Experience

Stanford University, School of Medicine, Department of Health Policy	
Data analyst and modeler	Apr. - Jun. 2024
Performed analyses for publication, developed and validated mathematical models, and handled data extraction, cleaning, and visualization. This work was published in the Journal of the National Cancer Institute.	
Research project	
State-level disparities in cervical cancer prevention and outcomes in the United States.	
Supervisor: Fernando Alarid-Escudero, Ph.D.	
Data analyst	Jun. - Sep. 2023
Migrated data cleaning pipelines from Stata to R, ensuring consistency and integrity. Conducted exploratory and descriptive statistical analysis to identify trends and patterns.	
Research project	
Evaluation of the effects of SARS-CoV-2 Infection on elevated risks of incident diabetes mellitus and hypertension.	
Supervisor: Jeremy D. Goldhaber-Fiebert, Ph.D.	
Center for Research and Teaching in Economics (CIDE), Mexico	
Data analyst and modeler	Jul. 2020 - Jul. 2022
Conducted analyses for publication; employed and validated mathematical models; and performed data extraction, cleaning, and visualization.	
Research projects	
- Modeling the Covid-19 spread in Mexico using the SC-COSMO model.	
- Modeling HPV and cervical cancer in the U.S.	
Supervisor: Fernando Alarid-Escudero, Ph.D.	
Data analyst	Nov. 2017 - Oct. 2019
Conducted analyses for publication; performed data extraction, cleaning, and visualization.	
Research projects	
- Using stated preference responses to address endogeneity in the travel cost equation.	
- Quantifying the number of visits to green areas within the Mexico City Metropolitan Area.	
Supervisor: Adán L. Martínez Cruz, Ph.D.	
Survey designer	Jul. - Nov. 2017
Developed survey instruments in Survey To Go software and piloted surveys to assess their effectiveness.	
Research project	
Longitudinal Study of the Development of the Children of Aguascalientes (EDNA)	
Supervisor: Alfonso Miranda, Ph.D.	

Fellowships and Grants

Stanford Woods Institute Environmental Venture Projects	
Environmental Venture Projects Seed Grant	Oct. 2026 - Mar. 2028
<i>Project:</i> Anticipating and Mitigating the Population Health Impacts of Air Pollution: The Example of the Mexico City Metropolitan Area	
<i>Lead Principal Investigator:</i> Jeremy D. Goldhaber-Fiebert, Ph.D.	
<i>Role:</i> Graduate Research Assistant. Responsible for extending a multi-disease population modeling and calibration framework to incorporate fine particulate matter (PM _{2.5}) risks; run scenario analyses of future PM _{2.5} exposure and interventions; lead coordination with Mexican government partners on climate, air pollution, and population health.	

Stanford University, Stanford Impact Labs	
Emerging Scholars Fellowship	Jun. - Aug. 2026
Competitive fellowship for PhD students and postdocs supporting cross-sector, practice-engaged social science research.	
<i>Faculty Mentor:</i> Marissa B. Reitsma, Ph.D.	
<i>Project:</i> Reducing the Health Impacts of Air Pollution in Mexico City	
Secretariat of Science, Humanities, Technology and Innovation (Secihti), Mexico	
Graduate Scholarship for Study Abroad in Sciences and Humanities	2025 - 2027
Competitive scholarship awarded by the Mexican federal government based on academic excellence and research potential. Funding source for doctoral studies.	
U.S. - Mexico Commission for Educational and Cultural Exchange (COMEXUS)	
Fulbright-García Robles Program for Graduate Studies in the U.S. – Mexico	2022 - 2025
Highly competitive merit-based scholarship awarded by COMEXUS and the U.S. Department of State. Funding source for doctoral studies.	
National Council on Science and Technology (CONACyT), Mexico	
National Graduate Scholarship	2015 - 2017
Competitive scholarship based on academic merit. Awarded through institutional nomination by CIDE. Primary source of funding for master's studies.	
Campus France	
Eiffel Scholarship Program of Excellence	2011 - 2013
Highly competitive scholarship awarded based on academic excellence awarded through institutional nomination by CentraleSupélec. Primary source of funding for double bachelor's degree.	
Teaching and Mentoring Experience	
Stanford University, School of Humanities and Sciences, Center for Latin American Studies	
Peer Mentor	Sep. 2025 - Present
Provided personalized guidance to master's students and assisted in writing their theses and capstone research papers.	
Stanford University, School of Medicine, Department of Health Policy	
Teaching Assistant	
Collaborated with faculty members responsible for the course to prepare for class sessions, hold regular office hours, grade assignments, provide individual support to students, and lead additional teaching sessions.	
Graduate-level course	
Analysis of Costs, Risks, and Benefits of Health Care	Sep. - Dec. 2024
Math Camp Instructor	
Co-led teaching methods sessions and provided individual support to incoming PhD students.	Sep. 2024, 2025
Center for Research and Teaching in Economics (CIDE), Mexico	
Teaching Assistant	
Collaborated with faculty responsible for the course to prepare for class sessions, lead discussion sessions, develop class materials, grade assignments, and provide group and individual support to students.	
Graduate-level courses	
- Statistics	Aug. - Dec. 2021
- Microeconomics II	Jan. - Jun. 2020
- Econometrics I	Jan. - Jun. 2020
- Microeconometrics	Aug. - Dec. 2017, 2018
- Advanced Microeconomics for the Design of Environmental Policies	Aug. - Dec. 2017, 2018
Undergraduate-level course	
Introduction to Economics	Jan. - Jun. 2018
Instructor	
Delivered lectures; developed course materials, assignments, and evaluations; and provided group and individual support.	
Undergraduate-level course	
Topics in International Economics	Mar. - Jun. 2020
Workshop facilitator at the National Institute of Statistics and Geography (INEGI)	
Delivered lectures; developed course materials, assignments, and evaluations; and provided group and individual support.	
Professional-level course	
Statistics with R, Methods for Spatial Analysis	May. - Jun. 2019

Panamerican University (UP), Mexico

Instructor

Delivered lectures; developed course materials, assignments, and evaluations; and provided group and individual support.

Undergraduate-level courses

- Microeconomics
- Macroeconomics

Jan. - Jun. 2020
Aug. - Dec. 2019

Banking and Business School (EBC), Mexico

Instructor

Delivered lectures; developed course materials and assignments; and provided group and individual support.

Undergraduate-level courses

- Introduction to Economics
- Economic Theory

Feb. - Mar. 2020
Feb. - Mar. 2019

Professional Experience

Center for Environmental Studies, Services and Consulting (CESCA), Mexico

Project Engineer

Collected data and prepared environmental impact assessment reports for government compliance.

May. 2014 - Apr. 2015

Publications

Peer-reviewed publications

Gracia, V., Goldhaber-Fiebert, J.D., Alarid-Escudero, F*. (2026). PRE-CISE: A PRE-calibration Coverage, Identifiability, and SENSitivity analysis workflow to streamline model calibration, *Medical Decision Making*, in press. Pre-print available in medRxiv: <https://www.medrxiv.org/content/10.64898/2026.02.27.26346591>. (*Corresponding author).

Alarid-Escudero, F.*, **Gracia, V.**, Wolf, M., Zhao, R., Easterly, C.W., Kim J.J., Canfell, K., de Kok, I.M.C.M., Barnabas, R.V., Kulasingam, S. (2024). State-level disparities in cervical cancer prevention and outcomes in the United States: a modeling study. *JNCI: Journal of the National Cancer Institute*, djae298. DOI: 10.1093/jnci/djae298. (*Corresponding author).

Alarid-Escudero F.*, **Gracia V.**, Luviano A., Roa J., Peralta Y., Reitsma M.B., Claypool A.L., Salomon J.A., Studdert D.M., Andrews, J.R., Goldhaber-Fiebert J.D., SC-COSMO Modeling Consortium. (2021). Dependence of Covid-19 policies on end-of-year holiday contacts in Mexico City Metropolitan Area: A Modeling Study. *Medical Decision Making Policy & Practice*. DOI 10.1177/23814683211049249. (*Corresponding author).

Preprints

Martinez-Cruz A. L., Peralta, Y., **Gracia, V.** (2024). Using stated preference responses to address endogeneity in the single site travel cost equation. <https://www.researchgate.net/publication/384284977>

Alarid-Escudero, F., **Gracia, V.**, Luviano, A., Peralta, Y., Reitsma, M.B., Claypool, A.L., Salomon, J.A., Studdert, D.M., Andrews, J. R., Goldhaber-Fiebert, J.D. (2020). How do Covid-19 policy options depend on end-of-year holiday contacts in Mexico City Metropolitan Area? A Modeling Study. <https://www.medrxiv.org/content/10.1101/2020.12.21.20248597>

Chapters in books

Avila-Forcada, S., **Gracia-Olvera, V.**, and Martinez-Cruz A. L. (2023). "Disponibilidad de y visitas a áreas verdes en la Zona Metropolitana del Valle de México". In: Reyes Plata, J. (ed) *Infraestructura verde y sostenibilidad urbana. Contribuciones multidisciplinarias*. UNAM-Universidad Iberoamericana.

Manuscripts in preparation

Gracia, V., Salomon, J.A., Alarid-Escudero, F., Reitsma, M., Goldhaber-Fiebert, J.D. Modeling a Population's Lifetime Burden of Multiple Conditions: A Two-stage Calibration Framework with Partially Observed Data.

Gracia, V., Salomon, J.A., Alarid-Escudero, F., Reitsma, M., Goldhaber-Fiebert, J.D. From Population Dynamics to Individual-Level Policy Analysis: A Two-Model Framework.

Other publications

Gracia Olvera V., Alarid-Escudero F., on behalf of PADeCI. (04/01/2021). Evolución de la epidemia de COVID-19 en México y proyecciones de SC-COSMO (text in Spanish). *Animal Político*.

Gracia Olvera V., Alarid-Escudero F., on behalf of PADeCI. (10/24/2020). ¿Disminuimos la sana distancia en Aguascalientes? Proyecciones de SC-COSMO (text in Spanish). *Animal Político*.

Academic meetings and seminars

2026 Climate & Health Conference

Oct. 23, 2026

Oral presentation – Top Rated Abstracts

Mortality and morbidity effects of air pollution control in Mexico City

Co-authors: Goldhaber-Fiebert, J.D. and Reitsma, M.B.

46th Annual North American Meeting of the Society of Medical Decision Making	Oct. 2024
Oral presentation – Top Rated Abstracts	
A fast continuous-time calibration framework for multi-disease modeling with competing risks	
Co-authors: Goldhaber-Fiebert, J.D. and Alarid-Escudero, F.	
Poster – Lusted Student Prize Competition Finalist	
“Time travel” calibration: an approach to multi-cohort disease model calibration with partially observed target data	
Co-authors: Goldhaber-Fiebert, J.D. and Alarid-Escudero, F.	
45th Annual North American Meeting of the Society of Medical Decision Making	Oct. 2023
Poster	
Quantifying the health impacts of ambient air pollution mitigation strategies in Mexico City: a discrete-event simulation model analysis	
Co-authors: Goldhaber-Fiebert, J.D. and Alarid-Escudero, F.	
44th Annual North American Meeting of the Society of Medical Decision Making	Oct. 2022
Oral presentations	
- Regional heterogeneity and biased intervention effect estimates when modeling large epidemics	
- Sensitivity and identifiability analyses for efficient calibration of health policy models	
Co-authors: Goldhaber-Fiebert, J.D. and Alarid-Escudero, F.	
43rd Annual North American Meeting of the Society of Medical Decision Making	Oct. 2021
Oral presentation	
Comparison of national epidemics between a national-level model vs. state-specific aggregated epidemic models: does heterogeneity matter?	
Co-authors: Goldhaber-Fiebert, J.D. and Alarid-Escudero, F.	
42th Annual North American Meeting of the Society of Medical Decision Making	Oct. 2020
Oral presentation	
Policy comparison of Non-Pharmaceutical Interventions and re-opening in Mexico City, Mexico: using a near-term validated model to control COVID-19 epidemic peaks and rebounds	
Co-authors: Alarid-Escudero, F., Diaz, H., Luviano, A., Peralta, Y., Cardona Arias, J.M., Kunst, N., Fernández, M., and Goldhaber-Fiebert, J.D. on behalf of the SC-COSMO Modeling Consortium.	

Honors and Awards

Stanford University, School of Medicine	
Stanford Biosciences, ADVANCE Summer Institute	Jun.- Aug. 2022
Harvard T.H. Chan School of Public Health Executive and Continuing Professional Education	
Fellowship to attend Environmental Health Risk: Analysis and Applications (online course)	Mar. 2021
Society for Medical Decision Making (SMDM)	
SMDM Virtual Annual Meeting and Membership Grant	2020, 2021
Center for Research and Teaching in Economics (CIDE), Mexico	
Ranked first in the class 2015	2017
Autonomous University of San Luis Potosi (UASLP), Mexico	
- Graduated with highest honors	2014
- Students of Excellence (<i>Alumnos de Excelencia</i>): Award given to the highest GPA per class	2009, 2010, 2011

Languages

Natural
Spanish (native speaker), English (TOEFL iBT Score: 105 - Oct. 2021), French (fluent: 2 years immersion).

Programming
C++ (Novice), LaTeX (Advanced), MATLAB (Proficient), Python (Proficient), Qualtrics (Proficient), R (Advanced), Stata (Advanced), Survey To Go (Proficient).

Service

Institute for Computing in Research, USA	
Mentor	July 2023, 2024
Assisted and guided interns in a research project.	
Août Secours Alimentaire, France	
Assistant of the head of the distribution center	Aug. 2012
Managed the logistics of goods in the warehouse and maintained accurate inventory.	

References

Jeremy D. Goldhaber-Fiebert, Ph.D.

Professor of Health Policy, Stanford University

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Dissertation Advisor/Primary Advisor

Joshua A. Salomon, Ph.D.

Professor of Health Policy, Stanford University

Email: salomon1@stanford.edu

Dissertation Advisor

Marissa B. Reitsma, Ph.D.

Assistant Professor of Health Policy, Stanford University

Email: mreitsma@stanford.edu

Dissertation Advisor

Fernando Alarid-Escudero, Ph.D.

Assistant Professor of Health Policy, Stanford University

Email: falarid@stanford.edu

Dissertation Advisor

Alfonso Miranda, Ph.D.

Professor of Economics, Center for Research and Teaching in Economics

Director of the Program for Longitudinal Studies, Experiments and Surveys (PANEL)

Email: alfonso.miranda@cide.edu

Former Advisor