

DEMOGRAPHIC AND PERSONAL INFORMATION

Current appointment	Assistant Professor School of Industrial Engineering Pontificia Universidad Católica de Valparaíso (PUCV) Valparaíso, Chile	August 2021 - Present
	Assistant Professor (by courtesy) Operations Management and Business Analytics Johns Hopkins Carey Business School Baltimore, MD	July 2021 - Present
Personal data	diana.prieto@pucv.cl dprieto3@jhu.edu	http://dianaprietosanta.weebly.com
Languages	Spanish - Native language, English - Fluent	
Areas of Interest	Public health, education	
Education and training	University of South Florida , Tampa, FL, Ph.D., Industrial Engineering, 2011 University of South Florida , Tampa, FL, M.A., Statistics, 2010 Universidad Del Norte , Barranquilla, Colombia, M.Sc., Industrial Engineering, 2006 Universidad Del Norte , Barranquilla, Colombia, B.Sc., Industrial Engineering, 2003	
Professional experience	Assistant Professor Operations Management and Business Analytics Johns Hopkins Carey Business School Baltimore, MD	August 2017 - June 2021
	Assistant Professor Western Michigan University, Kalamazoo, MI Department of Industrial and Entrepreneurial Engineering & Engineering Management	August 2011 - August 2017
	Lecturer in Time Series Analysis Universidad Del Norte, Barranquilla, Colombia Department of Industrial Engineering	July 2009
	Research/teaching assistant University of South Florida, Tampa, FL Department of Industrial and Management Systems Engineering	Fall 2005 - Fall 2011
	Research assistant Universidad Del Norte, Barranquilla, Colombia Department of Mechanical Engineering	Spring 2004 - Spring 2005
	Teaching assistant Universidad Del Norte, Barranquilla, Colombia Department of Industrial Engineering	Spring 2003 - Spring 2005
	Industrial Engineering Intern Carbones del Cerrejon, La Guajira, Colombia Departments of Mining and Pre-mining	Jan 2002 - Jun 2002

PUBLICATIONS (Names of mentees are underlined)

Journal publications

1. O. Uthman, F. Lyngse, S. Anjorin, B. Hauer, S. Hakki, D. Martinez, Y. Ge, J. Jonnerby, C. Halle, G. Lin, A. Lalvani, J. Loss, K. Madon, L. Martinez, L. Meyer, K. Page, **D. Prieto**, A. Hayman, Y. Shen, J. Wurm, U. Buchholz, et al. Susceptibility and infectiousness of SARS-CoV-2 in children versus adults, by variant (wild-type, alpha, delta): A systematic review and meta-analysis of household contact studies. *PLoS ONE*, 2024; 19(9): e0306740. <https://doi.org/10.1371/journal.pone.0306740>
2. M. Soto, A. Carrasco, and **D. Prieto**. AGGFORCLUS: A hybrid methodology integrating forecasting with clustering to assess mitigation plans and contagion risk in pandemic outbreaks: the COVID-19 Case Study. *Journal of Business Analytics*, 2023; 6(3):217-242. <https://doi.org/10.1080/2573234X.2023.2251111>
3. R. Paul, D. Han, E. Dedoncker and **D. Prieto**. Dynamic downscaling and daily nowcasting from influenza surveillance data. *Statistics in Medicine*, 2022; <https://doi.org/10.1002/sim.9502>.
4. D. Martinez, E. Klein, C. Parent, **D. Prieto**, B. Bigelow, R. Saxton, K. Page. Latino Household Transmission of SARS-CoV-2. *Clinical Infectious Diseases*, 2021; <https://doi.org/10.1093/cid/ciab753>.
5. Y. Gu, R. VanEnk, R. Paul, S. Peters, E. Dedoncker, G. Stoltman, and **D. Prieto**. Accuracy of State-level Surveillance During Emerging Outbreaks of Respiratory Viruses: A Model-based Assessment. *Medical Decision Making*, 2021; 41(8):1004-1016. doi:10.1177/0272989X211022276
6. D. Martinez, H. Zhang, M. Bastias, F. Feijoo, J. Hinson, R. Martinez, J. Dunstan, S. Levin, and **D. Prieto**. Prolonged wait time is associated with increased mortality for Chilean waiting list patients with non-prioritized conditions. *BMC Public Health*, 2019 Feb 26; 19(1):233. doi: 10.1186/s12889-019-6526-6.
7. **D. Prieto**, M. Soto, R. Tija, L. Peña, L. Burke, L. Miller, K. Berndt, B. Hill, J. Haghseenas, E. Maltz, M. Atwood, and E. Norman. Literature review of data-based models for identification of factors associated with racial disparities in breast cancer mortality. *Health Systems*, 2018; DOI: 10.1080/20476965.2018.1440925.
8. M. Soto, **D. Prieto**, and G. Munene. A Bayesian network and heuristic approach for systematic characterization of radiotherapy receipt after breast-conservation surgery. *BMC Medical Informatics and Decision Making*, 2017 Jun 28;17(1):93. doi: 10.1186/s12911-017-0479-4.
9. **D. Prieto** and T. K. Das. An operational epidemiological model for calibrating agent-based simulations of pandemic influenza outbreaks. *Health Care Management Science*, 2016; 19,1-19, <https://doi.org/10.1007/s10729-014-9273-3>.
10. **D. Prieto**, A. Kumar, C. Kothari, and C Dickson. Systematic identification of coordination gaps in pediatric care. *Frontiers in Public Health Services and Systems Research*, 2016; 5(4):12-20. DOI: 10.13023/FPHSSR.0504.03.
11. E. Meisheri, **D. Prieto**, P. Holvenstot, and R. VanEnk. Preliminary evaluation of the disease surveillance system during influenza outbreaks of pandemic scale. *Frontiers in Public Health Services and Systems Research*, 2015; 4(3):37-44. DOI: 10.13023/FPHSSR.0403.01.
12. **D. Prieto**, T. K. Das, A. Savachkin, A. Uribe, R. Izurieta, and S. Malavade. A systematic review to identify areas of enhancements of pandemic simulation models for operational use at provincial and local levels. *BMC Public Health*, 2012 Mar 30;12:251. doi: 10.1186/1471-2458-12-251.
13. A. Uribe, A. Savachkin, T. K. Das, A. Santana, and **D. Prieto**. A predictive decision aid methodology for dynamic mitigation of influenza pandemics. Special issue on optimization in disaster relief, *OR Spectrum* (6 May 2011), pp. 1-36.

Original research (in review)

14. **D. Prieto**, D. Martinez, F. Pachano, F. Feijoo, R. Martinez, S. Datta, and C. Evans. Dissecting Socioeconomic Disparities in Lockdown Durations: a study of Metropolitan Santiago's staged

reopening amidst the pre-vaccine phase of the COVID-19 pandemic.

15. M. Soto, A. Carrasco-Pena, and **D. Prieto**. EpiForecaster: A Novel Deep Learning Ensemble Optimization Approach to Combining Forecasts for Emerging Epidemic Outbreaks.

Conference proceedings

16. G. Ostroy, **D. Prieto**, Y. Gu, E. Dedoncker and R. Paul. Flu MODELO 1.0: A Simulation Model and Graphic Interface for Training and Decision Support for Influenza Management. *IEEE International Conference on Bioinformatics and Biomedicine*, Kansas City, MO, November 2017.

17. B. Shekh, E. de Doncker, and **D. Prieto**. Hybrid multi-threaded simulation of agent-based pandemic modeling using multiple GPUs. *IEEE International Conference on Bioinformatics and Biomedicine*, Washington D.C., November 2015.

18. P. Holvenstot, **D. Prieto**, and E. Dedoncker. GPGPU Parallelization of a Self-Calibrating Agent-Based Influenza Outbreak Simulation. *High Performance Extreme Computing Conference (HPEC)*, 2014 IEEE , vol., no., pp.1-6, 9-11, September 2014.

19. M. Soto-Ferrari, P. Holvenstot, **D. Prieto**, E. Dedoncker, and J. Kapenga. Parallel programming approaches for an agent-based simulation of concurrent pandemic and seasonal influenza outbreaks. *Proceedings of the International Conference on Computational Science*, Barcelona, Spain, June 2013.

20. T. Fredericks, S. Butt, **D. Prieto**, J. Burns, K. Harms, K. Naumann, and D. Larson. Investigating vertical displacement within the aesthesiometric threshold of the thigh. *Proceedings of the 2012 Industrial and Systems Engineering Research Conference*, Orlando, FL, May 2012 .

21. **D. Prieto**, P. Rocha, W. Otieno, and T. K. Das. Work in progress - Developing elementary science teacher training modules based on doctoral research in engineering. *40th ASEE/IEEE Frontiers in Education Conference*, Washington, DC, October 2010.

22. A. Uribe, **D. Prieto**, A. Savachkin, T. K. Das, and Y. Zhu. A cross-regional pandemic outbreak simulation model: An aid to national resource allocation policy making. *Proceedings of the Third INFORMS Workshop on Data Mining and Health Informatics*, Washington, DC, October 2008.

Working papers

23. **D. Prieto**, B. Akinyele, D. Martinez, B. Koirala, S. Zakaria. Factors influencing cardiology consultation in the chilean public healthcare system.

24. **D. Prieto**, Y. Gu, D. Bartlett, E. Hsu, M. Dada. Teaching model based decision making for resource allocation using a pandemic simulation, a graphic user interface, and case-based instruction.

FUNDING

Research

extramural funding

Aug 2015 - Aug 2020

Sampling criteria for monitoring influenza emergencies under constrained testing capabilities
CMMI-1537379

National Science Foundation

Funding amount: \$199,646

Principal investigator

Aug 2015 - Aug 2020

REU Supplement: Sampling criteria for monitoring influenza emergencies under constrained testing capabilities
CMMI-1537379

National Science Foundation

Funding amount: \$5,000

Principal investigator

Research intramural funding Jul 2024 - Jul 2025
PUCV DI Centenario. The HEAT Project: Health, Energy and Transportation AI-aided for Smart Cities
Funding amount: \$55000
Co-Principal investigator

Jul 2023 - Dic 2023
Desarrollando habilidades de diagnóstico de problemas a partir de la colaboración con una institución de cuidado de adultos mayores
Social responsibility observatory - Pontificia Universidad Católica de Valparaíso
Funding amount: \$562
Principal investigator

Jan 2019 - June 2021
Feasibility of implementing of data-driven computational technologies to reduce waiting lists in a health delivery network for low-income patients in Chile
Johns Hopkins Carey Business School
Funding amount: \$4,000
Principal investigator

Jan 2018 - May 2018
Planning the implementation of data-driven computational technologies to reduce waiting lists in a health delivery network for low-income patients in Chile
Johns Hopkins Alliance for a Healthier World
Funding amount: \$25,000
Principal investigator

Jun 2015 - Jun 2016.
A fusion method to correct for the time and population resolution of influenza like illness trends
Interdisciplinary Research Initiative Award, WMU College of Arts and Sciences
Funding amount: \$5,000
Principal investigator(s): Rajib Paul, Diana Prieto
50% responsibility in the planning and execution of the grant

June 2013 - June 2014
Model-based detection of breast cancer treatment disparities
WMU Faculty, Research, and Creative Activities Award, WMU
Funding amount: \$9,689.
Principal investigator

Jan 2010 - Dec 2010
Novel dynamic data collection strategies for pandemic surveillance
The Graduate Student Challenge Grant, University of South Florida
Funding amount: \$5,000
Principal investigator

System innovation, quality improvement extramural funding Jan 2016 - Dec 2016
Jan 2015 - Dec 2015
2015 Green Manufacturing Industrial Consortium
FabriKal
Funding amount: \$25,000 (2015), \$25,000 (2016)
Principal investigator: David Meade
Co-Principal investigator - Provide expertise in data collection and analysis

May 2012 - June 2013
Cot Loading - Data Collection

Stryker Medical
Funding amount: \$58,550
Principal investigator: Tycho Fredericks
Co-Principal investigator

System innovation, quality improvement intramural funding Mar 2015 - Jul 2015
Identification of gaps in children care coordination using quality improvement techniques
WMU School of Medicine - W.K. Kellogg Foundation Racial Healing Planning Grant
Funding amount: \$19,911
Principal investigator, 50% responsibility in the execution of the grant

RECOGNITION

Invited lectures and seminar presentations

"Overview of current work related to health and health equity,". Multisectoral Modeling Consortium, online, March 15, 2024.

"Analytic tools to support population health decisions,". Data science for the support of medical interventions and health management, Hospital Biprovincial Quillota-Petorca, Quillota, Chile, March 1, 2024.

"Towards fair social distancing in Santiago de Chile: Assessing association of socioeconomic factors with COVID-19 lockdown duration,". Innovation for Health and Development (IFHAD) research group meeting, online, September 26, 2023.

"Evaluating and correcting accuracy in pandemic incidence data,". Research seminar, Universidad Adolfo Ibañez, Viña Del Mar, Chile, July 7, 2023.

"Socioeconomic markers of longer lockdown periods post COVID-19 emergence in the Santiago Metropolitan Region,". Industrial Engineering Research seminar, Pontificia Universidad Católica de Valparaíso, Valparaíso, Chile, June 8, 2023.

"Analytic tools to support population health decisions,". Simposio de Ingeniería en salud, Hospital Gustavo Fricke, Viña Del Mar, Chile, October 12, 2022.

"Model based evaluation of surveillance system biases during emerging respiratory outbreaks,". Industrial Engineering Research seminar, Pontificia Universidad Católica de Valparaíso, Valparaíso, Chile, June 2, 2022.

"Accuracy of state-level surveillance during emerging outbreaks of respiratory viruses: A model-based assessment," Industrial Engineering Research seminar, Pontificia Universidad Católica de Valparaíso, Online, March 3, 2021.

"Is what we observed what really happened? Surveillance systems from the biases of reported influenza data during an emergent outbreak," Pandemic Prediction and Forecasting Science and Technology Workgroup, National Science and Technology Council, Online, October 8, 2019.

"Is what we observed what really happened? Surveillance system effects from the biases of reported influenza data during an emergent outbreak," Course on secondary uses of EHR data, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, September 25, 2019.

Innovations for Humanity and Responsible Supply Chains. Thinkers Speaker Series, *Office of Trade and Labor, Committee on Business Engagement, U.S. Department of Labor*, Washington, DC, January 22, 2019.

Speeding up a pandemic simulation model for emergency response. High Performance Computational Science (CTC/HPCS) Workshop, *CUDA Teaching Center, WMU College of Engineering*, Kalamazoo, MI, August 28, 2013.

Flu epidemic modeling. A Computational Science Seminar, *WMU College of Engineering*, Kalamazoo, MI, November 2012.

Operational modeling of emerging viral infectious diseases. Providing Better Healthcare Through Systems Engineering: Seminars and Discussions, Center for Healthcare Engineering and Patient Safety (CHEPS), *University of Michigan*, Ann Arbor, MI, September 2012.

A viral count driven calibration approach for simulation models of concurrent pandemic and seasonal influenza outbreaks. Analysis Seminar, *WMU Department of Mathematics*, Kalamazoo, MI, February 2012.

A viral count driven calibration approach for simulation models of concurrent pandemic and seasonal influenza outbreaks. 2011 Statistics Colloquium, *WMU Department of Statistics*, Kalamazoo, MI, September 2011.

Surveillance systems of population health. Great Lakes International Symposium: Interdisciplinary Research in Data Science , *Western Michigan University*, Kalamazoo, MI, February 16, 2016.

RESEARCH ACTIVITIES

Research focus Public Health Operations

Research program Jun 2012 - Aug 2017

building/leadership Founded and took leadership of the **Health Systems Decision Support Laboratory**
The lab used to provide engineering solutions that improve the operations of public and individual health systems. Services included applied operations research and data analytics. The lab sustained collaborations with regional members of the healthcare and public health community, including the Bronson Hospital, WMU Homer Stryker M.D. School of Medicine, West Michigan Cancer Center, Kalamazoo County Health and Community Services, and Michigan Department of Health and Human Services.

QUALITY IMPROVEMENT ACTIVITIES

Quality improvement focus Provide statistically based assessments of the performance of systems and processes.

Quality improvement efforts Summer 2015
WMU STEM Talent Expansion Program (STEP), Kalamazoo, MI
Identification of factors that affect academic performance of STEP students

Summer 2014, Summer 2015
WMU Department of Civil Engineering
Statistical consulting for the grants:
“Evaluation of Michigan’s engineering improvements for older drivers”
awarded by the Michigan Department of Transportation
“Remote monitoring of fatigue sensitive details on bridges”
awarded by the Michigan Department of Transportation

Spring 2004 - Spring 2005
Department of Mechanical Engineering, Universidad Del Norte, Barranquilla, Colombia.
Developed a time-series based algorithm for the monitoring and control of natural gas pressures
Implemented the algorithm in the regional gas distribution company (PROMIGAS)
Train the PROMIGAS process engineer in the use of the algorithm

TEACHING ACTIVITIES

Educational focus Operations Research

Teaching

Classroom instruction

Graduate courses taught at Pontificia Universidad Católica de Valparaíso

Date	Course	Students
Fall 2024	Independent study	1 student
Fall 2023	Design of Experiments	3 students
Fall 2023	Independent study	1 student

Undergraduate courses taught at Pontificia Universidad Católica de Valparaíso

Date	Course	Students
Spr 2024	Simulation	35 students
Fall 2023	Simulation	38 students/period
Fall 2023	Capstone project	3 students
Spr 2023	Simulation	78 students
Fall 2022	Simulation	27 students

Graduate courses taught at Johns Hopkins University

Date	Course	Students
Spring II 22	Business Analytics	25 students
Spring I 22	Operations Management	25 students
Spring II 21	Data Analytics	96 students
Spring I 21	Statistical Analysis	117 students
Spring I 20	Data Analytics	140 students
Fall II 19	Business Analytics	93 students
Fall I 19	Statistical Analysis	139 students
Spr I 19	Data Analytics	195 students
Fall II 18	Decision Models	88 students
Fall I 18	Statistical Analysis	136 students
Sum I 18	Data Analytics	48 students
Spr I 18	Data Analytics	142 students
Fall II 17	Decision models	109 students
Fall I 17	Statistical Analysis	125 students

Guest lectures at the graduate level taught at Johns Hopkins University

Date	Course	Students
Spring II 21	Introduction to Public Health Preparedness (Masters in Public Health)	24 students
Spring I 20	Fundamentals of Healthcare Operations	32 students
Spring I 20	Introduction to Public Health Preparedness (Masters in Public Health)	46 students
Spring I 20	Analysis of Healthcare Operations	8 students

Graduate courses taught at Western Michigan University

Date	Course	Students
Spr/Sum/Fall 15, Spr 16	Doctoral Dissertation in Industrial Engineering	1 student/period
Spr 14/15/16, Fall 14/15	Design of Experiments & Regression Analysis	30 students/period
Sum I 14	Masters thesis in Computer Science	1 student
Sum I 13, Fall 14, Spr 15	Independent Study in Industrial Engineering	1 student/period
Sum II 13/14	Independent Research in Computer Science	1 student/period
Sum II 12/14	Independent Study in Computer Science	1 student/period

Undergraduate courses taught at Western Michigan University

Date	Course	Students
Spr 15/16	Statistical Quality Control	11 students/period
Spr 15/16	Probability for Engineers	11 students/period
Spr 12/13/14/15/16	Probability and Quality for Engineers	9-28 students/period
Spr 12	Research in Computer Science	1 student
Fall 11/12/13/14, Sum 13/14/15	Engineering Statistics	185 student/period

Mentoring

Faculty Mentees

Date	Name	Appointment
Spr 22	Felipe Pachano	Online Professor
Fall 19 - Fall 20	Naser Nikandish	Assistant Professor, Operations Management and Business Analytics, JHU Carey School of Business
Fall 18 - Fall 19	Mohammad Alamdar Yazdi	Assistant Professor, Operations Management and Business Analytics, JHU Carey School of Business

Pre-doctoral Advisees/Mentees (see section "publications" for complete reference by number)

Date	Name	Degree	Awards	Publications
Fall 23 -	Maximiliano Valenzuela	B.Sc. Ind Eng		
Fall 23 -	Ignacia Vega	B.Sc. Ind Eng		
Fall 23 -	María Basualto	B.Sc. Ind Eng		
Spr 23 -	Diego Sánchez	M.P.S. Ind Eng		
Spr 20	Matthew Zhao	B.Sc. Biomed Eng		
Fall 19 - Spr 20	Nafisa Amir	M.Sc. Comp Sci		
Spr 18	Jingwen Shao	M.Sc. Real State		
Spr 16 -	Gregory Ostroy	BSc. Comp Sci	NSF REU	16
Fall 15 - Spr 16	Riley Martell	High School		
Fall 15 - Spr 16	Boemin Park	High School		
Spr 15 -	Mangesh Yoshi	M.Sc. Ind. Eng		
Spr 15 - Spr 19	Yuwen Gu	Ph.D. Ind. Eng	2018 Dept. Award	5,16
Fall 14 - Spr 15	Grant Lukjan	B.Sc. Ind. Eng		
Fall 14 - Spr 15	Darwin Haines	B.Sc. Ind. Eng		
Fall 14 - Spr 15	R. De La Paz	B.Sc. Ind. Eng		
Fall 14 - Spr 15	Luke Bednarczyk	B.Sc. Ind. Eng		
Spr 13 - Sum 14	Lorena Pena	B.Sc. Ind. Eng		7
Fall 12 - Spr 17	Milton Soto	Ph.D. Ind. Eng	Colciencias scholarship 2016 Dept. award 2016 University award K. Knight Scholarship	7, 8, 19, 2, 15
Fall 12 - Spr 15	Eric Meisheri	M.Sc. Ind. Eng		
Sum 12	Jacob Hill	B.Sc. Ind. Eng		
Sum 12	Elias Javier	B.Sc. Ind. Eng		
Sum 12 - Fall 13	Rindy	B.Sc. Chem Eng		7
Spr 12	Evan Maltas	B.Sc. Ind. Eng		
Spr 12	Dustin Youtsis	B.Sc. Ind. Eng		
Spr 12	Robert Buelke	B.Sc. Comp Sci		
Spr 12 - Sum 14	Peter Holvenstot	M.Sc. Comp Sci	2014 University award	11,18,19

Thesis committees

Fall 22 -	Francisco Flores	Ph.D. Ind. Eng	Committee member
Fall 17 - Spr 19	Yuwen Gu	Ph.D. Ind. Eng	Committee member
Fall 17	Bajel Al Shadeedi	MSc. Industrial Engineering	Committee member
Spr 15	Nolen Akerman	Ph.D. Engineering Management	Committee member
Sum 15	Lussani Acosta	MSc. Civil Engineering	Committee member
Sum 15	Barzan Shekh	MSc. Computer Science	Committee member
Spr 15	Benjamin Binoniemi	MSc. Industrial Engineering	Committee member
Fall 13	Ling Kit Kong	MSc. Civil Engineering	Committee member

Educational Program Building

Date	Role - % effort	Education Program	Explanatory notes
2023	Design, implementation - 100 %	Design of Experiments	A semester course to prepare PhD, masters, and advanced undergraduate students
2013	Design, implementation - 70 %	Probability for Engineers	Half a semester course in replacement of a whole semester course titled "Probability and quality for Engineers"
2013	Design, implementation - 70 %	Statistical Quality Control	Half a semester course in replacement of a whole semester course titled "Probability and quality for Engineers"
2012	Design, implementation - 100 %	Statistics and Evidence-based Medicine	Half a day workshop for orthopedic surgery residents from the Kalamazoo Center for Medical Studies

SCHOOL AND PROFESSIONAL SERVICE

Institutional administrative appointments	Date	Role	Committees	Explanatory notes
	Jun 2022 - Mar 2024	Member	Doctoral Body	PUCV School of Industrial Engineering
	Fall 2019 -	Member	Academic Ethics Board	JHU Carey School of Business
	Fall 2018 -	Member	Curriculum subcommittee - Operations Management and Business Analytics	JHU Carey School of Business
	Spr 2018	Member	Search Committee for Practice Track Faculty	JHU Carey School of Business
	Sum 2016	Member	Strategic Planning Committee for Graduate Education	WMU college of engineering
	Fall 2012 -	Member	Grade and Program Dismissal Appeal Committee	Office of the Ombudsman, Western Michigan University
	Fall 2011 -	Member	Healthcare engineering initiative	WMU college of engineering

Advisory committees, review groups, Meetings	Date	Role	Sponsor/organization/group
	March 2024	Organizer and presenter	Symposium at Hospital Biprovincial Quillota-Petorca
	Jun 2023 -	Chair	Steering committee of the Models of Infectious Disease Agent Study (MIDAS) network
	Fall 2020	Liaison	Explore experiential learning opportunity with DYA (a Latin American NGO dedicated to implement programs to eliminate dangerous child labor)
	Summer 2020	Participant	Committee producing the outline of the "Crisis Management" master class
	Nov 2019	Participant	Meeting with Richard Larson (MIT Sloan School of Management)
	Oct 2019	Host at JHU Carey School of Business	Invited guest from the Chilean Ministry of Health
	Mar 2019	Observer	Faculty peer class observation initiative, JHU Carey School of Business
	Mar 2019	Speaker	Lunch and Learn meeting with the staff at the JHU Carey School of Business
	Nov 2018	Presenter	I4H workshop, JHU Carey School of Business
	Oct 2018	Participant	Meeting with the Office of Child Labor, Forced Labor and Human Trafficking, Bureau of International Labor Affairs, U.S. Department of Labor
	Oct 2018	Host at JHU Carey School of Business	Meeting with DYA representatives
	Oct 2018	Host	Invited speaker at QBESS seminar
	Aug 2018	Presenter	Faculty Panel for the Masters of Science in Business Analytics and Risk Management, JHU Carey School of Business
	May 2018	Participant	Hopkins Health, Labor, Education, and Development Economics Conference
	Confidential	Reviewer and member	Proposal review panel, National Science Foundation
	Spr 2011 - Spr 2012	Participant	National workgroup for "Identifying key components of a successful operational epidemiological modeling process", organized by Yale New Haven Health Center for Emergency Preparedness and Disaster Response and the US Northern Command

Journal peer review activities	Date	Journal name
	Mar 2020	IIE Transactions in Healthcare
	Jun 2015	BMC Public Health journal
	Jun 2013	IIE Transactions in Healthcare
	Jun 2013	DYNA
	Jun 2013	Proceedings of the International Conference on Computational Science

Proposal peer review activities	Date	Proposal name
	2023	Fondecyt regular Chile
	2022	Fondecyt regular Chile
	2015	National Science Foundation

Professional societies

Models of Infectious Disease Agent Study (MIDAS) Network
Pandemic Prediction and Forecasting Science and Technology Group
Institute for Operations Research and Management Sciences (INFORMS)
Industrial Engineering Honor Society, Alpha Pi Mu

Session chair	Date	Sponsor/organization/group	Session title
	Nov 2015	INFORMS Conference	Health policy
	May 2012	IIE Conference	Disease modeling and surveillance

PROFESSIONAL DEVELOPMENT

Training

Teaching

Date	Role	Activity	Explanatory notes
Aug - Dec 2022	Student	Diplomado en docencia universitaria	PUCV
Jan 2020	Student	Best Practices in University Teaching	Johns Hopkins University
Mar 2019	Student	Case study workshop	Johns Hopkins Carey School of Business
Jul 2018	Observed in class	Faculty peer class observation initiative	Johns Hopkins Carey School of Business

OTHER PROFESSIONAL ACCOMPLISHMENTS

Conference and poster presentations

Research

D. Prieto, D. Martinez, F. Pachano, F. Feijoo, R. Martinez, S. Datta, C. Evans, "Socioeconomic markers of longer lockdown periods post COVID-19 emergence in the Santiago Metropolitan Region," *IFORS Conference*, Santiago, Chile, July 11 2023).

D. Prieto "Data and Models for Decision Making in Pandemic Outbreaks," *PUCV Faculty of Engineering Research Seminar*, Valparaíso, Chile, June 2022.

D. Prieto, Y. Gu "Is what we observed what really happened? Surveillance systems from the biases of reported influenza data during an emergent outbreak," *INFORMS Healthcare*, Boston, MA, July 2019).

D. Prieto "Factors Influencing the Mortality Outcomes in Patients Waiting for New Specialty Cardiology Consultation in Chile, South America" *INFORMS Healthcare*, Boston, MA, July 2019).

Y. Gu, D. Prieto, Assessing accuracy of influenza incidence characterization during an emergency. *INFORMS Annual Meeting*, Houston, TX, October 2017).

M. Soto, D. Prieto. Data Driven Monitoring of Medical Recommendations for Breast Cancer Treatment. *INFORMS Annual Meeting*, Philadelphia, PA, November 2015.

M. Soto, D. Prieto, E. Norman, L. Burke, and J. Mirro. Assessing treatment disparities in breast cancer patients. WMU Research and Creative Activities Poster Day, Kalamazoo, MI, April 2015.

D. Prieto. Factors Influencing Healthcare Disparities in Breast Cancer Patients: A Review. *INFORMS Annual Meeting*, San Francisco, CA, November 2014.

E. Meisheri, P. Holvenstot, D. Prieto, and R. VanEnk. Impact of the Disease Surveillance System in Epidemiologic Characterization of Pandemic Outbreaks. *INFORMS Annual Meeting*, San Francisco, CA, November 2014.

M. Soto, L. Pena, and D. Prieto. Bayesian Network Detection of Breast Cancer Disparities. *INFORMS*, San Francisco, CA, November 2014.

M. Soto, D. Prieto, and Rindy. Understanding interactions among factors influencing treatment disparities in breast cancer patients. *INFORMS Healthcare 2013*, Chicago, IL, Summer 2013.

E. Meisheri, D. Prieto, and P. Holvenstot. Impact of the disease surveillance system in the epidemiologic characterization of pandemic outbreaks *INFORMS Healthcare 2013*, Chicago, IL, Summer 2013.

D. Prieto. Operational modeling of pandemic and endemic influenza outbreaks *INFORMS Healthcare 2013*, Chicago, IL, Summer 2013.

D. Prieto and T. K. Das. Calibrating epidemiological parameters of influenza simulation models in

short decision cycles. *INFORMS Annual Meeting* conference, Phoenix, AZ, October 2012.

D. Prieto and T. K. Das. A real-time policy to select specimens for lab confirmatory testing during pandemic influenza outbreaks *IIE*, Orlando, FL, May 2012.

D. Prieto and T. K. Das. A testing strategy of influenza-like illness specimens for real-time characterization of pandemic outbreaks *INFORMS Annual Meeting*, Charlotte, NC, November 2011.

D. Prieto, S. Malavade, A. Santana, T.K. Das, and A. Savachkin. Real-time data collection strategies for pandemic outbreaks. *2010 Centers for Disease Control and Prevention (CDC) Conference "Modeling for public health action: from epidemiology to operations"*, Atlanta, GA, December 2010.

D. Prieto, T. K. Das, S. Malavade, A. Santana, and A. Savachkin. Models for public health crisis management during a pandemic. *INFORMS*, Austin, TX, November 2010.

D. Prieto, T. K. Das, A. Savachkin, and A. Uribe. Real-time applicability of pandemic modeling approaches. *INFORMS*, San Diego, CA, October 2009.

A. Uribe, D. Prieto, A. Savachkin T. K. Das, and Y. Zhu. A cross-regional pandemic outbreak simulation model: An aid to national resource allocation policy making. *Third INFORMS Workshop on Data Mining and Health Informatics*, WA, DC, October 2008.

A. Savachkin, T. K. Das, D. Prieto, and A. Uribe. A simulation-based optimization model for dynamic resource utilization at federal and local levels during cross-regional pandemic outbreaks. *INFORMS*, Seattle, WA, November 2007.

Educational

D. Prieto, P. Rocha, W. Otieno, and T.K. Das. Work in progress - Developing elementary science teacher training modules based on doctoral research in engineering. *40th ASEE/IEEE Frontiers in Education Conference*, Washington, DC, October 2010.

D. Prieto, V. Nanduri, W. Otieno, J. Fuentes, C. Leacock, and J. Kemp. STARS Mentor teacher workshops in collaboration with the Hillsborough School District in Tampa FL. *Annual NSF GK-12 Conference*, Washington, DC, April 2009.

D. Prieto, V. Nanduri, W. Otieno, J. Fuentes, C. Leacock, J. Kemp, and T. K. Das. Train the trainers: STARS mentor teacher workshops. Poster presentation, *Annual NSF GK-12 Conference*, Washington, DC, April 2009.

D. Walker, J. Weber, V. Nanduri, D. Prieto, and T. K. Das. Building the foundations of nanotechnology: From the classroom to the laboratory. Poster presentation, *Annual NSF GK-12 Conference*, Washington, DC, March 2008.