PABLO VALDES-DONOSO

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SUMMARY

I am a researcher with over ten years of experience working across different production systems. I work to improve animal health and the sustainability of food production through robust data collection and analysis. My research focuses on understanding how economic incentives can affect animal, human, and environmental health.

EDUCATION

University of California, Davis – Davis, CA

- PhD in Epidemiology – Emphasis in Health Economics 2017
- MSc in Agricultural and Resource Economics 2017
- Master in Preventive Veterinary Medicine (MPVM) 2012

Universidad de Chile – Santiago, Chile

- Doctor of Veterinary Medicine 2007

SKILLS

- Statistical analytical experience: machine learning, network analysis, observational study design, regression models, linear optimization, longitudinal analysis, spatial and temporal analyses, system dynamics, time series, game theory
- Program languages: ArcGIS, Pandas, Python, R, SQL, Stata, Stella
- R packages: deSolve, igraph, lattice, lme4, map, nlme, randomForest, raster, rgdal, rgeos, sf, stpp, TTR, etc.

ACADEMIC WORK EXPERIENCE

Assistant Professor – Université de Montréal. St-Hyacinthe, QC 2022 – now

- I conduct research on how to promote animal health and sustainability of food production by combining epidemiology and economics with artificial intelligence (AI) tools

Postdoctoral Scholar – UC Agricultural Issues Center. Davis, CA 2017 – 2019

- Specified cost structure and evaluated economic challenges of cannabis testing protocols imposed by new food safety regulations in California
- Contributed on evaluating the economic and environmental impacts of using by-products as feed for dairy livestock in California
- Contributed on quantifying the capital, operational, and maintenance costs of alternative manure management practices to evaluate the economic effects of greenhouse gas reduction policies on dairy farms in California
- Used large, longitudinal datasets collected by the California Department of Food and Agriculture to assess spatial and temporal variation in costs and productivity across dairy farms in California

Graduate Researcher – UC Davis One Health Institute. Davis, CA 2016 – 2017

- Acquired data from online repositories to identify the spatial and temporal distribution of and factors associated with zoonotic diseases in South America as part of the USAID PREDICT project

Graduate Student Researcher – UC Davis. Davis, CA 2015 – 2016

- Used a disaggregated disease diffusion model to estimate public and private economic optima for the adoption of strategies to control porcine reproductive and respiratory syndrome (PRRS), an endemic swine disease, within a region in the US
- Used spatial and network data to create a disaggregated disease diffusion model to emulate an outbreak of PRRS between farms in Minnesota
- Used data from Midwestern sow farms to estimate the economic damage caused by an outbreak of PRRS
- Used machine learning techniques to predict animal movements between swine facilities located throughout a large region of the US
- Used time series and regression analyses to evaluate how the incidence of PRRS is influenced by farmer enrollment and participation in a voluntary program to control that disease in Minnesota

Research Specialist – University of Minnesota. St. Paul, MN 2014 – 2015

- Paired data from swine farms with a long-term dataset collected by the Morrison Swine Health Monitoring Program to evaluate the spatial and temporal patterns of and risk factors related to PRRS
- Taught graduate level courses on animal health economics

NON-ACADEMIC WORK EXPERIENCE

Health Data Scientist – ECTO Inc. Atlanta, GA 2019 – 2021

- Constructed predictive models to forecast the feed demand of the Chilean salmon industry
- Worked on predictive models to forecast the growth distribution of farmed salmon to help optimize production
- Used satellite data to assess the spatial and temporal risks of harmful algae blooms and amoebic gill disease to salmon farming operations
- Work on the design of a traceability module from raw materials incorporated in salmon diets to production performance and fillet quality
- Connected business questions with statistical analyses of available data to aid decision-making among salmon producers (e.g., finding optimal stocking and harvesting periods, using different prophylactic strategies)
- Contributed to data architecture and user interface development

Independent Consultant 2012 – 2015

- Combined datasets on salmon health and production with data from the Chilean salmon farming industry to estimate the risk of transmitting infectious diseases to export markets
- Evaluated production flows of a commercial live Nodavirus vaccine to estimate the risk of a Nodavirus spillover event from labs to salmon farms across Chile
- Used a disease transmission model to evaluate costs and benefits of disinfecting tributaries and effluents of all salmonid hatcheries in Chile

Veterinarian – National Fisheries Service. Valparaiso, Chile 2008 – 2010

- Used data on farmed salmon health and production to evaluate the effects of new regulations on high-risk disease control
- Led the national control program for sea lice and salmon infectious anemia, high-risk diseases affecting Chilean salmon production
- Created an electronic system to collect and analyze information from salmon farms distributed across Chile

Veterinarian – MOWI. Chiloé Island, Chile 2007

- Supervised salmon health, welfare, and productive output at seawater salmon farms
- Designed preventive and control strategies to enhance salmon health and welfare

Veterinary Technician – Fjord Seafood. Puerto Montt, Chile 2006

- Analyzed information from all company farms and delivered bi-monthly reports on animal health and production

PEER-REVIEWED PUBLICATIONS

1. **Valdes-Donoso, P.**, Sumner, D. A., and Goldstein, R. S. 2020. "Costs of cannabis testing compliance: Assessing mandatory testing in the California cannabis market". *Plos One*, doi: 10.1371/journal.pone.0232041
2. Lehman, B., Johnson, R., Foott, S., Som, N. A., Burgess, O., Adkison, M., Miller, K., Hallet, S., Purcell, M., Martínez-López, B., Connon, R., Fangue, N., **Valdes-Donoso, P.**, and Collins, A. L. 2020. "Disease in Central Valley Salmon: Status and Lessons from Other Systems". *Journal of San Francisco Estuary and Watershed Science 18*, doi: 10.15447//sfews.2020v18iss3art2
3. **Valdes-Donoso, P.**, Sumner, D. A, and Goldstein, R. S. 2019. "Costs of mandatory cannabis testing in California". *Calif Agric.* 73: 154–160. doi:10.3733/ca.2019a0014
4. **Valdes-Donoso, P.**, Alvarez, J., Jarvis, L. S., Morrison, R. B., and Perez, A. M. 2018. "Production Losses from an endemic animal disease: Porcine Reproductive and Respiratory Syndrome (PRRS) in Selected Midwest US Sow Farms". *Frontiers in Veterinary Science 5,* doi:10.3389/fvets.2018.00102
5. **Valdes-Donoso, P.**, VanderWaal, K., Jarvis, L. S., Wayne, S. R., and Perez, A. M. 2017. "Using Machine Learning to Predict Swine Movements within a Regional Program to Improve Control of Infectious Diseases in the US". *Frontiers in Veterinary Science 4,* doi:10.3389/fvets.2017.00002
6. Vilalta, C., Arruda, A. G., Tousignant, S. J. P., **Valdes-Donoso, P.**, Muellner, P., Muellner, U., Alkhamis, M. A., Morrison, R. B., and Perez, A. M. 2017. "A Review of Quantitative Tools Used to Assess the Epidemiology of Porcine Reproductive and Respiratory Syndrome in U.S. Swine Farms Using Dr. Morrison's Swine Health Monitoring Program Data". *Frontiers in Veterinary Science 4,* doi: 10.3389/fvets.2017.00094
7. **Valdes-Donoso, P.**, Jarvis, L. S., Wright, D., Alvarez, J., and Perez, A. M. 2016. "Measuring Progress on the Control of Porcine Reproductive and Respiratory Syndrome (PRRS) at a

Regional Level: The Minnesota N212 Regional Control Project (RCP) as a Working Example". *Plos One 11, e0149498, doi:10.1371/journal.pone.0149498*

8. Alvarez, J., **Valdes-Donoso, P.**, Tousignant, S., Alkhamis, M., Morrison, R., and Perez, A. 2016. "Novel analytic tools for the study of porcine reproductive and respiratory syndrome virus (PRRSv) in endemic settings: lessons learned in the U.S". *Porcine Health Management 2, doi:10.1186/s40813-016-0019-0*
9. Jarvis, L. S. and **Valdes-Donoso, P**. 2015. "A Selective Review of the Economic Analysis of Animal Health Management". *Journal of Agricultural Economics, 1-25, doi:10.1111/1477-9552.12131*
10. Perez A., Davies P., Goodell C., Holtkamp D., Mondaca E., Poljak Z., Tousignant S., **Valdes-Donoso, P.**, Zimmerman J., and Morrison, R. 2015. "Lessons learned and knowledge gaps about the epidemiology and control of porcine reproductive and respiratory syndrome virus in North America". *American Veterinary Medical Association*, 246 (12)
11. **Valdes-Donoso, P.**, Mardones F. O., Jarpa, M., Ulloa, M., Carpenter, T. E., and Perez, A. M. 2013. "Co-infection patterns of infectious salmon anemia and sea lice in farmed Atlantic salmon, Salmo salar L., in southern Chile (2007-2009)". *Journal of fish diseases,* 36, doi:10.1111/jfd.12070
12. Mardones, F. O., Martínez-López, B., **Valdes-Donoso, P.**, Carpenter, T. E., and Perez, A.M. 2013. "The role of fish movements in the spread of infectious salmon anemia in Chile, 2007-2009". *Preventive Veterinary Medicine*. GEOVET special issue: 114 (1)
13. Mardones, F. O., Jansen, P.A., **Valdes-Donoso, P.**, Jarpa, M., Lyngstad, T.M., Jimenez, D., Carpenter, T.E., and Perez, A.M. 2013. "Within-farm spread of infectious salmon anemia virus in salmon farms in Chile". *Disease of Aquatic Organisms*, 106
14. Mardones, F.O., Perez, A.M., **Valdes-Donoso, P.**, and Carpenter, T.E. 2011. "Farm-level reproduction number during an epidemic of infectious salmon anemia virus in southern Chile in 2007-2009". *Preventive Veterinary Medicine,* 102(3
15. Hamilton-West, C., Arriagada, G., Yatabe, T., **Valdés, P.**, Hervé-Claude, L.P., and Urcelay, S. 2011. "Epidemiological description of the sea lice (Caligus rogercresseyi) situation in southern Chile in August 2007". *Preventive Veterinary Medicine,* 104 (3-4)

CONFERENCE PAPERS

1. **Valdes-Donoso, P.** and Sumner, D. A. 2019. "Greenhouse gas reduction policy and size distributions of dairy farms". *Annual Meeting of Agricultural and Applied Economics Association (AAEA)*. Atlanta GA, US
2. **Valdes-Donoso, P.** and Sumner, D. A. 2019. "Economics of mandatory cannabis testing regulations: Impact on marginal costs in California". *Annual Meeting of Agricultural and Applied Economics Association (AAEA)*. Atlanta GA, US
3. **Valdes-Donoso, P.**, Alvarez, J., Morrison, R., Jarvis, L.S., and Perez., A. 2019. "Assessment of Porcine Reproductive and Respiratory Syndrome (PRRS) Impact in US Sow Farms". *2019 Allen D. Leman Swine Conference*. St. Paul MN, US

4. **Valdes-Donoso, P.**, VanderWaal, K., Jarvis, L.S., Wayne S., and Perez, A. 2016. "Using machine learning to predict swine movements with application to the control of infectious diseases". *2016 North American PRRS Symposium.* Chicago IL, US
5. **Valdes-Donoso**, P., Jarvis, L.S., Wright, D., Alvarez, J., and Perez, A. M. 2015. Measuring progress on the control of porcine reproductive and respiratory syndrome (PRRS) at a regional level: the Minnesota N212 regional control project (RCP) as a working example. *2015 North American PRRS Symposium.* Chicago IL, US
6. **Valdes-Donoso, P.**, Perez, A.M., and Jarvis, L.S. 2015. Evaluating optimal strategies for regional control of porcine reproductive and respiratory syndrome (PRRS): a collective choice problem approach. *2015 North American PRRS Symposium.* Chicago IL, US
7. **Valdes-Donoso, P.**, Jarvis, L. S., Wright, D., and Perez, A. 2015. "Measuring progress on the control of porcine reproductive and respiratory syndrome (PRRS) at a regional level: the N212 area regional control (ARC) program as a working example". 14th Symposium of the International Society for Veterinary Epidemiology and Economics (ISVEE 14). Merida, Mexico
8. Perez, A., Tousignant, S., Brito, B., **Valdes-Donoso, P.**, Murtaugh, M., Rovira, A., and Morrison, B. 2014. "Epidemiology of PRRS: closing some of our knowledge gaps". *2014 North American PRRS Symposium.* Chicago IL, US
9. **Valdes-Donoso, P.**, Wright, D., and Perez, A. 2014. "Spatial and temporal dynamics of porcine reproductive and respiratory syndrome (PRRS) in a voluntary regional project (N212)". *2014 North American PRRS Symposium.* Chicago IL, US
10. Jarvis, L. and **Valdes-Donoso, P**. 2013. "Economic Analysis of Animal Health Issues: A Guide to Critical Thinking". *Livestock disease policies: Building bridges between science and economics.* Paris, France, OECD OiE. 19-32
11. **Valdes-Donoso**, P., Mardones, F., Carpenter, T., and Perez, A. M. 2012. "Simultaneous spatial and temporal analysis of two aquaculture high-risk diseases: Infectious Salmon Anemia (ISA) and sea lice infestation, in fish farms located in the X region of Chile (2007-2009)". *13th Symposium of the International Society for Veterinary Epidemiology and Economics (ISVEE 12)*. Maastricht, Netherlands

PEER-REVIEWED PUBLICATIONS IN PROGRESS

1. **Valdes-Donoso, P.** and Jarvis, L. Combining Epidemiology and Economics to Reduce Damages from PRRS, an Endemic, Nonreportable Animal Disease – *Accepted under minor revisions*

OUTREACH ARTICLES

1. **Pablo Valdes-Donoso**. 2020. "Automation in the Chilean salmon industry: progress and challenges". *Salmonexpert Magazine – Chile* (https://www.salmonexpert.cl/article/automatizacin-en-la-industria-chilena-del-salmn-avances-y-desafos/)

2. **Pablo Valdes-Donoso**. 2019. "Adoption of Artificial Intelligence in Chilean Salmon Production". *Salmonexpert Magazine – Chile.* (https://www.salmonexpert.cl/article/adopcin-de-inteligencia-artificial-en-la-salmonicultura-chilena/)
3. **Pablo Valdes-Donoso**. 2019. "Applying Data Science for Precision Aquaculture". *Salmonexpert Magazine – Chile.* Printed version No. 72 (https://www.salmonexpert.cl/profile/magazines/122085)
4. Daniel A. Sumner, Dustin R. Messner, **Pablo Valdes-Donoso**. 2019. "Organic Dairy: Economic opportunities and challenges with a focus on California". *Organic Farmer Magazine, Vol 2, Issue 3* (https://aic.ucdavis.edu/wp-content/uploads/2019/07/OrganicFarmer_June-July-2019-Dan-SumnerNOADS.pdf)
5. **Valdes-Donoso, P.**, Alvarez, J., Jarvis, L. S., Morrison, R. B. & Perez, A. M. 2019. "Production losses associated to PRRS in sow farms in the US". *Suis Magazine – Spain*. Printed version No. 154 (http://www.suis.grupoasis.com/default.htm)
6. **Pablo Valdes-Donoso** and Andres Perez. 2017. "PRRS has lingering negative impact". *National Hog Farmer Magazine* (http://www.nationalhogfarmer.com/animal-health/study-shows-prrs-has-lingering-negative-impact)
7. **Pablo Valdes-Donoso** and Andres Perez. 2017. "How much do porcine reproductive and respiratory syndrome (PRRS) cost to US?". *Dr. Morrison Swine Health Monitoring Project. University of Minnesota* (https://www.vetmed.umn.edu/sites/vetmed.umn.edu/files/shmp_2016l17.29_cost_of_prrs_to_the_us_sciencepage.pdf)
8. **Valdes-Donoso P.** and Jarvis, L.S. 2015. "Economic analysis on fish health management". *Salmonexpert Magazine – Chile* (https://www.salmonexpert.cl/noticias/analisis-economico-en-la-gestion-de-salud-de-los-peces/)
9. **Pablo Valdes-Donoso** and Robert Morrison. 2015. "Spatial distribution of sow sites enrolled in the Swine Health Monitoring Program (SHMP)". *Morrison Swine Health Monitoring Project. University of Minnesota* **(**https://www.vetmed.umn.edu/sites/vetmed.umn.edu/files/shmp_2014.40_shmp_spatial_distribution_of_sites-science_page.pdf)

THESES AND DISSERTATION

1. **Pablo Valdes-Donoso**. Collective Strategies to Control PRRS, a Non-Reportable, Endemic Swine Disease. *MS thesis in Agricultural and Resource Economics. UC Davis* (December of **2017**)

I used a disaggregated diffusion model, which included distance and animal movements between swine farms, to analyze public and private benefits of investing in vaccination and/or installing bio-filters in breeding farms to mitigate PRRS through a Regional Control Program.

2. **Pablo Valdes-Donoso**. Epidemiological investigation of a non-reportable endemic disease: Porcine reproductive and respiratory syndrome (PRRS) in the US. *PhD dissertation in Epidemiology. UC Davis* (June of **2017**)

I used a variety of methods, including machine learning, network analysis, regression models, spatio-temporal analyses, and system dynamics, to study important aspects of PRRS dynamics, including risk factors, effects of the disease on production, and strategies adopted to control PRRS.

3. **Pablo Valdes-Donoso**. Co-infection patterns of two high-risk diseases affecting farmed Atlantic salmon in southern Chile (2007- 2009). *MS thesis in Preventive Veterinary Medicine (MPVM). UC Davis* (June of **2012**)

I used surveillance data collected by the fish health authority to investigate spatial and temporal co-infection patterns and risk factors of two high-risk diseases affecting salmon production in Chile.

4. **Pablo Valdes-Donoso**. Evaluation of the efficacy of two different vaccines against the salmonid rickettsial septicemia (SRS) in salmon farms in Chile. *DVM thesis. Universidad de Chile* (September of **2007**)

I used an observational cohort study to evaluate and compare the efficacy of two commercial vaccines against salmonid rickettsial septicemia (SRS), a highly prevalent disease in salmon sea farms in Chile.

TEACHING EXPERIENCE

Catholic University of Chile – Santiago, Chile 2020

- Invited Lecturer. Introduction to Veterinary Medicine – Lecture on the Economics of Animal Health

University of California, Davis – Davis, CA 2014 – 2017

- Teaching Assistant. Intermediate Microeconomics -100B
- Teaching Assistant. Emerging Issues at the Interface of Ecosystem, Animal and Human Health -MPM201 (Lecture on Climate Change)
- Teaching Assistant. Statistics -MPM203
- Teaching Assistant. Biological Sciences -BIS2C
- Facilitator. Disease Investigation in Populations -VET401, School of Veterinary Medicine

University of Minnesota – St. Paul, MN 2014 – 2015

- Invited Lecturer. Quantitative Methods for Analysis of Food Animal Disease Data -VMED 5442 – Gave lecture titled Economic Tools for Animal Health Issues: Benefit Cost Analysis and Decision Trees)
- Associate Instructor. Workshop From Geeks to Geeks: Spatial Analysis. Leman Conference 2014 – Gave two lectures: 1. Integrated Epidemiological and Economic Models to Assess Control, and 2. Eradication of Endemic Diseases in Highly Intensive Production Systems in the US
- Mentor of two veterinarian students from Brazil. Topics included sanitary and economic analysis of Tilapia production in Brazil

Centech – Puerto Varas, Chile 2014

- Associate Instructor. Workshop: Farmed Salmon Health Economics – Gave two lectures:

1. Epidemiology in Aquaculture: Principles and Applications, and 2. Data Management to Generate Information: Applications on Farmed Salmon Health Economics

University of Chile – Santiago, Chile 2014

- Invited Lecturer. Diploma in Applied Epidemiology in Veterinary Medicine – Lecture on Surveillance and Control of Sea Lice in Chile

GRANTS AND AWARDS

1. California Dairy Research Foundation Grant ($101,355). Project title: Economic and related impacts of using by-products as dairy feeds. January 2019
2. International Affair Grant, UC Davis ($5,000). Project title: An interdisciplinary research framework for sustainable aquaculture: the case of infectious diseases, control strategies and environmental impacts in farmed fish. March 2018
3. Agricultural and Resource Economics Department's Best MS Thesis of 2017. University of California, Davis. Davis, CA, US. January 2018
4. 2018 Merck Sharp & Dohme High-Quality Pork Runner-up Award. Merck Animal Health, US. January 2018
5. Epidemiology Graduate Group Fellowship 2016 ($16,000). University of California, Davis. Davis, CA. September 2016
6. David A. Benfield Travel Fellowship ($500). North American PRRS Symposium. Kansas State University, Manhattan KS, US. 2016
7. David A. Benfield Travel Fellowship ($500). North American PRRS Symposium. Kansas State University, Manhattan KS, US. 2015
8. MnDrive program of the University of Minnesota, and Boehringer Ingelheim Ph.D. Fellowship ($10,000). 2014
9. David A. Benfield Travel Fellowship ($500). North American PRRS Symposium 2014. Kansas State University, Manhattan KS, US. 2014
10. Hemispheric Institute of the Americas (HIA) Field Research Grant ($1,000). Project title: MARIPOSA (Making Added Revenue in Promoting and Organizing Sustainable Agriculture): Linking Health, Environmental Conservation and Livelihoods in rural communities. University of California, Davis. Davis, CA, US. 2013
11. Pre-selection University of California Pacific Rim Program. Project title: MARIPOSA (Making Added Revenue in Promoting and Organizing Sustainable Agriculture): Linking Health, Environmental Conservation and Livelihoods in Rural Communities. University of California, Davis. Davis, CA, US. 2013
12. Becas Chile for Doctoral Studies (fees and tuition, plus stipend, for 4 years). Comisión Nacional de Ciencia y Tecnología (CONICYT), Chile 2012
13. UC Davis grant in support of The Washington State University Public Policy at Federal Level Internship, Washington DC (fees and stipend). Davis, CA, US. 2011

14. UC Davis grant in support of The Washington State University Public Policy at State Level Internship, Columbus-Ohio (fees and stipend). Davis, CA, US. 2010
15. Becas Chile for Master Studies (fees and tuition, plus stipend, for 2 years). Comisión Nacional de Ciencia y Tecnología (CONICYT), Chile 2009

CONFERENCE PRESENTATIONS AND INVITED SEMINARS

1. How can AI improve animal, human, and environmental health? Adoption of AI in veterinary science, status, and future challenges. Time World, Global Congress on Artificial Intelligence. Montreal QC, Canada. May **2022**.
2. "Implication of manure management practices for size distributions of dairy farms". 1st Annual Scientific Summit on Dairy Methane Management Research. University of California, Davis. June 2019 (Invited)
3. "Dairy Manure Regulations and Economic Implications for Dairy Farms in California". One Health for Food Safety and Security Seminar –UC Davis Western Institute for Food Safety and Security (WIFSS). Davis CA, US. January and February 2019 (Invited)
4. "Regional Strategies to Control Porcine Reproductive and Respiratory Syndrome (PRRS), a Non-Reportable, Endemic Swine Disease in the US". MSD High-Quality Pork EU Congress. Baveno, Italy. October 2018 (Invited)
5. "Economics and farmed fish health management". Salmon Disease Ecology Workshop, University of California, Davis. Davis, US. March 2018 (Invited)
6. "Epidemiological investigation of a non-reportable endemic disease: Porcine reproductive and respiratory syndrome (PRRS) in the US". Swine Seminars, School of Veterinary Medicine, University of Minnesota, St. Paul MN, US. June 2017 (Invited)
7. "Using machine learning to predict swine movements within a regional program to improve control of infectious diseases in the US" and "Production losses associated with porcine reproductive and respiratory syndrome (PRRS) in US sow farms". 2016 North American PRRS Symposium. Chicago IL, US. December 2016
8. "Measuring progress on porcine reproductive and respiratory syndrome (PRRS) control at a regional level: the Minnesota N212 regional control project (RCP) as a working example". 14th International Society of Veterinary Epidemiology and Economics (ISVEE14). Merida, Mexico. November 2015
9. "Animal health issues from an integrated view: some tools from epidemiology and socio-economics". Seminar at the University of Miyazaki. Miyazaki, Japan. July 2015 (Invited)
10. "Measuring Progress on the Control of Porcine Reproductive and Respiratory Syndrome (PRRS) at a Regional Level: The Minnesota N212 Regional Control Project (RCP) as a Working Example". 2015 North American PRRS Symposium. Chicago IL, US. December 2015
11. "Spatial and temporal dynamics of porcine reproductive respiratory syndrome (PRRS) in a voluntary regional project (N212)". 2014 North American PRRS Symposium. Chicago IL, US. December 2014

12. “Challenges to the official surveillance system: a scientific overview” and “Integral approach of ISA in Chile: evidences in its spread and control”. Salmon Research Symposium: Science for a Better Industry. Puerto Varas, Chile. April 2013 (Invited)
13. “Co-infection patterns of two high-risk diseases affecting farmed Atlantic salmon in southern Chile (2007- 2009)”. 13th International Society for Veterinary Epidemiology and Economics (ISVEE13) Maastricht, The Netherlands. August 2012
14. “Surveillance and control sanitary programs in the national aquaculture”. Seminars of bioethics and biosecurity in experimental animals. The Catholic University of Valparaíso. Valparaíso, Chile. April 2010 (Invited)

REFEREE SERVICE

Frontiers in Vet Science, Preventive Veterinary Medicine, Livestock Science, USDA-National Institute of Food Agriculture.

PROFESSIONAL ASSOCIATIONS

- Agricultural and Applied Economics Association (AAEA)
- International Society for Aquatic Animal Epidemiology

EXTRACURRICULAR ACTIVITIES

Atlanta Cycling Group, Atlanta, GA. 2019 – 2021.

Atlanta Rainbow Trout Team Member, Atlanta, GA. 2019 – 2021.

Davis Bike Club Race Team Member, Davis, CA. 2018 – 2019.

Organization Staff at Chile-California Conference (C3 http://calcubo.org), Davis, CA. 2012.

Vice-President and Co-founder of the Chilean Students Organization at the University of California, Davis (Chile-UCD http://www.chileucd.com), Davis, CA. 2011 – 2013.

Executive Secretary of the Veterinary Students Association, University of Chile. Santiago, Chile. 2003 – 2004.

Organization Staff of Volunteer Veterinary Works (TVV), University of Chile. Lonquimay, Chile. 2002.

PERSONAL

- Citizenship: Chile
- Languages: English (full professional proficiency), Spanish (native)
- First generation scholar