

THOMAS L. MARSH

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509-335-8597

Education

Ph.D., Agricultural Economics, Washington State University, 1998.

M.S., Statistics, Washington State University, 1998.

M.S., Economics, Montana State University, 1991.

M.S., Mathematics, Montana State University, 1987.

B.A., Mathematics, Carroll College, 1985.

Professional Experience

Director (2023-), Collaborating Center on the Economics of Animal Health (CCEAH) – Americas Region, World Organization for Animal Health (WOAH)

Social Burden Working Group (Chair), Wider Economic Impact Theme (Chair), Organizational Management Committee for the Global Burden of Animal Disease Program (2020-present)

Distinguished Professor Agricultural and Resource Economics (2015-)

Professor, School of Economic Sciences (2010-), Paul G. Allen School for Global Animal Health Washington State University

Affiliated faculty: Statistics, Data Analytics

Affiliated faculty: Nelson Mandela African Institute of Science and Technology

Director, WSU IMPACT Center (2009-2014)

Visiting Professor, North Carolina State University, 2012 (sabbatical leave)

Associate Professor, School of Economic Sciences, Washington State Univ., (2004-9)

Assistant/Associate Professor, Agricultural Economics, Kansas State Univ., (1998-2004)

Research Economist, Pacific Northwest Laboratory, Richland, WA, (1991-1998)

Graduate Teaching

ECONS/FINAN 511, Ph.D., Econometrics I, Washington State Univ. (2006-2011, 2013-)

ECONS 536, M.S., Econometrics, Classical & Casual Inference, Washington State Univ. (2020-)

ECONS 514, Ph.D. field course advanced topics in econometrics, 2005, 2007, 2015, 2019

ECONS 513 Ph.D. field course advanced topics in econometrics, 2004, 2008, 2010, 2014, 2018

ECONS 452, Advanced Business Management Economics, WSU. (2008-2013)

AGEC 936, Ph.D., Topics in Quantitative Methods, Kansas State Univ. (2000-2004)

AGEC 905, Ph.D., Agricultural Demand & Commodity Markets, K-State (1999-2004)

AGEC 610, Natural Resource Economics, K-State (1999-2004)

Graduate Econometrics, Nelson Mandela African Institution of Science and Tech (16-17)

Machine Learning, University of Nairobi (2022)

Post-Doc Advising (8)

Heather Johnson (2009, WSU IMPACT), Mike Brady (2010, WSU IMPACT), Xiaojiao Jiang (2013, WSU IMPACT), Ashley Railey (2019, WSU IREACH), Alex Kappes (2021-22, WSU GBADs), Golam Shakil (2022-, WSU GBADs), Jae Young Hwang (2023, USDA ARS), Maksud Rahman (2023-, USDA ARS)

Graduate Advising: PhD Students (32 chair (28 completed), 40 other committees)

- Uday Math. Spring 2029. Dissertation – Essays on Soil Health and Plastic Pollution (chair). Position taken: In progress.
- Kevin Morris. Spring 2027. Dissertation – Essays on Pollution in Agricultural Plastics (chair). IIDP Program (Economics & Statistics). Position taken: In progress.
- Dipanwita Barai. Spring 2025. Dissertation – Essays in Agricultural and Resource Economics (co-chair). Position taken: in progress.
- William King. Spring 2025. Dissertation – Economics of Space Pollution and Experiments (chair). Position taken: in progress
- Jae Young Hwang. Spring 2023. Dissertation – Essays in Decision Making Applied to Auctions and Airlines (chair). Position taken: Post-Doc, Computational Scientist, USDA
- Mohammad Maksudur Rahman. Spring 2023. Dissertation – Essays on the Global Burden of Animal Diseases (chair). Position taken: Post-Doc Research Economist, USDA.
- Golam Shakil. Summer 2022. Dissertation – Essays on Econometrics and Empirical Modeling (chair). Position taken: Post-Doc, Global Burden of Animal Disease Program, World Organization of Animal Health.
- Alex Kappes. Spring 2021. Dissertation – Essays on Consumer Demand and Production Risk (co-chair). Position taken: Post-Doc, WSU Global Burden of Animal Disease (GBADs) program
- Xi Gu. Fall 2020. Dissertation – Essays on Consumer Demand and Production Risk (chair). Position taken: Colaberry, Data Scientist position at Bayer.
- Youngran Choi. May 2020. Dissertation – Essays on Consumer Preferences and Decision Making (chair). Position taken: Assistant Professor (tenure track), Embry Riddle University. Poster selected in top 10 and highlighted at 2019 ASSA meeting.
- Ashley Railey. May 2019. Dissertation – Household decision-making towards livestock disease control (chair). IIDP Program (Economics, Sociology, & Global Health). Position taken: Post-Doc, Indiana University. PhD cohort in PEHPL program, Gates Foundation.
- Boris Houenou. May 2019. Dissertation – Essays on Human Health and Economics of Diseases (co-chair). Position taken: United Nations Development Programme.
- Kuan Chen. May 2019. Dissertation – Essays of Environmental and Sustainable Economics (chair). Position taken: Assistant Professor (tenure track) University of Guam.
- Nathan Delay. May 2018. Dissertation – Agricultural Risk Management Policy and Producer Decision Making (co-chair). Position taken: Assistant Professor (tenure track), Purdue University.
- Liu, Miaoru. May 2015. Dissertation – Essays on Health and Nutrition (chair). Position taken: Senior Analyst, Zion Bank.
- Bastola, Umesh. May 2015. Dissertation – Essays on Animal Diseases, Productivity, and Trade (chair). Position taken: Senior Analyst, Chase.
- Gabrielyan, Gnel, May 2014. Dissertation – Demand for U.S. Hops and Beer (co-chair). Position taken: Post Doctoral Research Associate, Cornell University.
- Deboch, Tesfaye. 2013. Dissertation – Economics of Livestock Diseases in Africa (chair). Posthumous PhD Award. Outstand Published Research Award, Western Agricultural Economics Assoc (2017).
- Jiang, Xiaojiao. 2013. Dissertation – Three Essays on Tree Fruit Marketing and Trade (chair). Position taken: Analyst, Chase.

- Jiang, Jingze. 2013. Dissertation – Economics of Environmental and Sustainable Choices: Plastics and Biodegradable Products (co-chair). Position taken: Assistant Professor, Edinboro University.
- Zhang, Ruojin. 2013. Dissertation – Essays on Policy Analysis in Agricultural Economics (chair). Position taken: Assistant Professor, Southwestern University of Finance and Economics, China.
- Zhao, Yunfei. 2011. Dissertation – Empirical Demand Analysis and Forecasts in Tree Fruit Products (chair). Position taken: Analyst, Citi Bank.
- Perevodchikov, Evgeniy. 2010. Dissertation - Invasive Species and Livestock Trade (chair). Position taken: assistant professor, Tomsk State University, Russia. The Thomas S. Foley Institute for Public Policy and Public Service, Burlington Northern Fellowship, 2007-2008.
- Zhang, Huifang. 2009. Dissertation - Food Safety and Media Information (co-chair). Position taken: State of Washington, Department of Social and Health Services, Research and Data Analysis Manager.
- Ponnaluru, Srinivasa. 2009. Dissertation - Essays on Price Formation in Construction Equipment (chair). Position taken: Vijayanagar Sri Krishnadevaraya University.
- Zhang, Caiping. 2008. Essays in Empirical Economics: Wheat Gluten Imports, Pear Marketing, and Banking Inefficiency (chair). Position taken: Assistant Professor, Central University of Finance and Economics, Beijing.
- Nogueira, Lia. 2008. Non-Tariff Barriers and Research Programs: Trade and Welfare Implications. Washington State University (co-chair). Position taken: Assistant Professor (tenure track), University of Illinois. Ph.D. Dissertation Award, International Agricultural Trade Research Consortium (IATRC), 2008.
- McCullough, Michael. 2007. Dissertation - Phase Space Reconstruction: Methods in Applied Economics and Econometrics. Washington State University (co-chair). Position taken: Assistant Professor (tenure track), California Polytechnic State University, San Luis Obispo.
- Benson, Aaron. 2007. Dissertation - Essays in Environmental and Natural Resource Policy. Washington State University (co-chair). Position taken: Assistant Professor (tenure track), Texas Tech University.
- Fanning, Jasper. 2006. Dissertation - A Spatial Hedonic Analysis of Veterinarian Incomes. Kansas State University (chair). Position taken: Ground Water District Manager, Nebraska.
- Dong, Fengxia. 2003. Dissertation - State Trading Enterprises in a Differentiated Environment: The Case of Global Malting Barley Markets (co-chair). Position taken: Research Associate, CARD, Iowa State University. Awarded outstanding dissertation by Department of Agricultural Economics, Kansas State University
- Schumacher, Sara. 2002. Dissertation - Economic Analysis of Production and Pest Management Decisions Confronting Greenhouse Growers, Kansas State University (chair). Position taken: Visiting Assistant Professor, Kansas State University.
- Marshall, Maria. 2002. Dissertation - Endogenous Protection in the Mexican Corn and Sorghum Import Markets, Kansas State University (chair). Position taken: Assistant Professor (tenure track), Purdue University. Gamma Sigma Delta Outstanding Graduate Student Teaching Award.

Other Economic Ph.D. Committees:

WSU: (21) Joe Patten, Samiya Ali Al-Mamari, Hyunjin Lim, Xiangrui Wang, Melissa Wright, Haseeb Ahmed, Paul Ervin, Megan Waldrop, Daegoon Lee, Darlington Sabasi, Ethan Spangler, Pavan Dhanireddy, Tim Graciano, Nan Yang, Sungchul Lee, Sanatan Shrey, Armenak Markosyan, Kevin Mongeon, Sridar Komar, Zishun Zhao, Raphael Karuaihe

KSU: (14) Alok Anand, Kranti Mulki, January Mafaru, Adriana Chacon, Molly Brant, Brian Coffey, Hee-Seok Park, Arindra Zainal, Leah Tsoodle, Heather Nivens, Aloyce Kaliba, Chatura Ariyarante, Abdullahi Abdulkadri, Jayson Lusk

Other Ph.D. Committees: (5) Zoe Campbell, Leonard Nderitu, Lianxin Yang (Idaho); George Opit (KSU), Judith Hayes (KSU)

Graduate Advising: MS Students (14 chair/supervisor, 32 other committees)

Kevin Morris. Fall 2022. Economics of plastic use in agriculture. School of Economic Sciences (chair).

Ricky Thai. Spring 2022. Econometrics of Financial Analysis. School of Economic Sciences (chair).

Riley Seeger. May 2017. Response costs for the 2014-2015 highly pathogenic avian influenza epidemic in the USA. School of Economic Sciences (chair).

Jiang, Xiaojiao. May 2014. "Nonparametric Estimation and Prior Information: Advertising Impacts on Bartlett Pears, Department of Statistics (supervisor).

Moses Ole-Neselle. 2014. "Assessment of Foot and Mouth Disease in Africa," Paul Allen School for Global Animal Health (supervisor).

Zhao, Yunfei. 2012. "An Evaluation of Estimators for Censored Systems of Equations using Monte Carlo Simulation," Department of Statistics (supervisor).

Sifiso Mhlaba. 2012. "Economic Assessment of Livestock Disease Outbreaks in South Africa," School of Economic Sciences, WSU (co-chair).

Irwin, Morgan. Expected graduation 2008. "Caviar Import Demand," WSU (chair). Position Taken: Northwest Farm Credit Service.

Flaming, Steve. 2005. "Price Formation for Fresh Sweet Cherries," WSU (co-chair). Position Taken: Strategic Analyst, Safeway.

Taylor, Justin. 2003. "Price and Policy Analysis of the Kansas Transferable Deer Hunting Permit Program," Kansas State University (chair). Awarded outstanding thesis by Department of Agricultural Economics.

Call, Shauna. 2003. "The Determinants of U.S. Wheat Product Consumption," Kansas State University (chair).

Perry, Bill. 2002. "Effects of Joint Product Management Strategies on E. COLI 0157:H7 and Feedlot Profits," Kansas State University (chair).

Theriault, Pascal. 2001. "The Influence of Exchange Rate on Beef Trade between the U.S. and Canada," Kansas State University (chair).

Terry, Justin. 2000. "Derived Demand for Wheat by Class," Kansas State University (chair).

M.S. Committees (Economics):

WSU: (10) Thaweb Maamri, Joshua Freimark, Richard Houghton, Mariatou Ndiaye, Tyler Laferriere, Boris Houenou, Brandon Ware, Mehmet Mus (2006), Soon-il Choi (2005), Ricardo Diaz (2005)

KSU: (14) Anup Menon (2004), Tyler Turner (2004), Jen Blake (2004), Jochen Hartl (2003), Erika Lehman (2003), Megan Douthit, Philip Miller, Leonardo Alfonzo (2002), Jeff Mills (2001), Brett Gelso (2000), Krista Fingerhut (2000), Mike Nielson (2000), Arish Amir Ardalan (2000), David Goode (2000).

M.S. Committees (Statistics): (8) Maksud, Rahman (2023), Alex Kappes (2020), Boris Houenou (2019), Kuan Chen (2019), Xi Gu (2020), Miaoru Liu (2015), Umesh Bastola (2015), Mike Giannetto (2008), Mike McCullough (2007)

Research Grant Awards (In all, collaborated over 50 grant projects totaling over \$80 million. Directly managed some \$7 million in program funds.)

USAID Feed the Future Innovation Lab for Veterinary Vaccines Delivery. **T.L. Marsh**, co-project investigator 2024-2029. Funding \$13,000,000.

Analysis and Economic Impact of HPAI control strategies. **T.L. Marsh**, co-project investigator 2024-2025. USDA, subcontract with KSU. Funding \$95,000. USDA

Cost Benefit Analysis of Cattle Fever Tick and Bovine Babesiosis Control: US-Mexican Border. **T.L. Marsh**, project director, 2023-2025. Funding \$180,000. USDA-ARS.

Global Burden of Animal Disease Program (GBADs). **T.L. Marsh**, co-project investigator (Dr. Jonathan Rushton project leader) 2023. Third Year Funding \$2,800,000. Gates Foundation and World Organization for Animal Health.

Improving end-of-life management of plastic mulch in strawberry systems. **T.L. Marsh**, co-project investigator (Dr. Lisa DeVetter project leader) 9/1/2022-8/31/2026. \$8,000,000 USDA-SCRI.

Enhancing Supply Chain Sustainability and Global Competitiveness for Pacific Northwest Hops. **Marsh, T. L.** (Co-Principal Investigator), Walsh, D. (Principal Investigator), Federal, \$4,853,908.00. (September 1, 2021 - August 31, 2025).

Global Burden of Animal Disease Program (GBADs). **T.L. Marsh**, co-project investigator (Dr. Jonathan Rushton project leader) 2021-2031. Initial 2 Year Funding \$7,000,000. Gates Foundation and World Organization for Animal Health.

Implementation of New Technologies and Improved End-of-Life Management for Sustainable Use of Agricultural Plastics. **T.L. Marsh**, co-project investigator (Dr. Lisa DeVetter project leader) 9/1/2019-8/31/2020. \$50,000 USDA-SCRI.

Conducting Communicable Disease Research in Kenya. **T.L. Marsh**, co-project investigator (Dr. M. Kariuki Njenga project leader). From 10/1/2017 to 9/30/2022. \$22,000,000 HHS. Evaluation of the Effectiveness of Advertising and Promotion for the Processed Pear Commission.

Processed Pear Commission. **T.L. Marsh**, project investigator From 2019 to 2020. Total Funds: \$25,000.

Workshop on the Economics of Animal Health and Biosecurity. Dustin Pendell and **T.L. Marsh**, co-project investigator. USDA. From 2017 to 2019. Funding \$50,000.

Cost Functions and Predictions of Highly Pathogenic Avian Influenza. **T.L. Marsh**, co-project investigator. USDA. From 2016 to 2017. Funding \$75,000.

Economic Assessment of Zoonotic Diseases. American Veterinarian Medical Association. **Marsh, T.L.** (principle investigator). Funding \$57,000 through 2017.

Performance and Adoptability of Biodegradable Plastic Mulch for Sustainable Specialty Crop Production. **T.L. Marsh**, co-project investigator (Doug Hayes project leader). From 10/1/2016 to 9/30/2019. USDA-SCRI. Funding \$3,000,000.

Economic Assessment of Pest and Disease Outbreaks in Tree Fruit. **T. L. Marsh** (principal investigator). USDA-APHIS. From 10/1/2015 to 9/31/2016. Total Funds: \$54,000.

Economic Assessment of Zoonotic Diseases. American Veterinarian Medical Association. **Marsh, T.L.** (principle investigator). Funding \$57,000 through 2015.

Applying Abundant Plants to Develop Battery Materials and Benefits to the Agricultural Economy. **T.L. Marsh**, co-project investigator (Katie Zhong project leader). From 10/1/2014 to 9/30/2016. USDA-SCRI. Funding \$500,000.

Reducing the Impact of Industry-Critical Insect and Disease Problems in Hops through Development of Preventive and Predictive Strategies. **T.L. Marsh**, co-project investigator (Doug Walsh project leader). From 10/1/2014 to 9/30/2016. USDA-SCRI. Funding \$3,400,000.

Performance and Adoptability of Biodegradable Plastic Mulch for Sustainable Specialty Crop Production. **T.L. Marsh**, co-project investigator (Doug Hayes project leader). From 10/1/2014 to 9/30/2019. USDA-SCRI. Funding \$2,000,000.

Economic Assessment of Pest and Disease Outbreaks in Tree Fruit. **T. L. Marsh** (principal investigator). USDA-APHIS. From 10/1/2013 to 9/31/2014. Total Funds: \$45,000.

Agronomic, Biochemical, Social, and Economic Impacts of Biotic and Abiotic Stress on Pacific Northwest Flavor Crops. **T.L. Marsh**, co-investigator (Doug Walsh project leader). From 10/1/2012 to 9/30/2014. USDA-SCRI. Funding \$1,800,000.

Evaluation of the Effectiveness of Advertising and Promotion for the Processed Pear Commission. Processed Pear Commission. **T. L. Marsh** (principal investigator). From 2012 to 2014. Total Funds: \$30,000.

Evaluation of the Effectiveness of Pear Advertising and Promotion **T. L. Marsh** (principal investigator). Fresh Pear Commission. From 2012 to 2014. Total Funds: \$44,000.

Economic Assessment of Pest and Disease Outbreaks in Tree Fruit. **T. L. Marsh** (principal investigator). USDA-APHIS. From 10/1/2011 to 9/31/2012. Total Funds: \$50,000.

Bio-Battery Proposal. Katie Zhong, Hanwu Lei, Louis Scudiero, **T. L. Marsh** (co-investigator). WSU. From 2011 to 2013. Total Funds: \$100,000.

Impact on ECF Vaccination. J. LaFrance, **T.L. Marsh** (co-investigator), G. Palmer, T. McElwain, J. Yoder. Global Alliance for Livestock Veterinary Medicines. From 1/1/2011 to 12/31/2011. Total Funds: \$206,281.

Biodegradable Mulches for Specialty Crops Produced under Protective. **T.L. Marsh**, co-project director (Debra Inglis project leader). From 10/1/2009 to 9/30/2012. USDA-SCRI. Funding \$2,000,000.

Agronomic, Biochemical, Social, and Economic Impacts of Biotic and Abiotic Stress on Pacific Northwest Flavor Crops. **T.L. Marsh**, co-investigator (Doug Walsh project leader). From 10/1/2009 to 9/30/2012. USDA-SCRI. Funding \$3,000,000.

Enhancing Competitiveness of Agricultural Products. **T.L. Marsh** (principle investigator), From 10/1/2009 to 9/31/2011. USDA-CSREES. Funding \$252,000.

Columbia River Basin Water Supply Investment Plan: A strategy to develop water supply to meet water demand needs through 2030. Co-investigator, **T.L. Marsh** (Jennifer Adam project leader). From 09/01/2009 to 10/31/2011. Washington State Department of Ecology. Funding \$748,372.

Invasive Species Policies and Trade Effects. **T.L. Marsh** (principle investigator) and J. Steele. WSU, IMPACT 2008-2010. Funding \$30,000.

Evaluation of the Effectiveness of Pear Advertising and Promotion **T. L. Marsh** (principal investigator). Fresh Pear Commission. 2006. Total Funds: \$43,000.

Integrating Economic and Biophysical Models to Assess the Impacts of Water Quality Trading. Jeff Peterson, John Leatherman, **Thomas Marsh** (co-investigator), Kyle Mankin, and Sean Fox. US-EPA Competitive Grant. Funding \$376,165.

Pollution Trading. Jeff Peterson, John Leatherman, **Thomas Marsh** (co-investigator), and Kyle

Mankin. Kansas Department of Health and Environment, EPA 319 Fund, July 1, 2004 – June 30, 2005, \$142,850.

- Rational Addiction and Food Consumption. **Tom Marsh** and Kyle Stiegert. Effective dates 10/01/04-09/31/05. Food Systems Research Group, University of Wisconsin Funding \$28,000. Transfer of spider mite management on ivy geranium to multiple bedding plants. Principal Investigators are Kimberly A. Williams, James R. Nechols, David C. Margolies, Terry Kastens, and **Tom Marsh**. Effective dates are 10/02/02-9/30/05. *USDA-PMAP*, funding level \$165,000.
- Determinants of Fast Food Consumption. Principle investigators are **Tom Marsh** and Kyle Stiegert. Effective dates are 03/01/02-12/31/02. Food Systems Research Group, University of Wisconsin. Funding level \$17,000.
- A Proposal to Meet National Needs for Scholars Trained in Economics of Food Safety and Quality. Principle investigators are Ted Schroeder and **Tom Marsh**. Effective dates 10/02/02-9/30/05. *USDA National Needs*, funding level \$138,000.
- The Potential to Increase U.S. Demand for Wheat: Emerging Domestic Market. Principle investigators are Andrew Barkley, Michael Boland, **Tom Marsh**, Kyle Stiegert. Effective dates are 08/01/01-07/31/02. Kansas Wheat Commission. Funding level \$24,000.
- Bioeconomic Assessment of Biologically Based Pest Management on Ivy Geranium. Principle investigators are Kimberly A. Williams, James R. Nechols, David C. Margolies, **Tom Marsh**, and Terry Kastens. *NRI-CGP*. Effective dates are 08/01/00-07/31/03. Funding level \$190,000.
- Bioeconomic Assessment of Biologically Based Mite Management on Ivy Geranium. Principal Investigators are Kimberly A. Williams, James R. Nechols, David C. Margolies, Terry Kastens, and **Tom Marsh**. NCR-IPM Biological Based Pest Management. Effective dates are 08/01/99-07/31/01. Funding level \$95,000.

Honors and Awards

- Fellow*, Agricultural and Applied Economics Association (2024)
- International Visitor Research Award*, Massey University, New Zealand (2023)
- Affiliate Researcher*, WSU IMPACT Center (2022-)
- Fellow*, Western Agricultural Economics Association (2019)
- Faculty Excellence in Research Award*, College of Agricultural, Human, and Natural Resource Sciences, WSU (2019).
- Top 10 Poster Recognition*, Allied Social Science Association (ASSA)/American Economic Association (AEA), 2019 meetings. Dissertation advisor and coauthor.
- Outstand Published Research Award*, Western Agricultural Economics Assoc. (2017)
- Award of Excellence*, Academic Advisor, The Graduate & Professional Student Association, WSU (2016/2017)
- Fellow*, American Association for the Advancement of Science (2015)
- Distinguished Professorship in Agricultural and Resource Economics*, Washington State University, (2015-)
- Team Award, *Partnership Award for Innovative Programs and Projects* USDA, National Institute of Food and Agriculture (2013)
- Visiting Scholar*, Agricultural & Resource Economics, North Carolina State Univ., 2012.
- Research Advancement Challenge*, Team Award, WSU Office of Research and Office of the President, 2012
- Washington State *Academy of Sciences* (elected member 2011)

Dissertation advisor: International Agricultural Trade Research Consortium (IATRC) Ph.D. Dissertation Award, 2008.

Visiting Scholar, Federal Reserve Bank of St. Louis (2007)

Visiting Specialist, Department of Agriculture, On Her Majesty's Service (OHMS), Australia (2006).

Food Marketing Fellow, IMPACT Center, Washington State University, 2004-2009.

Young Professionals Award, Australian Agricultural and Resource Economics Society and American Agricultural Economics Association (2002-2003)

President's Faculty Development Award, Kansas State University (Fall 2002)

Teaching Excellence Honoree, College of Agriculture, Kansas State University (2002-03)

Early Career Award, Gamma Sigma Delta, Kansas State University (2001-2002)

Teaching Excellence Honoree, College of Agriculture, Kansas State University (2001-02)

President's Faculty Development Award, Kansas State University (Fall 2000)

Award for Academic Excellence, Outstanding Dissertation (H.M.), American Agricultural Economics Association (1999)

Publications in submission (^a after name denotes collaborations initiated with students during their graduate programs.)

Aminu OR, TL Forde, MM Rahman ^a, ..., **TL Marsh**, and T Lembo. 2024. Two costs of neglect diseases: evaluating the health and economic impacts of anthrax in an endemic area of rural Africa. Submitting to *PLOS Global Public Health*.

Shakil G.,..., **TL Marsh**. 2024. Animal Health Systems in a Limited Resource Environment: Case Study of Ethiopia. Under revision *Choices*.

Hagerman, A.,..., **TL Marsh**. 2024. Lessons Learned in U.S. Animal Disease Surveillance for Commercial and Smallholder Systems from 2015 to 2022. Under revision *Choices*.

Shakil, G., D. Pendell, J. Rushton, T.L. Marsh. 2024. "Economic Burden of Livestock Diseases: A Vertically Integrated Partial Equilibrium Livestock Model." Under revision *Agricultural Economics*.

Rahman, MM ^a and **TL Marsh**. 2024. Causal Analysis of Trade Loss from Pests and Pathogens: A Global Study of Foot and Mouth Disease Impacts on Meat Exports. Revise and resubmit *American Journal of Agricultural Economics*.

Publications Refereed (^a after name denotes collaborations initiated with students during their graduate programs. A total of 102 = 96 articles, 4 book chapters, 2 comments)

- Clough et al. 2025. A framework for handling uncertainty in a large-scale programme estimating the Global Burden of Animal Diseases (GBADs), accepted *Front. Vet. Sci.*
- Countryman, A., T.C. Menezes, D. Pendell, J. Rushton, **T.L. Marsh**, et al. 2024. “Economic Effects of Livestock Disease Burden in Ethiopia: A Computable General Equilibrium Analysis.” *PLOS One*, <https://doi.org/10.1371/journal.pone.0310268>
- J.Y. Hwang, S. Bhattacharyya, S. Chatterjee, **T.L. Marsh**, J. Pedro, and D.H. Gent. 2024. What explains hop grower’s fungicide use intensity and management costs in response to powdery mildew? *Phytopathology*, 2024 Oct;114(10):2287-2299. doi: 10.1094/PHYTO-04-24-0127-R. Epub 2024 Oct 15.
- Gilbert, W, **TL Marsh**, G Chaters, WT Jemburu, M Bruce, W Steeneveld, JS Afonso, B Huntington, J Rushton. 2024. Quantifying disease cost in animals: a new metric for the Global Burden of Animal Diseases. *The Lancet Planetary Health* Volume 8, Issue 5, May 2024, Pages e309-e317 (IF=25.7)
- D.L. Pendell, J. Romero, E. Benavides, J.L.D. Flores, V.S.P. Gonçalves, **T.L. Marsh**, C. Meza, and S.H.G. de Miranda. 2024. A Collaborating Centre for animal health economics in the Americas. *Rev Sci Tech*. Aug: 43:152-158 <https://doi.org/10.20506/rst.43.3527>
- Marsh, TL**, D Pendell, P Schrobback, G Shakil, P Tozer, 2024. Loss of production and animal health costs in assessing economic burden of animal disease. *Rev Sci Tech*. Aug:43:58-68. doi: 10.20506/rst.43.3518.
- Schrobback et al. 2023. Approximating the global economic (market) value of livestock and aquatic farmed animals. *Global Food Security*, Volume 39, 2023, 100722, ISSN 2211-9124, <https://doi.org/10.1016/j.gfs.2023.100722>. (IF=9.027)
- Kappes A, Tozoneyi T, Shakil G, Railey AF, McIntyre KM, Mayberry DE, Rushton J, Pendell DL and **Marsh TL** (2023) Livestock health and disease economics: a scoping review of selected literature. *Front. Vet. Sci.* 10:1168649.doi: 10.3389/fvets.2023.1168649
- Kerfua SD, Railey AF and **Marsh TL** (2023) Household production and consumption impacts of foot and mouth disease at the Uganda-Tanzania border. *Front. Vet. Sci.* 10:1156458. doi: 10.3389/fvets.2023.1156458
- Wang, X., R.C. Mittelhammer, **T.L. Marsh**, and J.J. McCluskey. 2023. Is Divestiture Effective as a Merger Remedy in the U.S. Beer Industry? 62, pages1–18 (2023) *Review of Industrial Organization*
- Iles RA, **Marsh TL**, Thumbi SM, Palmer GH (2022) Effects of changes in short-term human cognition on reported healthcare utilisation. *PLOS Glob Public Health* 2(11): e0000690. <https://doi.org/10.1371/journal.pgph.0000690>
- Gibson, M., B. Houenou,^a and **T.L. Marsh**. 2022. Infectious Disease Control and Human Health Investment: Learning by Controlling. *Journal of African Development*, Vol 23, 2: 187-206 (Special Issue: Health, Human Capital and Gender Issues in Africa).
- Madrid, M. et al. End-of-Life Management Options for Agricultural Mulch Films in the United States. A review. July 2022, Vol 6, *Frontiers in Sustainable Food Systems*.
- Hennessy, D.A., **T.L. Marsh**, Chapter 79 - Economics of animal health and livestock disease, C.B. Barrett, D.R. Just (Eds.), *Handbook of Agricultural Economics*, Elsevier (2021), pp. 4233-4330. <https://doi.org/10.1016/bs.hesagr.2021.10.005>
- Railey AF, **Marsh TL**. Economic benefits of diagnostic testing in livestock: anaplasmosis in cattle. *Front Vet Sci.* (2021) 8:626420. doi: 10.3389/fvets.2021.626420

- Huntington et al. 2021. Global Burden of Animal Disease: a novel approach to understanding and managing disease in livestock and aquatic animals, *Rev Sci Tech* . 2021 Aug;40(2):567-584. doi: 10.20506/rst.40.2.3246.
- Seeger, R.^a, A. Hagerman, K. Johnson, D. Pendell, and **T.L. Marsh**. 2021. When poultry take a sick leave: response costs for the 2014-2015 highly pathogenic avian influenza epidemic in the United States, *Food Policy*. Volume 102, July 2021, 102068. (IF 6.5)
- Nderitu^a et al. 2021. Spatial clustering of livestock Anthrax events associated with agro-ecological zones in Kenya, 1957-2017. *BMC Infectious Diseases* 21, Article number: 191.
- Rushton et al. Roll-out of the Global Burden of Animal Diseases Programme. *The Lancet*. February 04, 2021. DOI:[https://doi.org/10.1016/S0140-6736\(21\)00189-6](https://doi.org/10.1016/S0140-6736(21)00189-6) (IF 168.7)
- Pendell DL, **Marsh, TL**, Vosough, Ahmadi B, Raboisson, D, Hogeveen, H and Rushton, J (2021) Editorial: Proceedings of the 3rd ISESSAH Conference 2019. *Front. Vet. Sci.* 8:807796. doi: 10.3389/fvets.2021.807796
- Kappes, A.J.^a and T.L. Marsh. 2020. Household Macronutrient Prices and Livestock Health in Western Kenya, *Frontiers in Veterinarian Science*, 2020 Nov 13;7:547348. doi: 10.3389/fvets.2020.547348. eCollection 2020.
- Delay^a et al. 2020. "Linking Calving Intervals to Milk Production and Household Nutrition in Kenya," *Food Security*, 12: 309-325. (IF 7.15)
- Chen, K.^a, S. Galinato, **T.L. Marsh**, P. Tozer, and H. Chouinard. Willingness to Pay for Attributes of Biodegradable Plastic Mulches in the Agricultural Sector, *HortTechnology* 2020; 30: 437-447.
- Choi, Y.^a, K. Chen^a, and **T.L. Marsh**. 2020. "Consumer Preference for Bio-based Batteries," *Journal of Consumer Behavior*. First published: 18 May 2020 <https://doi.org/10.1002/cb.1827>.
- Jiang, J. and **T.L. Marsh**. "Volatility Spillover Effects in the Oil and Financial Market: Cross-hedging in the U.S. Oil Market and the Energy Pipeline Sector," *Handbook of Energy Finance*, March 2020, p:267-299.
- Railey, A.^a, F. Lankester, T. Lembo, Richard Reeve, G. Shirima, **T. Marsh**. 2019. Enhancing livestock vaccination decision-making through rapid diagnostic testing, *World Development Perspectives* (16) 100144.
- Railey, A. and **T. Marsh**. 2019. A Rational Explanation of Limited FMD Vaccine Uptake in Endemic Regions. 2019, 8(4), 181; <https://doi.org/10.3390/Pathogens8040181> - 10 Oct 2019. Special issue on Diagnostics, Vaccinology and Pathogenesis of Foot-and-Mouth Disease and Other Viral Vesicular Diseases of Livestock.
- Zoë A. Campbell^a, Thumbi Wangi, **Thomas L. Marsh**, Marsha B Quinlann, Gabriel Shirima, Guy H. Palmer. Why isn't everyone using the thermotolerant vaccine? Preferences for Newcastle disease vaccines by chicken-owning households in Tanzania, 15 Aug 2019, *PLOS ONE*, <https://doi.org/10.1371/journal.pone.0220963>
- Zoë A. Campbell^a, Linus Otieno, Gabriel Shirima, **Thomas L. Marsh**, Guy H. Palmer, 2019. "Drivers of vaccination preferences to protect a low-value livestock resource: Willingness to pay for Newcastle disease vaccines by smallholder households," *Vaccine* 37 (2019): 11-18 (IF=5.5)
- Zoë A. Campbell^a, **Thomas L. Marsh**, Emmanuel A. Mpolya, Samuel M. Thumbi, Guy H. Palmer. 2018. "Newcastle disease vaccine adoption by smallholder households in Tanzania: Identifying determinants and barriers," *PLOS One*, October 24, 2018 <https://doi.org/10.1371/journal.pone.0206058>
- Casey-Bryars et al. 2018. "Waves of endemic foot-and-mouth disease in eastern Africa suggest

- feasibility of proactive vaccination approaches,” *Nature Ecology & Evolution*, volume 2, p:1449–1457 (2018). (IF 19.1)
- Rushton, J. et al. 2018. "Initiation of the Global Burden of Animal Diseases (GBADS)," *The Lancet*, Volume 392, Issue 10147, P538-540, August 18, 2018. (IF 168.7)
- Raily, A.^a, Shirima, G., Lembo, T., Palmer, G. H., and **Marsh, T.L.** 2018. “Spatial and temporal risk as drivers for adoption of foot and mouth disease vaccination,” *Vaccine* 36 (2018) 5077–5083. <https://doi.org/10.1016/j.vaccine.2018.06.069> (IF=5.5)
- Gabrielyan, G.^a, **T. L. Marsh**, J. McCluskey, and C. Ross. 2018. “Hoppiness is Happiness? Under-fertilized Hop Treatments and Consumers’ Willingness to Pay for Beer,” *Journal of Wine Economics*, Volume 13, 2018, No. 2: 160-181.
- Kuan-Ju Chen^a, P. Tozer, S. Galinato and **T.L. Marsh**. 2018. “Biotechnology to Sustainability: Consumer Preferences for Food Products Grown on Biodegradable Mulches,” *Food Research International*, Volume 116, February 2019, Pages 200-210.
- Tozer, P. and **T.L. Marsh**. 2018. "Dynamic Regional Model of the US Apple Industry: Consequences of Supply or Demand Shocks Due to Pest or Disease Outbreaks and Control," *Agricultural Systems*, 164:252-263. (IF=6.76)
- Prera, A., R. Fortenbery, and **TL Marsh**. 2017. “Risk Management: Potential for U.S. Microbreweries,” *Journal of Agribusiness*, Vol 35, No2: 143-160.
- Jiang, X.^a, A. Cassie, and **TL Marsh**. 2017. "Economic Consequences for Tree Fruit Intermediaries from Shocks," *Journal of Agriculture and Applied Economics*, Volume 49, Issue 4, November 2017, pp. 592-616
- Marsh, T.L.**, D. Pendell, R. Knipperberg. "Animal health economics: aid to decision-making on animal health interventions – case studies in the USA," *OIE Scientific and Technical Review*, Vol. 36 (1), April 2017.
- Brodhagen, M., J. Goldberger, D. Hayes, D. Inglis, **T. L. Marsh**, C. Miles. 2017. “Policy Considerations for Limiting Unintended Residual Plastic in Agricultural Soils,” *Environmental Science and Policy*, Volume 69, March 2017, Pages 81–84. (IF=6.42)
- Marsh, T.L.**, J. Yoder, T. Deboch,^a T. McElwain, G. Palmer. 2016. “Livestock vaccinations translate into increased human capital and school attendance by girls,” *Science Advances* 14 Dec 2016: Vol. 2, no. 12, e1601410, DOI: 10.1126/sciadv.1601410. Outstanding Published Research Award, Western Agricultural Economics Assoc. (2017) (IF 12.8)
- Pendell, D. L., Lusk, J.L., **T. L. Marsh**, K. H. Coble, and S. C. Szmania. 2016. "Economic Assessment of Zoonotic Diseases: An Illustrative Study of Rift Valley Fever in the United States," *Transboundary and Emerging Diseases*, Article first published online: 23 JUL 2014, DOI: 10.1111/tbed.12246.
- Markosyan, A^a, H. Chouinard, **T.L. Marsh**. "Producer Preferences for Specialty Crop Trade Policies," *Journal of Agribusiness*, 34, 2 (Fall 2016).
- Johnson, K.K., R. Seeger^a, **T.L. Marsh**. 2016. “Local Economies and Highly Pathogenic Avian Influenza,” *Choices*, 2nd Quarter 2016, 31(2).
- Yang, L.^a, L. Elbakidze, **T. L. Marsh**, C. McIntosh. 2016. "Primary and secondary pest management in agriculture: Balancing pesticides and natural enemies in potato production," *Agricultural Economics*, 47 (2016) 609–619.
- Pendell, D. L., **T. L. Marsh**, K. H. Coble, J.L. Lusk, and S. C. Szmania. "Economic Assessment of Animal Disease Releases: The National Bio and Agro Defense Facility," *PLOS ONE*. June 26, 2015, DOI: 10.1371/journal.pone.0129134
- Thumbi, SM., M. Kariuki Njenga, **T. Marsh**, S. Noh, E. Otiang, P. Munyua, L. Ochieng, E. Ogola, J. Yoder, A. Audi, J. Montgomery, G. Palmer and T. McElwain. “Linking human

- health and livestock health: a "One-Health" platform for integrated analysis of human health, livestock health, and economic welfare in livestock dependent communities," *PLOS ONE*, March 23, 2015 DOI: 10.1371/journal.pone.0120761. Developed PBASS data platform jointly with US-CDC, Kenya Medical Research Inst.
- Zhang, ^a R., **T.L. Marsh**, D. Gent. 2015. "Risk and Maximum Residue Limits: The Hops Sector," *Journal of Agricultural Science*, Vol. 7, No. 5:85-93.
- P. R. Tozer, **T.L. Marsh**, and Perevodchikov, E.V.^a. 2015. "Welfare Impacts of Foot-and-Mouth Disease in the Canadian Cattle Sector," *Canadian Journal of Agricultural Economics*, Volume 63, Issue 2, pages 163–184, June 2015; Article first published online: 30 JUN 2014 | DOI: 10.1111/cjag.12041. (IF=11.35)
- Jiang, J.^a, **T.L. Marsh**, and P. Tozer. 2015. "Policy Induced Price Volatility Transmission: Linking the U.S. Crude Oil, Corn and Plastic Markets," *Energy Economics* (52):217-227. (IF 12.8)
- Nogueira, L^a, J. Michalski, **T.L. Marsh**, and V. McCracken. "Welfare Implications of Washington Wheat Breeding Programs." *Journal of Agriculture and Applied Economics*. Volume 47 / Issue 02 / May 2015, pp 147-174. Published online: 29 January 2015.
- Gabrielyan, G.^a, J. McCluskey, **T. L. Marsh**, and C. Ross. 2014. "Willingness to Pay for Sensory Attributes in Beer," *Agricultural and Resource Economics Review* 43/1 (April 2014) 125–139.
- Marsh, T.L.**, R. C. Mittelhammer, and N. S. Cardell. 2014. "Generalized Maximum Entropy Analysis of the Linear Simultaneous Equations Model." *Entropy*, 16(2), 825-853, Special Issue: Maximum Entropy and Its Application.
- McCullough, M.^a, **Marsh, T.L.**, and Mittelhammer, R. C. 2014. "Reconstructing Nonlinear Structure in Regression Residuals," *Journal of Applied Statistics*, 41 (2):332-350. (Presented at the 2008 North American Meetings of the Econometrics Society.)
- Mittelhammer, R.C., N. S. Cardell, and **T.L. Marsh**. 2013. "The Data-Constrained Generalized Maximum Entropy Estimator of the GLM: Asymptotic Theory and Inference," *Entropy* 15, 1756-1775.
- Belasco, E., Galinato, S., **Marsh, T.**, Miles, C., Wallace, R., Wszelaki, A., and Inglis, D. 2013. High Tunnels Are My Crop Insurance: An Assessment of Risk Management Tools for Small-Scale Specialty Crop Producers," *Agricultural and Resource Economics Review*, 42/2 (August 2013) 403–418.
- McCullough, M.^a, **Marsh, T.L.**, and Huffaker, R.G. 2013. "Reconstructing Market Reactions to Consumption Harms." *Applied Economics Letters*, Volume 20, Issue 2, February 2013, pages 173-179.
- McCullough, M.^a, T.G. Smith, and **T.L. Marsh**. 2012. "Intertemporal Dependence in Alcohol Consumption Data: Evidence of Rational Addiction?" *Enometrica*, Volume 5, number 1, March 2012.
- Perevodchikov, E.V. ^a, **T. L. Marsh**, and R.C. Mittelhammer. 2012. "Information Theoretic Estimators for the First Order Spatial Autoregressive Model," *Entropy* 2012, 14(7), 1165-1185.
- Srinivasa, S.P. ^a, **Marsh, T. L.** and M. Brady. 2012. "Spatial Price Analysis of Used Construction Equipment: The Case of Excavators," *Journal Construction Management and Economics* Volume 30, 2012 - Issue 1.
- Tozer, P., and **Marsh T.L.**, 2012. "Domestic and Trade Impacts of Foot and Mouth Disease on the Australian Beef Industry." *Australian Journal of Agricultural and Resource Economics*, 56:1-19.

- McCullough, M.^a, **Marsh, T.L.**, and Huffaker, R.G. 2012. “Endogenously Determined Cycles: Evidence from Livestock Industries.” *Nonlinear Dynamics, Psychology, and Life Sciences*, 16: 205-231.
- Nogueira, L.^a, **T. L. Marsh**, P.R. Tozer and D. Peel. 2011. “Foot-and-Mouth Disease and the Mexican Cattle Industry.” *Agricultural Economics*, 42 (33-44).
- Piggott, N., and **Marsh, T.L.** (2011) Constraint Utility Maximization and Demand System Estimation. In Oxford Handbook on the Economics of Food Consumption and Policy, ed. J. Lusk, J. Roosen, and J. Shogren.
- Oxford, UK: Oxford University Press. Coffey, B. K.^a, T. C. Schroeder, and **T. L. Marsh**. 2011. “Disaggregated Household Meat Demand with Censored Data.” *Applied Economics*, 43, 2343-2363.
- Fanning, J.^a, **T. L. Marsh**, and K. Stiegert. 2010. “Determinants of U.S. Fast Food Consumption 1994-98,” *British Food Journal* 112, pp: 5-20.
- Marsh, T.L.** and K. Gallardo. 2009. “Adopting Biological Control for Ornamental Crops in Greenhouses,” *CAB Reviews: Perspectives in Agriculture, Veterinary Science, Nutrition and Natural Resources*, 4, No. 022, pp:1-9.
- Jones, R., K. Dhuyvetter, and **T. L. Marsh**, and T. Turner^a. “Estimating the Economic Value of Specific Characteristics Associated with Angus Bulls at Auction.” *Journal of Agriculture and Applied Economics* 40, 1(April 2008):315-333.
- Marshall, M.I. and **T.L. Marsh**. “Consumer and Investment Demand for Manufactured Housing Units,” *Journal of Housing Economics* 16(2007):59-71.
- Flaming, S.^a, **T.L. Marsh**, and T. Wahl. “Farm-Level Price Formation for Fresh Sweet Cherries.” *Journal of Food Distribution and Research* 38(2) (July 2007):39-49.
- Tonsor, G.^a and **T.L. Marsh**. “Comparing Heterogeneous Consumption in U.S. and Japanese Meat and Fish Demand.” *Agricultural Economics* 37 (2007) 81-91.
- Zhao, Z.^a, T. Wahl, and **T.L. Marsh**. 2007. “Economic Effects of Mitigating Apple Maggot Spread.” *Canadian Journal of Agricultural Economics* 55, (December 2007): 501-16. (IF=11.35)
- Garrett, T. A., **T. L. Marsh**, and M.I. Marshall. 2006. “Political Allocation of Agriculture Disaster Payments in the 1990s.” *International Review of Law and Economics*, 26(2), (June 2006): 143-161 (lead article).
- Taylor, M. R., K. C. Dhuyvetter, T. L. Kastens, M. Douthit^a, and **T. L. Marsh**. 2006. “Show Quality Quarter Horse Auctions: Price Determinants and Buy-Back Practices.” *Journal of Agricultural and Resource Economics*. Vol. 31, No. 3 (December 2006): 595-615.
- Boland, M. A., and **T. L. Marsh**. 2006. “Vertical Integration and Input Quality in the Sugar Beet Industry.” *Journal of Agricultural and Resource Economics*, Vol. 31, No. 1 (April 2006):114-128.
- Ogunyinka, E.O.^a, and **T. L. Marsh**. 2006. “Nigerian Demand for Meat,” *Journal of International Food & Agribusiness Marketing*, Volume 18, (1/2) 125-149.
- Perry, B.^a, **T. L. Marsh**, R. Jones, M.W. Sanderson, J.M. Sargeant, D.D. Griffin, and R.A. Smith. 2007. “Joint Product Management Strategies on E. Coli O157 and Feedlot Profits,” *Food Policy* 32(2007):544-565. (IF 6.5)
- Dong, F.^a, **T. L. Marsh**, and K. Stiegert. “State Trading Enterprises in a Differentiated Environment: The Case of Global Malting Barley Markets.” *American Journal of Agricultural Economics*, 88(1), (February 2006):90-103.
- Stiegert, K, A. A. Ardalan^a, **T.L. Marsh**. 2006. “Modal Foreign Direct Investment in the European Union.” *Journal of Food Distribution and Research* 37(3):44-55.

- Schumacher, S. K.^a, **T. L. Marsh**, and K. A. Williams. 2006. "Optimal Pest Control in Greenhouse Production of Ornamental Crops." *Agricultural Economics*, 34(2006) 39-50.
- Zhao, Z.^a, T. Wahl, and **T.L. Marsh**. 2006. "Invasive Species Management: Foot-and-Mouth Disease in the U.S. Beef Industry." *Agricultural and Resource Economics Review*, 35 (April):98-115.
- Marshall, M.I.^a and **T.L. Marsh**. 2006. "Endogenous Trade Protection in the Mexican Corn Market." *Journal of International Agricultural Trade and Development*, Volume 2 (2) 221-240.
- Garrett, T. A., **T. L. Marsh**, and M.I. Marshall. 2006. "Political Allocation of Agriculture Disaster Payments in the 1990s." *International Review of Law and Economics*, 26(2), (June 2006): 143-161 (lead article).
- Marsh, T.L.** and R.C. Mittelhammer. 2004. "Generalized Maximum Entropy Estimation of a First Order Spatial Autoregressive Model," *Advances in Econometrics, Spatial and Spatiotemporal Econometrics*, Volume 18, eds. Pace and LeSage (peer reviewed).
- Marsh, T. L.** 2005. "Economic Substitution for U.S. Wheat Food Use by Class." *Australian Journal of Agricultural and Resource Economics*, 49: 283-301.
- Piggott, N. E. and **T.L. Marsh**. 2004. "Does Food Safety Information Impact US Meat Demand?" *American Journal of Agricultural Economics*, 86 (February):154-174.
- Marsh, T.L.**, T. C. Schroeder, and J. Mintert. 2004. "Impacts of Meat Product Recalls on Consumer Demand in the USA," *Applied Economics*, 36, 897-909.
- Schumacher, S. K.^a and **T. L. Marsh**. 2003. "Economies of Scale in the Floriculture Industry." *Journal of Agricultural and Applied Economics*, 35 (December):497-507.
- J. M. Peterson, **T. L. Marsh**, and J. R. Williams. "Conserving the Ogallala Aquifer: Efficiency, Equity, and Moral Motives" *Choices* (February 2003).
- Tozer, P. R., D. L. Scollard, **T. L. Marsh**, and T. J. Marsh. 2002. "Predicting calving ease peri-partum" *Canadian Journal of Animal Science*, 82 (March):19-7.
- Garrett, T. A. and **T. L. Marsh**. "The Revenue Impacts of Cross-Border Lottery Shopping in the Presence of Spatial Autocorrelation." *Regional Science and Urban Economics*, vol. 32, no. 4 (July 2002): 501-19.
- Lusk, J. L.^a, A. M. Featherstone, **T. L. Marsh** and A. O. Abdulkadri^a. 2002. "Empirical Properties of Duality Theory." *Australian Journal of Agricultural and Resource Economics* 46:(March)45-68.
- Lusk, J. L. ^a, **T. L. Marsh**, and T. C. Schroeder. "The Supply and Demand for USDA Quality Graded Boxed Beef." *Journal of Agriculture and Resource Economics*, 26, (Jul 2001):91-106.
- Marsh, T. L.**, R. C. Mittelhammer, and R. G. Huffaker. "Probit with Spatial Correlation by Plot: PLRV Net Necrosis." *Journal of Agricultural, Biological, and Environmental Statistics*, 5(2000): 22-36.
- Marsh, T.L.**, R. G. Huffaker, and G. E. Long. "Optimal Control of Vector-Virus-Plant Interactions: The Case of PLRV Net Necrosis." *American Journal of Agricultural Economics*, 2000 (August).
- Marsh, T.L.**, R. G. Huffaker, R. C. Mittelhammer, R. J. Folwell, G. E. Long, D. R. Horton, and H. H. Toba. "Potato Leaf Roll Virus Expressed as Net Necrosis in Potato Tubers: Identifying Tradeoffs Among Time of Inoculation, Storage Length, and Tuber Weight." *Journal of Economic Entomology*, 91(August 1998): 923-932.
- Roosen, J., R. G. Huffaker, R. J. Folwell, **T. L. Marsh** and R. C. Mittelhammer. "The Relation of Potato Leafroll Virus Net Necrosis in Potato Tubers to the Interval Between Planting and Inoculation." *Crop Prot.* 16 (1997): 533-539.

- Anderson, D.M., **T.L. Marsh**, and D.E. Deonigi. 1996. "Developing Historical Food Production and Consumption Data for ¹³¹I Dose Estimates: The Hanford Experience." *Health Physics Journal*, October.
- Ulibarri, C.A. and **T.L. Marsh**. 1994. "Tax Revenue and Innovations in Natural Gas Supply: New Mexico." *The Natural Resources Tax Review*, Vol. 8, No. 4, April 1995.

Government and Other Reports (Mandated & Requested)

- Marsh, T.L.** (subject matter expert) 2024. [Potential Research Priorities to Inform U.S. Readiness and Response to Avian Influenza A \(H5N1\): Proceedings of a Workshop—in Brief | The National Academies Press](#)
- Marsh, T.L.** (subject matter expert) 2015. Livestock Modernization Initiative, Tanzania. (Invited participant, Tanzanian Ministry of Agriculture)
- Marsh, T.L.** (co-chair, subject matter expert). "White paper on Washington State Initiative 522 (I-522): Labeling of Foods Containing Genetically Modified Ingredients," Washington State Academy of Sciences, October 2013. (WA Legislative Request)
- Marsh, T.L.** (contributing author, subject matter expert) "Chapter 7. Economic Assessment," *Updated Site-Specific Biosafety and Biosecurity Mitigation Risk Assessment: National Bio and Agro-Defense Facility*, Department of Homeland Security (Final Report, February 2012). (Congressionally mandated report, reviewed by the National Academy of Sciences)
- Marsh, T.L.** (contributing author, subject matter expert) 2012. "Feasibility of Camelina as a Biofuels Feedstock in Washington," WSU IMPACT report, Washington State University, Pullman. (Policy response at Senator Cantwell's request).
- Marsh, T.L.** (contributing author, subject matter expert) 2011 Washington State Legislative Report Columbia River Basin Long-Term Water Supply and Demand Forecast, <https://apps.ecology.wa.gov/publications/documents/1112011.pdf>
- Marsh, T.L.** (contributing author, subject matter expert) "Chapter 5. Economic Assessment," *Site-Specific Biosafety and Biosecurity Mitigation Risk Assessment: National Bio and Agro-Defense Facility*, Department of Homeland Security (Final Report, October 2010). (Congressionally mandated report, reviewed by the National Academy of Sciences)
- Marsh, T.L.** (contributing author, subject matter expert) "Appendix C: Qualitative Risk/Hazard Assessment" *Site-Specific Biosafety and Biosecurity Mitigation Risk Assessment: National Bio and Agro-Defense Facility*, Department of Homeland Security (Appendices to Final Report, June 2010). (Congressionally mandated report, reviewed by the National Academy of Sciences)
- Marsh, T.L.** (contributing author, subject matter expert) 1994. "Key Elements Affecting Manufactured Home Investments in Energy-Efficiency: An Empirical Analysis." DOE/BP-2335, Pacific Northwest Laboratory, Richland, WA. (US Congressional Testimony)
- Marsh, T.L.** (contributing author, subject matter expert) 1993. "Estimation of 1945, 1951, and 1957 Food Consumption for Use in the Hanford Environmental Dose Reconstruction Project." DOE/PNWd-2113 HEDR, Pacific Northwest Laboratory, Richland, WA. (Mandated report, reviewed by the National Academy of Sciences)
- Marsh, T.L.** (contributing author, subject matter expert). 1993. "End Use Energy Estimates for U.S. Commercial Buildings." DOE/PNL-8946, Pacific Northwest Laboratory, Richland, WA.
- Marsh, T.L.** (contributing author, subject matter expert) 1992. "Commercial Production and Distribution of Fresh Fruits and Vegetables: A Scoping Study on the Importance of Produce Pathways to Dose." DOE/PNWD-2022 HEDR, PNL, Richland, WA. (Mandated report,

reviewed by the National Academy of Sciences)

Other Publications, Reports, and Software

- Menezes et al. Chapter 6: Assessing the wider economic impact of animal disease burdens, Global Burden of Animal Diseases (GBADs) Technical Guide, Version 1.0, July 2024.
- Kappes, A., T.L. Marsh, and D. Pendell. 2021. "Global Burden of Aquaculture: Wider Economic Impacts" White Paper, GBADs (<https://animalhealthmetrics.org>).
- X. Gu^a and **T.L. Marsh**. "Evaluation of the Effectiveness of Advertising and Promotion for Processed Pears," Report to the Processed Pear Committee (July 2020).
- Marsh, T.L.**. 2017. "The Economic Benefits of Diagnostic Testing: Anaplasmosis in Cattle," Research Report in the 50th Annual Conference Proceedings of the American Association of Bovine Practitioners, p. 202.
- Liu, Ma, **T.L. Marsh**, and P.R. Tozer. "Evaluation of the Effectiveness of Advertising and Promotion for Processed Pears," Report to the Processed Pear Committee (May 2014).
- Jiang, X.^a, **T.L. Marsh**, and P.R. Tozer. "Evaluation of the Effectiveness of Pear Advertising and Promotion," Report to the Fresh Pear Committee, Pear Bureau Northwest (March 2014).
- Jiang, X. and **T.L. Marsh**. 2014. "Economic Assessment of Pest and Disease Outbreaks in Tree Fruit: Empirical Model and Manual for U.S. Pears," IMPACT Center and School of Economic Sciences, Washington State University.
- Marsh, T.L.** and J. Yoder. 2013. "Economic Assessment of ECF Vaccination on Kenyan Pastoral Households," Final Report, GALVmed.
- Marsh, T.L.** (supporting author). Washington State University and the Washington State Department of Ecology. January 2012. Columbia River Basin 2011 Long Term Water Supply and Demand Forecast. Legislative Report.
- C. Miles, and **T. Marsh**. 2012. "Chapter 3.12 Biodegradable plastic mulches, China, India and USA," In Profit from Storage: The costs and benefits of water buffering, edited by Lenneke Knoop and Linda Navis.
- C. Miles, D. Hayes, M. Brodhagen, J. Lee, A. Wszelaki, J. Moore-Kucera, R. Wallace, **T. Marsh**, and D. Inglis. 2011. "Chapter 3.12 Plastic Mulches, Biodegradeable Alternatives: China and US," In Transforming Landscapes, Transforming Lives: The Business of Sustainable Water Buffer Management, edited by Steenbergen, F. van, Tuinhof A., and L. Knoop.
- Peterson, J. M., C. M. Smith, J. C. Leatherman, K. R. Mankin, **T. L. Marsh**, J. A. Fox, M. Lee, and M. Henry. 2009. "Integrating Economic and Biophysical Models to Assess the Impacts of Water Quality Trading, EPA.
- Zhang, C.^a, **T.L. Marsh**, and R.T. Schotzko. "Evaluation of the Effectiveness of Pear Advertising and Promotion," Final Report to the Fresh Pear Committee, Pear Bureau Northwest (October 11, 2007).
- McClaskey, J., J. Fox, **T.L. Marsh** (supporting author), O. Doering, K. Foster, A. Nutsch, and J. Kastner. 2004. "Chapter 9: Economic and Cost Considerations," In *Carcass Disposal: A Comprehensive Review*, USDA-APHIS and National Agricultural Biosecurity Center Consortium.
- T. L. Marsh** and N. E. Piggott. "Impact of Food Safety on Beef Demand," Cattlemen's Day, Report of Progress, Kansas State University Agricultural Experiment Station and Cooperative Extension Service, 2002.
- Fanning, J., **T. Marsh**, and Jones R. "Commercial Cow Herd Culling and Replacement Strategies." Cattlemen's Day, Report of Progress, Kansas State University Agricultural Experiment Station and Cooperative Extension Service, 2002.

- J. Mintert, T. C. Schroeder, and **T. L. Marsh**. "Focus on Beef Demand," Livestock Marketing Information Center Extension Fact Sheet, 2002.
- J. Mintert, T. C. Schroeder, and **T. L. Marsh**. "Factors Effecting Beef Demand," Cattlemen's Day, Report of Progress 873, Kansas State University Agricultural Experiment Station and Cooperative Extension Service, 2001.
- Schroeder, T. C., **T. L. Marsh**, and J. Mintert. 2000. "Beef Demand Determinants: A Research Summary." MF-2457 Beef Marketing, Agricultural Experiment Station and Cooperative Extension Service, Kansas State University.
- Schroeder, T. C., **T. L. Marsh**, and J. Mintert. 2000. "Beef Demand Determinants." Report prepared for the National Cattlemen's Beef Association (January).
- Marsh, T.L.** "Chapter 6.6: Comprehensive Computer Application," in *Econometric Foundations* by R.C. Mittelhammer, G. G. Judge, and D. J. Miller. Cambridge University: New York, 2000.
- Marsh, T.L.**, J.L. Krogmeier, and R.C. Mittelhammer. 1997. *Mathematical Statistics for Economics and Business: Solution Manual*. Springer-Verlag, New York.
- Belzer, D.B., **T.L. Marsh**, and R.D. Sands. 1994. "Analysis of U.S. Commercial Energy Use Trends, 1972-1991." In *Building Tomorrow: The Path to Energy Efficiency*, Vol. 7, American Council for an Energy Efficient Economy, Washington, DC.
- Ulibarri, C.A. and **T.L. Marsh**. 1993. "Deadweight Loss From BTU Taxes on Manufacturing Energy Consumption." In *Energy and the Environment*, International Association for Energy Economics, Seattle, WA.
- Ulibarri, C.A. and **T.L. Marsh**. 1993. "Preservation Value and Sustainable Yield." In *Proceedings of the Pacific Northwest Regional Economic Conference*, Northwest Policy Center, University of Washington, Seattle.

Outreach

- Marsh, T.L.**, 2024. Bird Flu, US Cows, and Economic Consequences. Think Global Health. Council on Foreign Relations. <https://www.thinkglobalhealth.org/article/bird-flu-us-cows-and-economic-consequences#:~:text=Although%20the%20public%20health%20risk,milk%20production%20for%20short%20periods>
- Dustin Pendell, **Thomas L. Marsh**, and Ellen Hughes. Introduction to the GBADs Technical Guide, WOAHA Collaborating Center for the Economics of Animal Health (Americas Region) & Global Burden of Animal Diseases (GBADs), September 18, 2024.
- Chen, K., S. Galinato, S. Ghimire, S. MacDonald, **T. Marsh**, C. Miles. P. Tozer, M. Velandia. 2018. "Important Considerations for the Use of Biodegradable Mulch in Crop Production." Washington State University Extension Publication FS304E
- Velandia, M., A. Smith, A. Wszelaki, S. Galinato, and **T. Marsh**. 2018. "The Economics of Adopting Biodegradable Plastic Mulch Films." University of Tennessee Extension Publication W650.
- Marsh, T.L.**, Interviewed for "From farm to glass: How hops are priced," NPR, 12/26/2016
- Marsh, T.L.** et al. Referenced in "What Does Vaccinating Cows Have To Do With A Girl's Education?", NPR, 12/14/2016.
- Hagerman, A, and **Marsh, T.L.** "Theme Overview: Economic Consequences of Highly Pathogenic Avian Influenza," *Choices*, 2nd Quarter 2016 • 31(2).
- Marsh, T.L.** et al. Referenced in "Humans, livestock in Kenya linked in sickness and in health,"

- Science Daily, May 2015.
- Marsh, T.L.** Quoted in “Craft beer boom has brewers scrambling for hops,” CNBC, July 16, 2014.
- Galinato, S., P.R. Tozer, and **T.L. Marsh**. 2014. “The Contribution of the Hop Production Sector to Washington’s Economy,” WSU IMPACT Center, Fact Sheet.
- Miaoru L., **T. L. Marsh** and P. R. Tozer. “Evaluation of Advertising and Promotion for Processed Pears,” Presentation to the Processed Pear Committee, Portland, May 28, 2014.
- Marsh, T.L.** Washington State Academy of Sciences, GMO report - interviews (radio, television, newspaper) KIROTV, King 5, 7 News Denver, KABI, NWPR, KUOM, KOHO, KPUG, KGMI, Seattle Times, Capital Record, The Olympian, ect.
- Tozer, P. R., J. Sage^a, and **T.L. Marsh**. 2013. “Trends in Agricultural Production, Exports, and Transportation in Washington State,” IMPACT Center Washington State University.
- Marsh, T.L.** “Wheat in the PNW,” NC Small Grain Association Meeting, Mebane, NC, August 29 2012.
- Young, D.L. Galinato S.P, and **Marsh, T.L.** 2012. “Concerned about Camelina,” Wheat Life, June 2012, p:24-28.
- Marsh, T.L.** Referenced in “Study simulates effects of foot-and-mouth disease outbreak in Mexico”, EurekAlert! The Global Source for Science News, American Association for the Advancement of Science (AAAS), February 2012.
- Marsh, T.L.** “Overview of BCAP,” 2012 WSU Oilseeds production, marketing conference, Colfax, WA.
- Marsh, T.L.** Quoted in “Farmers in good mood at Yakima Ag Expo,” Capital Press, January, 7, 2012.
- Marsh, T.L.** Quoted in “Farmers look to 2012 with cautious optimism,” Capital Press, December 30, 2011.
- Marsh, T.L.** Quoted in “Competition fuels rising food costs,” Lewiston Tribune, December 4, 2011.
- Marsh, T.L.** Quoted in “Tainted Turkey Still in Homes, Agency Warns,” Wall Street Journal, August 5, 2011. Also reported by Fox News.
- Marsh, T.L.** Quoted in “Global glut, volatile prices make Washington's wheat farmers uneasy,” Puget Sound Business Journal, July 16, 2010.
- Marsh, T.L.** Quoted in “USDA: Farm profits plummet,” Capital Press, September 6, 2009.
- Marsh, T.L.** “Wheat and Grain Outlook,” WSU Conference on Economic Issues and Outlook, Pasco, WA, December 6, 2007.
- Marsh, T.L.** Wheat and Grain Outlook interviews with NPR, Spokane Journal of Commerce, Capital Press, and Northwest Agricultural News Network. 2007.
- Marsh, T.L.**, C. Zhanga, and R.T. Schotzko. “Effectiveness of Pear Advertising and Promotion,” Pear Bureau Northwest, Portland, May 31, 2007.
- Marsh, T.L. 2007.** Testimony before the Washington State Senate Committee on Economic Development, Trade, and Management.
- Marsh, T.L. 2006.** Contributions to the Farm Bill Specialty Crop Briefing, U.S. House Agricultural Committee.
- Marsh, T.L.**, Markoysan, A., Chouinard, H.H., Wahl, T.I., & Wieck, C. (2006). “Invasive Species.” Fact Sheet for Specialty Crops Policy Options and Consequences: Trade issues.
- Wahl, T.I., Chouinard, H.H., **Marsh, T.L.**, Wieck, C., & Markoysan, A. (2006). Specialty Crops Policy Options and Consequences: Pacific Northwest Region. Final Report.
- Wahl, T.I., **Marsh, T.L.**, Wieck, C., Chouinard, H.H., Schotzko, T., Markosyan, A., & Josling,

- T.E. (2006, May). "Trade Issues." Fact Sheet for Specialty Crops Policy Options and Consequences.
- Marsh, T. L.** "International Marketing," Presentation, Ag Forestry Leadership Conference, Prosser, WA, September 2005.
- Marsh, T. L.** "Market Trends for Wheat by Class," Presentation, Pullman City Commerce, Pullman, WA, February 22, 2005.
- Crespi, J., S. Grunewald, A. Barkley, J. Fox, and **T. Marsh**. "Potential Economic Impacts from the Introduction of Genetically Modified Wheat on the Export Demand for US Wheat," Kansas Wheat Commission, April 2005.
- Dhuyvetter, K.D., R. Jones, T. Turner, and **T. Marsh**. "Economic Values Associated With Expected Progeny Differences For Angus Bulls At Auction." In *Cattlemen's Day 2005*, Kansas State University Agricultural Experiment Station Report of Progress, No. 923, March 2005
- T. L. Marsh**, S. Calla, A. Barkley, and M. Boland. "The Potential to Increase U.S. Demand for Wheat: Emerging Domestic Markets," 2002, Kansas Wheat Commission, Manhattan, KS.
- T. L. Marsh**, J. Fanning, A. Barkley, M. Boland, and K. Stiegert. "Fast Food Sales: The Potential to Increase Wheat Product Consumption," 2002, Kansas Wheat Commission, Manhattan, KS.
- T. L. Marsh** and J. Taylor. "Transferable Permits and Kansas Deer." Presentation and proceedings paper for the 2002 Risk and Profit Conference, Manhattan, KS.
- T.L. Marsh**, J. Fanning, and R. Jones. "Commercial Cow Herd Culling and Replacement Strategies." Presentation and proceedings paper for the 2001 Risk and Profit Conference, Manhattan, KS.
- J. M. Peterson, **T. L. Marsh**, and J. R. Williams. "Pump It If You Can: Kansas Water Policy at the Crossroads." Presentation and proceedings paper for the 2001 Risk and Profit Conference, Manhattan, KS.
- T. L. Marsh**, and J. Fox. "Kansas Wildlife: Perceptions, Conflicts, and Efficient Management." Presentation and proceedings paper for the 2000 Risk and Profit Conference, Manhattan, KS.
- T. L. Marsh**, Rodney Jones, and Justin Terry. 1999. "Commercial Replacement Heifers: Markets, Prices, and Decisions," Presentation and proceedings of Risk and Profit Conference, Manhattan, KS.
- Mintert, J., T.C. Schroeder, and **T. L. Marsh**. 2000. "What Causes Beef Demand to Shift?" *Kansas Stockman*, July 2000.

Book Reviews

- Marsh, T. L.** 2004. Review of "Battling Resistance to Antibiotics and Pesticides: An Economic Approach" in the *Journal of Environmental Quality* (November-December).
- Marsh, T. L.** 2004. Review of "The Economics of Conserving Wildlife and Natural Areas" in the *Wildlife Society Bulletin*.

Other Consultations (Paid and Non-Paid)

Australian Department of Agriculture, Battelle Laboratories, Bonneville Power Administration, Federal Trade Commission, Gates Foundation, National Academy of Sciences, National Cattlemen Beef Association, Signature Science, U.S. Bureau of Reclamation, U.S. Department

of Energy, U.S. Department of Homeland Security, U.S. Department of Agriculture, Centers for Disease Control, Tyson Foods, Ministry of Agriculture Tanzania, World Organization for Animal Health, and American Veterinarian Medical Association.

Captive Supply in Cattle. Republican Valley Feeders, etc v Conagra Foods, Inc. 2003.

Pesticide Spray Externality in Hops. Jackson v. Watson. 2018.

International Programs and Projects: Collaborating Center on the Economics of Animal Health (CCEAH) – Americas (founding director), World Organization for Animal Health (WOAH); Global Burden of Animal Disease Program (GBADs) (founding member); WSU Global Health (member); Program for Enhancing the Health and Productivity of Livestock (PEHPL) Program (advisor); EU-FMD (participant)

Sabbatical: North Carolina State University (2012)

Peer-Reviewed Conference Presentations (100)

Mohammad Maksudur Rahman, Shakil, G.S. and **T.L. Marsh**. 2024. Are Animal Health Investments Optimal? An Analysis of the Determinants of Public Investment in Agriculture and Animal Health. Selected presentation, 17th ISVEE Conference, Sydney, Australia.

Tozer, P.R. and **T.L. Marsh**. 2024. Impact of animal nutrition on the economic welfare of firms and consumers. Selected presentation, 17th ISVEE Conference, Sydney, Australia.

Mohammad Maksudur Rahman and **T.L. Marsh**. 2024. An analysis of the economic impacts of tick-borne disease outbreaks on the US meat sector. Selected presentation, 17th ISVEE Conference, Sydney, Australia.

Shakil, G.S., and **T.L. Marsh**. 2024. A Partial Equilibrium Model for Analyzing the Economic Burden of Livestock Diseases. Selected paper, AAEA meetings, NOLA.

Shakil, G.S., A. Countryman, **T.L. Marsh**. 2024. Economic Impacts of Peste des Petits Ruminants (PPR) in Ethiopia, Peer Reviewed, Selected Paper, 27th Annual Conference on Global Economic Analysis, Global Trade and Analysis Project (GTAP), Denver, Colorado.

Shakil, G.S. and **T.L. Marsh**. A Regime Switching Limited Information Maximum Likelihood Estimator. Selected Paper, AAEA 2023, Washington DC.

Gent, D. H., Pedro, J. F., **Marsh T. L.**, Chatterjee, S., and Bhattacharyya, S. 2023. Coupling an epidemiological and economic model to optimize management of hop powdery mildew at the landscape level. Proc. Scientific Commission of the International Hop Growers Convention. June 25-29 2023, Ljubljana, Slovenia.

Barai, D. ^a et al. COVID Impact on the US Poultry Trade, Selected Poster. AAEA 2023, Washington DC.

Shakil, G.S. et al. Are Disease Equilibria Equivalent to Health Equilibria? Selected Poster, AAEA 2023, Washington DC.

Countryman et al. Effects of Animal Disease Mitigation in Ethiopia: A Computable General Equilibrium Analysis, Organized Symposia, WAEA & CAES, June, 2023.

Thompson et al. Economic Burden of Animal Health: A Case Study of the U.S. Broiler Industry, Organized Symposia, WAEA & CAES, June, 2023.

Marsh et al. Economic Impact of Animal Health Improvement in Ethiopia: A Partial Equilibrium Model of Small Ruminants, Organized Symposia, WAEA & CAES, June, 2023.

Pendell, D.I., A. Kappes, T. Tozoneyi, G.S. Shakil and **T.L. Marsh**. GBADs: Wider Economic Impacts of Animal Health, 2022 LD4D, Livestock Data for Decisions, October

2022.

- Pendell, D.I., A. Kappes, T. Tozoneyi, G.S. Shakil and **T.L. Marsh**. Wider Economic Impacts of Animal Health, Global Burden of Animal Disease Program. International Symposium of Veterinary Epidemiology and Economics (ISVEE), August 2022, Halifax, NS.
- Rahman, M. **T.L. Marsh**, Causal Analysis of Trade Cost from Pests and Pathogens: A Global Study of Foot and Mouth Disease Impacts on Meat Exports. International Symposium of Veterinary Epidemiology and Economics (ISVEE), August 2022, Halifax, NS.
- Railey, A., S. Kerfua and **T.L. Marsh**. Human and animal impacts of livestock quarantines at the Uganda-Tanzania border, Selected Paper, 2022 AAEA.
- Barai, D. and **T.L. Marsh**. Why are there so many DUCs?, Selected Poster. AAEA 2022.
- Brenda Madrid, Sam Wortman, Douglas G Hayes, Jennifer M DeBruyn, Carol A Miles, Markus Flury, **Thomas L Marsh**, Suzette P Galinato, Karl Englund, Shinsuke Agehara, Lisa Wasko DeVetter. Opportunities for Improving the End-of-Life Management of Plastic Mulches in Agriculture, 2021 American Society for Horticultural Science (ASHS) Annual Conference.
- Shakil, G.S. and **T.L. Marsh**. One Instrument to Rule Them All? Selected Paper, AAEA 2021.
- Shakil, G.S. And **T.L. Marsh**. Vertically integrated equilibrium model: A small economy context. Selected Poster, AAEA 2021.
- Rahman, M. **T.L. Marsh**, Measuring impact of animal diseases on livestock productivity across countries," Atlanta, GA., Jul. 2019, International Society for Economics and Social Sciences of Animal Health (ISESSAH) Annual Meeting.
- Railey, A, and **T.L. Marsh**. Empirical Evidence on the Substitution between Antibiotics and Vaccination: Livestock in East Africa Symposium presentation, Atlanta, GA., Jul. 2019, Agricultural & Applied Economics Association (AAEA) Annual Meeting.
- Marsh, T.L.** et al "Measuring the Global Burden of Diseases," Symposium presentation, Atlanta, GA., Jul. 2019, Agricultural & Applied Economics Association (AAEA) Annual Meeting.
- Marsh, T.L.**, H. Chouinard, X. Gu, JT LaFrance, and M Ward. Econometrics of Binding Non-Negativity Constraints in Food Demand," Selected paper presentation, Atlanta, GA., Jul. 2019, Agricultural & Applied Economics Association (AAEA) Annual Meeting.
- Choi, Y and **T.L. Marsh**, "Machine Learning Techniques for Vaccine Program Assessment in Kenya". Track session. Atlanta, GA., Jul. 2019, Agricultural & Applied Economics Association (AAEA) Annual Meeting.
- Kappes, **T.L. Marsh**, Technical Efficiency of Food Intake Frequency on Childhood Stunting in Western Kenya," Selected paper presentation, Atlanta, GA., Jul. 2019, Agricultural & Applied Economics Association (AAEA) Annual Meeting.
- T.L. Marsh** "The Burden of Zoonotic Diseases: Panel Data Evidence from Rural Kenya," Symposium presentation, Atlanta, GA., Jul. 2019, Agricultural & Applied Economics Association (AAEA) Annual Meeting.
- Gu, X., **T.L. Marsh**, and T.R. Fortenbery. "Price Linkage and Volatility Spillover of Beer Inputs". Contributed paper, 2019 AARES Annual Conference, Melbourne, Victoria, Australia, Feb 12-15.
- Seeger et al. International Society for Economics and Social Sciences of Animal Health (ISESSAH), "Cost Data Collection in an Animal Health Emergency," France. (2018).
- Railey et al., EU FMD, "Household Preferences for Diagnostic Testing to Vaccine Match in an Endemic Setting," Italy. (2018)
- Railey et al., International Society for Economics and Social Sciences of Animal Health (ISESSAH), "Household response to FMD vaccines in northern Tanzania," France. (2018).
- Chen et al., Agricultural and Applied Economics Association, "The Relationship Between Biomaterial and Agricultural Commodity Markets." (2018).

- Marsh, T. L.**, Agricultural and Applied Economics Association, "Welfare Analysis of Livestock Disease Outbreaks." (2018).
- T.L. Marsh.** 2017. "The Economic Benefits of Diagnostic Testing: Anaplasmosis in Cattle," Oral Presentation, 50th Annual Conference of the American Association of Bovine Practitioners.
- Railey, A. and **T.L. Marsh.** 2017. "Diagnostic Testing and Vaccine Matching," AAEA Selected Paper, Chicago. AAEA Selected Paper, Chicago.
- Kuan-Ju Chen and **T.L. Marsh.** 2017. "Consumer Willingness to Pay for Strawberries Grown on Biodegradable Mulches," AAEA Selected Paper, Chicago.
- Gu, X. and **T.L. Marsh.** 2017. "Pesticide Substitution under Maximum Residue Limits," AAEA Selected Paper, Chicago.
- Xiangrui Wang, Ron C. Mittelhammer, **Thomas L. Marsh;** Jill J. McCluskey, "Divestiture of U.S. Businesses May Fail as a Merger Remedy: The Case of the U.S. Beer Industry," Agricultural and Applied Economics Association, Selected Paper, Chicago.
- Kuan-Ju Chen, Kuan-Heng Chen, **Thomas Marsh.** 2016. "Analysis of Energy and Agricultural Commodity Markets with EISA 2007: A Vine Copula-based ARMA-EGARCH Model," AAEA Selected Paper, Boston.
- Jiang, J. and **T.L. Marsh.** 2016 "Volatility Spillover Effects and Cross-Hedging in the U.S. Oil Market and the Energy Pipeline Sector Index," AAEA Selected Poster, Boston.
- Bastola, U., **T.L. Marsh,** et al. 2015. "Household Behavior and Livestock Diseases: The Case of Foot-and-Mouth Disease in Tanzania," ISVEE, Merida, Mexico.
- Bastola, U. and **T.L. Marsh.** 2015. "Trade Impacts of Pests and Pathogens: The Case of Foot and Mouth Disease," ISVEE, Merida, Mexico.
- Sapkota Bastola, P., U. Bastola and **T.L. Marsh** 2015. "Role of Food Insecurity and Women's Autonomy in Child Health: Empirical Evidence from Nepal," AAEA Selected Paper, San Francisco.
- Chouinard, H., J.T. LaFrance, X. Liu, and **T.L. Marsh.** "The Demand for Ales and Lagers in the United States." Paper and presentation 2015 Beeronomics Conference, Seattle.
- Wang, X., **T.L. Marsh,** R. Mittelhammer. "Demand for U.S. Beer Imports." Paper and presentation 2015 Beeronomics Conference, Seattle.
- Gabrielyan, G., **T.L. Marsh,** J.J. McCluskey, and C.F. Ross. "Hoppiness and Happiness: The Impact of Hop Quality on Willingness to Pay for Beer." Paper and presentation 2015 Beeronomics Conference, Seattle.
- Marsh, T.L.** "Production Risk and Maximum Residue Limits in Hops Production." Paper and presentation 2015 Beeronomics Conference, Seattle.
- Prera, A., R. Fortenbery, and **T.L. Marsh.** "Risk Management: Hedging Potential for U.S. Breweries." Paper and presentation 2015 Beeronomics Conference, Seattle.
- Nogueira, L., H. Chouinard, and **T.L. Marsh,** and C. Wieck. 2014. "Technical Barriers to Trade: Effect on Revenue and Surplus," 2014 IATRC Meeting, San Diego, CA.
- M. Casey, S. Cleaveland, D. Mshanga, T. Kibona, H. Auty, **T. Marsh,** J. Yoder, B. Perry, R. Kazwala, D. Haydon, D. King, S. Parida, D. Paton, R. Reeve, and T. Lembo. 2014. "Household Level Impacts of Foot-and-Mouth Disease on Traditional Livestock-Keeping Systems of Northern Tanzania", European Union FMD Meeting.
- Thumbi, W., Otiang E., Ochieng L., Ogola E., Munyua, P., **Marsh, T.,** Yoder, J., Noh, S., McElwain T., Njenga, M.K. and Palmer, G. 2013. "Linking Human and Animal Health: A Population Based Animal Syndromic Surveillance Study," ASTMH, Washington, DC.
- Gabrielyan, Gnel, Jill J. McCluskey, **Thomas L. Marsh,** and Carolyn Ross. "Consumer Preferences for Beer Attributes" presented at Beeronomics Conference - The Economics of Beer and Brewing biennial meeting. September 18 to 21, 2013 in York, United Kingdom.

- Gabrielyan, Gnel, Jill J. McCluskey, **Thomas L. Marsh**, and Carolyn Ross. “Willingness to Pay for Hops in Beer,” Willingness to Pay for Hops in Beer.” presented at Northeastern Agricultural and Resource Economics Association Workshop on Beverage Marketing and Policy Issues. June 22 to 23, 2013 in Ithaca, NY.
- Brady, M. and **T.L. Marsh**. 2013. Do Changes in Orchard Supply Occur at the Intensive or Extensive Margin of the Landowner? Selected Paper Presentation at the Agricultural & Applied Economics Association’s Annual Meeting.
- Hamilton, A., Szmania, S., Kadavy, D., Isbell, M., Gardner, M., Cassagrande, R., Kazmierczak, M., Rush, M., Bieberbach, G., Bieringer, P., Coble, K., **Marsh, T.**, Pendell, D., Bryant, F., Splichal, P. and Brewer, J., “Site-specific biosafety and biosecurity risk assessment for the national bio and agro-defense facility,” 13th International Symposium on Veterinary Epidemiology and Economics, Belgium, August 2012.
- Lembo, T., Auty, H., Fyumagwa, R., Haydon, D., Hoare, R., Kamani, E., Kasanga, C., Kazwala, R., King, D., Knight-Jones, T., Knowles, N., **Marsh, T.**, Mshanga, D., Parekh, K., Parida, S., Paton, D., Reeve, R., Yoder, J. and Cleaveland, S. “Patterns and household implications of foot-and-mouth disease in rural Tanzanian communities,” 13th International Symposium on Veterinary Epidemiology and Economics, Belgium, August 2012.
- Gabrielyan, G. and **T.L. Marsh**, “Price Formation of U.S. Hops,” Selected paper for presentation at the Agricultural & Applied Economics Association’s Annual Meeting, Seattle, Washington, August 12-14, 2012.
- Gabrielyan, G. and **T.L. Marsh**, “Export Demand Analysis for U.S. Hops” Presentation at the Pacific Northwest Economics Conference, Seattle, Washington, May 16-18, 2012.
- Lankester, F., Grant, D., Haig, D., Russell, G., Lugelo, A., Kazwala, R., **Marsh, T.**, Yoder, J., Keyyu, J., Cleaveland, S. 2011. Malignant catarrhal fever: a field-based vaccine trial and an economic impact assessment. Tanzania Wildlife Research Institute Conference, Arusha, TZ. December.
- Belasco, E., S. Ponnaluru, S. Galinato, and **T.L. Marsh**. “An Assessment of the Interaction between High Tunnels and Crop Insurance for Specialty Crop Producers,” American Agricultural Economics Association, Pittsburg, 2011.
- Tozer, P. R. and **T. L. Marsh**, and E. Perevodchikov^a. 2010. “Invasive Species Management: FMD and BSE in the Australian Beef Sector,” Contributed paper at the Australian Agricultural and Resource Economics Society Meetings, Adelaide, Southern Australia.
- Zhang, R.^a, J. Steele, and **T.L. Marsh**. 2010. “Backyard Farming and Optimal Government Intervention of Avian Influenza.” Contributed paper, Western Economic International Meeting, Portland.
- McCullough, M., **Marsh, T.L.**, and Smith, T. 2009. “Intertemporal Alcohol Dependency: Like Father, Unlike Son,” Presented at the 2008 Beeronomics Conference, Belgium.
- McCullough, M., **Marsh, T.L.**, and Mittelhammer, R. C. “Nonlinear Structure in Regression Residuals,” Presented at the 2008 North American Meetings of the *Econometrics Society*.
- Nogueira, L. , **Marsh, T.L.**, and Johnson, H. “Welfare Implications of Washington Wheat Breeding Programs,” Selected Paper, Western Agricultural Economics Association Meetings, Big Sky, MT, 2008.
- Perevodchikov, E. and **T. L. Marsh**. “International Trade and FMD in the Canadian Livestock Sector,” Selected Paper, Western Agricultural Economics Association Meetings, Big Sky, MT, 2008.
- Tozer, P. and **T. L. Marsh**. “Invasive Species Management: FMD in the Australian Beef Sector,” Symposium presentation, American Agricultural Economics Association, Orlando, July 2008.
- Marsh, T. L.** and E. Perevodchikov. “Econometrics in Agricultural Economic and Economic PhD Programs,” Symposium presentation, American Agricultural Economics Association, Orlando,

July 2008.

- McCullough, M., **Marsh, T. L.**, and Huffaker, R. "Phase Space Reconstruction and Nonlinear Equilibrium Dynamics in the U.S. Beef Market," Selected paper for the American Agricultural Economics Association, Portland, Oregon, August 2007.
- Markosyan, A., Wahl, T., **Marsh T.L.**, and Chouinard, H "Specialty Crop Producer's Preferences Towards International Trade Policies," Selected paper for the Western Agricultural Economics Association, Portland, Oregon, August 2007.
- Suyambulingam, T. and **T. L. Marsh.** "Determinants of BSE Export Bans," Selected paper for the Western Agricultural Economics Association, Portland, Oregon, August 2007.
- Nogueira, L., Chouinard, H.H., **Marsh, T.L.**, Wahl, T.I., & Wieck, C. (2006). The Effects of Reducing Sanitary and Phytosanitary Barriers to Trade on the Washington State Apple Industry. American Agricultural Economic Association Meetings, Long Beach, California.
- Zhao, Z., T.I. Wahl, and **T.L. Marsh.** "Modeling the Effects of Mitigating Apple Maggot Spread into Apple Production Region of Washington State," American Agricultural Economics Association, Long Beach, California, August 2006.
- Zhang C., and **T.L. Marsh.** "Impacts of Gluten Imports on U.S. Food Wheat Use". American Agricultural Economics Association, Long Beach, California, August 2006.
- Marsh, T. L.** and N. Piggott. "Consumer Price Formation with Demographic Translating". International Association of Agricultural Economists, Queensland Australian, August 2006.
- Zhao, Z., T.I. Wahl, and **T.L. Marsh.** "Invasive Species Management: Foot-and-Mouth Disease in the U.S. Beef Industry". International Association of Agricultural Economists, Queensland Australian, August 2006.
- Marsh, T. L.** and N. Piggott. 2005. "Demographic Translating in Consumer Distance Functions", Australian Agricultural and Resource Economics Society Meetings, Coffs Harbour, Australia.
- Komar, S., **T. L. Marsh**, and T. A., Garrett. 2005. "Political Allocation of Agriculture Disaster Payments by Assistance Program." Presentation, Western Agricultural Economics Association.
- Suyambulingam, T. and **Marsh, T.L.** 2005. "Trade Bans and BSE". International Agricultural Trade Research Consortium, Annual Meeting.
- Zhao, Z., T.Wahl, and **T.L. Marsh.** "The Government's Role in Stabilizing Beef Supply when BSE Strikes", Presented at World Trade Organization Impacts on U.S. Farm Policy 2005 Conference June 1-3, 2005 New Orleans, Louisiana.
- Zhao, Z., T.Wahl, and **T.L. Marsh.** "Modeling the Impacts of Alternative Invasive Species Management Policies on Perennial Fruit Production and Consumption." Presented at the 2005 Pacific Northwest Regional Economic Conference, May 19-20, 2005 Bellingham, Washington.
- Zhang, C. and **T. L. Marsh.** 2005. "Measuring Impacts of Gluten Imports on US Wheat Food Use By Class," Presentation, Western Agricultural Economics Association.
- Brant, M., **T. L. Marsh**, and A. M. Featherstone. 2005. "Multivariate AIM Consumer Demand Model Applied to Dried Fruit, Raisins, and Dried Plums," Selected Paper, American Agricultural Economics Association, Providence.
- Marsh, T.L.**, Wahl, T., and Suyambulingam, T.^a, 2005. "Animal Disease outbreaks and Trade Bans". World Trade Organization Impacts on U.S. Farm Policy, Proceedings Southern Regional Trade Research Committee (S1016), World Trade Center, New Orleans.
- Fanning, J. and **T. L. Marsh.*** 2005. Spatial Hedonic Analysis of Veterinarian Income," Selected Paper, American Agricultural Economics Association, Providence.
- Tonsor, G. and **T. L. Marsh.*** 2005. "Comparing Heterogeneous Consumption in US and Japanese Meat and Fish Demand," Selected Paper, American Agricultural Economics

- Association, Providence.
- Brant, M., Featherstone, A. M. and **T. L. Marsh**, and. 2005. "AIM Application to Kansas Farm Data," Selected Paper, Western Agricultural Economics Association.
- Chacon-Cascante, A., J. Crespi, and **T. L. Marsh**. 2005. "Import demand of Bananas in the European Union," Selected Paper, American Agricultural Economics Association, Providence.
- Perry, B., **T. L. Marsh**, R. Jones, M.W. Sanderson, J.M. Sargeant, D.D. Griffin, and R.A. Smith. 2004. "Effects of Joint Product Management Strategies on E. Coli 0157:H7 and Feedlot Profits," Selected Paper, Western Agricultural Economics Association, Hawaii.
- Turner, T., K. Dhuyvetter, **T. L. Marsh**, and R. Jones. 2004. "Estimating the Economic Values Associated with EPDS for Angus Bulls at Auction." Selected Paper, Western Agricultural Economics Association, Hawaii.
- Taylor, M. R., K. C. Dhuyvetter, T. L. Kastens, M. Douthit^a, and **T. L. Marsh**. 2004. "Price Determinants of Show Quality Quarter Horses," Selected Paper, Western Agricultural Economics Association, Hawaii.
- Odeh, O. and **T. L. Marsh**. 2004. "Price Formation and Food Safety in U.S. Meat Demand: A Semi-flexible Normalized Quadratic Inverse Demand System," Selected Paper, Southern Agricultural Economics Association, Tulsa.
- Marsh, T. L.**, A. Featherstone, and T. Garrett. 2003. "Input Inefficiency in Commercial Banks: A Normalized Quadratic Input Distance Function," Working Paper 2003-036A, Federal Reserve Board of St. Louis.
- J. Taylor and **T. L. Marsh**. 2003. "Valuing Characteristics of Transferable Deer Permits in Kansas." Selected paper, Western Agricultural Economics Association, Denver, Colorado.
- Marsh, T. L.**, and R. C. Mittelhammer. 2002. "Information Theoretic Alternatives to Traditional Simultaneous Equations Estimators in the Presence of Heteroskedasticity." Selected Paper at the AAEA Meeting, Long Beach.
- Marsh, T. L.**, R. C. Mittelhammer, and G. G. Judge. 2001. "Empirical Likelihood Estimators of the Linear Simultaneous System of Equations." Selected Paper at the AAEA Meeting, Chicago.
- Marsh, T.L.** and R. C. Mittelhammer. "Adaptive Estimation, Truncation, and Maximum Entropy." Selected paper for the 2001 WAEA meeting, Logan, Utah.
- Schumacher, S., **T. L. Marsh**, and K. Williams, "Economic Thresholds: An Application to Floriculture," Selected Paper, 2000 AAEA Meetings, Tampa, FL.
- Lusk, J. L., A. M. Featherstone, and **T. L. Marsh**. 1999. "The Multi-Product Asymptotically Ideal Model: An Application to Agriculture." Selected Paper at the AAEA Meeting, Nashville.
- Marsh, T.L.**, R. G. Huffaker, and R. J. Folwell. 1998. "An Intraseasonal Bioeconomic Model of PLRV Net Necrosis." Selected Paper at the AAEA Meeting, Salt Lake City.
- Marsh, T.L.**, R. C. Mittelhammer, and N. S. Cardell. 1998. "Structural-Equation GME Estimator." Selected Paper at the AAEA Meeting, Salt Lake City.
- Marsh, T.L.**, R. C. Mittelhammer, and R. G. Huffaker. 1997. "Spatial Correlation in Applied Econometric Models." Selected Paper at the AAEA Meeting, Toronto, Canada.
- Ulibarri, C.A. and **T.L. Marsh**. 1993. "Deadweight Loss from BTU Taxes on Manufacturing Energy Consumption," International Association for Energy Economics, Proceedings of the 15th Annual North American Conference, Seattle, WA.
- Marsh, T.L.** and L.A. Corathers. 1993. "Endangered Species and Washington's Agri-Food Industry." Presented at the International Association of Impact Assessment Conference,

Seattle, WA.

- Marsh, T.L.** and C.A. Ulibarri. 1993. "Debt-for-Nature Swaps and the Preservation of Latin American's Rain Forests." Selected paper at the Western Economic Association International, Lake Tahoe, Nevada.
- Marsh, T.L.** 1992. "Commercial Production and Distribution of Fresh Fruits and Vegetables: A Scoping Study on the Importance of Produce Pathways to Dose." Hanford Environmental Dose Reconstruction Project. Public Meeting of the Technical Steering Panel, Pasco, WA.
- Marsh, T.L.** 1988. "Sinc-Galerkin Approximation to the First Order Hyperbolic Problem." Idaho State Univer Conference on Applied and Computational Linear Algebra, Pocatello, ID.

Invited Presentations and Symposiums (50)

- Marsh, T.L.** Highly Pathogenic Avian Influenza: Economic and Trade Impact. Understanding the Global Spread of H5N1 Highly Pathogenic Avian Influenza, United States Department of State, December 19, 2024.
- Marsh, T.L.** Comments on Markets & Economic Assessment: Agroecconomics and Food Value Chain Incentives. October 22-23, 2024. [Potential Research Priorities to Inform Readiness and Response to Highly Pathogenic Avian Influenza A \(H5N1\) A Workshop | National Academies](#)
- Marsh, T.L.** Anticipated Economic and Trade Impacts: Perspectives on the Emergence of H5N1. National Academy of Sciences (NAS), Board on Agriculture and Natural Resources. H5N1 and Agriculture. Summer Meeting, June 25, 2024.
- Marsh, T.L.** Economic Burden of Livestock Disease: Who is burdened and by how much? Invited Seminar, Massey University, Palmerston North, New Zealand, November 21, 2023.
- Marsh, T.L.** Economics and Implications of Animal Diseases. Keynote Speaker. International Symposium of Veterinary Epidemiology and Economics (ISVEE), August 2022, Halifax, NS.
- Marsh, T.L.** and D. Pendell. Global Burden of Animal Diseases: Metrics and Methods. Health Economics Track Session, AAEEA 2022.
- Marsh, T.L.** World Bank, Global burden of Animal Health (presentation and workshop discussant), September 2019.
- Marsh, T.L.** Workshop Presentation "Regional approaches to the control of foot-and-mouth disease in East Africa", 22-24 May 2019, University of Glasgow, Glasgow, UK.
- Marsh, T.L.** OIE-World Organization for Animal Health, Global burden of Animal Health (discussant and workshop discussant), April 2019, Paris France
- Rosenman, R. & **Marsh, T. L.**, "A Brief Introduction to the Economic Evaluation of Social and Policy Interventions," National Congress of American Indians Policy Research Center, Washington, DC. (2019)
- Marsh, T. L.** "Economic Consequences of Pests & Diseases: The Case of USA Pears," WSU/USDA FAS. (2018).
- Marsh, T. L.** "Economic Modeling of Pest and Disease Events Under Quarantine," EMBRAPA, Brazil. (2018).
- Marsh, T. L.**, Science In The City, "The surprising link between livestock health and girls' education," Gates Foundation/ Pacific Science Center - Seattle. (2018).
- Marsh, T.L.**, "Economic Assessment of Zoonotic Diseases," American Veterinarian Medical Association, October 2016.

- Marsh, T.L.**, “Household Food Expenditures, Macronutrients, and One Health: Evidence from Smallholders in Kenya,” Oklahoma State University, November 2015.
- Marsh, T.L.**, “Economic Assessment of Zoonotic Diseases: The Case of Avian influenza,” American Veterinarian Medical Association, October 2015.
- Marsh T.L.** “Measuring Burden of Disease: The Role of Food and Agriculture,” Presidential Address, Western Agricultural Economics Association, June 23, 2014.
- Marsh T.L.** “Economic Consequences of Livestock Vaccinations on Agro-Pastoral Households,” Michigan State University, May, 2014.
- Jiang, X. and **T.L. Marsh**. 2014. " Economic Modeling of Tree Fruit: U.S. Pears," Research Seminar, USDA-APHIS, Raleigh, NC.
- Jiang, X. and **T.L. Marsh**. 2014. " Empirical Modeling of U.S. Pears: Application of Fire Blight," Training Workshop, USDA-APHIS, Raleigh, NC.
- Marsh T.L.** “Economics of Livestock Vaccinations on Pastoral Households: ECF in Kenya,” University of London, January, 2013.
- Marsh T.L.** “Generalized Event Analysis of the 2006 E. Coli Outbreak in Spinach and Lettuce,” North Carolina State University, November 27, 2012.
- Marsh T.L.** and Dustin Pendell. “Site-Specific Biosafety and Biosecurity Risk Assessment for the National Bio and Agro-Defense Facility (NBAF),” Symposium, Western Agricultural Economics Association, Park City Utah, June 2012.
- Marsh, T.L.** 2012. “What are the Economic Consequences of Livestock Diseases?” Kansas State University, Manhattan, KS, March 15, 2012.
- Marsh, T.L.** 2011. “Markets, Infrastructure, and Animal Production Systems,” Joint Plenary Session for the United States Animal Health Association/American Association of Veterinary Laboratory Diagnosticians, Buffalo New York, Oct 2011.
- Marsh, T.L.** “Specification and Estimation of Food and Alcoholic Beverages Demand”, Invited paper on Food Demand and Econometrics Symposium, Australian Agricultural and Resource Economics Society Meetings, Adelaide, Southern Australia.
- Marsh, T.L.** “Economic Impacts of FMD on North America and Australia.” Invasive Species Management: 2009 PREISM Workshop, Washington D.C.
- Marsh, T.L.** “U.S. Caviar Trends and Issues,” FAMPS Symposium, American Agricultural Economics Association, Orlando, July 2008.
- Marsh, T.L.**, “Measuring Pre-Committed Quantities through Consumer Price Formation,” Invited Seminar, UC-Davis, December 5, 2007.
- Marsh, T.L.**, Perevodchikov, E.^a, Tozer, P., and Wahl T. “Impacts of Invasive Species on International Livestock Trade.” Invasive Species Management: 2007 PREISM Workshop.
- Zhao, Z., Wahl T. and **Marsh, T.L.** “Economic Effects of Mitigating Apple Maggot Spread.” Invasive Species Management: 2007 PREISM Workshop.
- Marsh, T.L.**, & Wahl, T.I. (2006, October). Welfare Impacts of Invasive Species on Livestock Trade. PREISM Organizational Meeting, Washington, DC.
- Zhao, Z., T.I. Wahl, and **T.L. Marsh**. (2006, October) “Economic Effects of Mitigating Apple Maggot Spread.” Crisis in Agriculture and Resource Sectors Workshop: Analysis of Policy Response, Calgary, Alberta.
- Marsh, T. L.**, “Hedonic Analysis of Veterinarian Income,” Invited seminar Washington State University/University of Idaho Joint Statistics and Applied Probabilities Seminar, October 31, 2006.
- Marsh, T. L.** , “Invasive Species Management in the Australian Beef Sector,” Invited Presentation, Ministry of Agriculture & Forestry, Wellington, New Zealand, June, 2006.

- Marsh, T. L.** , “Invasive Species Management in the Livestock Sector,” Invited Presentation, Department of Agriculture, Western Australia, Geraldton, May, 2006.
- Marsh, T. L.** and C. Zhang^a, “Economic Responsiveness in US Wheat Markets,” Invited Presentation, Australian Innovation Festival, The University of Western Australia, Perth, WA, May 5, 2006.
- Marsh, T. L.** “Food Safety Impacts on US Meat Demand,” Invited presentation, Department of Agricultural Economics, Washington State University, 2004.
- Marsh, T. L.** “Economics and Agricultural Terrorism,” Invited presentation, Agricultural Terrorism Conference, Wichita State University, June 2004.
- Marsh, T. L.** “Economic Impacts of a FMD Outbreak,” Invited presentation, Exercise Planning Workshop, State Department of Defense, Topeka, Kansas, April 2004.
- Piggott, N. and **T.L. Marsh**. 2003. “Does Food Safety Impact US Meat Demand?”, Invited paper on Marketing and Food Safety, Australian Agricultural and Resource Economics Society Meetings, Perth, Western Australia.
- Marsh, T.L.** and R.C. Mittelhammer. “Generalized Maximum Entropy Estimation of Spatial Autoregressive Models,” Conference on *Advances in Econometrics, Spatial and Spatiotemporal Econometrics*, Louisiana State University, November 7, 2003.
- Marsh, T. L.** 2003. Invited discussant, The Role of GMOs in Trade Disputes, San Antonio TX, October 2003.
- Marsh, T. L.** 2001. "Adaptive Truncated Regression Applied to Maximum Entropy." Invited Seminar, Department of Agricultural Economics, Washington State University, Pullman.
- Marsh, T. L.** “Maximum Entropy and Finite Sample Estimation,” Invited Seminar, Nov. 2000, Department of Agricultural Economics, Kansas State University, Manhattan.
- Marsh, T.L.** 1999. “Optimal Control of Vector-Virus-Plant Interactions.” Invited Seminar, Department of Entomology, Kansas State University.
- Marsh, T.L.** 1997. “Optimal Control of Vector-Virus-Plant Interactions.” Invited Seminar (Job Talk), Department of Agricultural Economics, Kansas State University.
- Marsh, T. L.** 1997. "Model-Driven Approach to Test and to Correct Cross-Sectional Data for Unobserved Spatial Correlation by Region." Invited Seminar, Washington State University and University of Idaho's Seminar on Statistics, Applied Probability, and Applied Statistics.
- Marsh, T. L.** 1997. “Empirical Evidence Refuting Elastic Demand in the Manufactured Housing Industry.” Invited Seminar, Pacific Northwest National Laboratory, Richland, WA.

Other supporting information (citations of key articles, impact factor of key publications, etc)

Google Scholar Citations: >4025

H-Index: 34

Citations of Key Articles:

Piggott, N. E. and **T.L. Marsh**. 2004. “Does Food Safety Information Impact US Meat Demand?” *American Journal of Agricultural Economics*, 86 (February):154-174. Most downloaded article in AJAE in 2004. 593 citations (Google Scholar)

Brodhagen, M., J. Goldberger, D. Hayes, D. Inglis, **T.L. Marsh**, C. Miles. 2016. “Policy Considerations for Limiting Unintended Residual Plastic in Agricultural Soils,” *Environmental Science and Policy*, Volume 69, March 2017, Pages 81–84. 261 citations (Google Scholar)

Marsh, T.L., T. C. Schroeder, and J. Mintert. 2004. “Impacts of Meat Product Recalls on Consumer Demand in the USA,” *Applied Economics*, 36, 897-909. 261 citations (Google Scholar)

Highest Impact Factors of Key Articles: *The Lancet* – 202.7; *The Lancet Planetary Health* – 25.7; *Science Advances* – 14.4; *Nature - Nature: Ecology & Evolution* – 15.46

Initiation of global burden of animal diseases programme. 2018. J Rushton, M Bruce, C Bellet, P Torgerson, A Shaw, **T Marsh**, D Pigott, ... *The Lancet* 392 (10147), 538-540

Roll-out of the Global Burden of Animal Diseases programme. 2021. J Rushton, B Huntington, W Gilbert, M Herrero, PR Torgerson, APM Shaw, M Bruce, **TL Marsh**, ... *The Lancet* 397 (10279), 1045-1046

Quantifying disease cost in animals: a new metric for the Global Burden of Animal Diseases. 2024. Gilbert, W, TL Marsh, G Chaters, WT, Jemburu, M Bruce, W. Steeneveld, JS Afonso, B Huntington, J Rushton. *The Lancet Planetary Health*, Volume 8, Issue 5, May 2024, Pages e309-e317

Altmetric Ranking:

Marsh, T.L., J. Yoder, T. Deboch,^a T. McElwain, G. Palmer. 2016. “Livestock vaccinations translate into increased human capital and school attendance by girls,” *Science Advances* 14 Dec 2016: Vol. 2, no. 12, e1601410, DOI: 10.1126/sciadv.1601410. 67 citations, Altmetric ranks this article in the 99th percentile of the nearly 7 million research outputs tracked. Popular press reports on research include: *Seattle Times*, *Wall Street Journal*, etc.

Conference Organization (lead organizer or co-organizer)

International Society for Economics and Social Sciences of Animal Health, Meeting, Atlanta, 2019

Workshop on the Economics of Animal Health, AAEEA joint with USDA, WSU, and KSU, Washington DC, 2018

AAEA & WAEA Joint Annual Meeting, July 26-28, San Francisco, California, 2015

International Beeronomics Meeting: the Economics of Beer and Brewing, Seattle, 2015.

Economic Issues and Outlook Conference, Pasco, Washington, 2007.

Service

Journal Reviewer: *Agricultural Economics*, *American Journal of Agricultural Economics*, *Applied Mathematics Letters*, *Applied Economic Perspectives and Policy*, *Australian Journal of Agricultural and Resource Economics*, *Agricultural Resource and Economics Review*, *Bioscience*, *BMC Veterinarian Research*, *British Food Journal*, *Canadian Journal of Agricultural Economics*, *Economics Research International*, *Empirical Economics*, *Entropy*, *European Review of Agricultural Economics*, *Food Policy*, *International Tax and Public Finance*, *Irrigation Science*, *Journal of Agricultural Economics*, *Journal of Agricultural and Applied Economics*, *Journal of Agricultural and Resource Economics*, *Journal of Applied Econometrics*,

Journal of Applied Statistics, Journal of Economics and Environmental Management, Journal of Food Distribution and Research, Journal of International Agricultural Trade and Development, Journal of Public Choice, Journal of Public Economics, Journal of Regional Science, Papers in Regional Science Nature - Sustainability, PLOS One, Review of Agricultural Economics, Review of Economics and Statistics, Science, The Economic Record, Transboundary and Emerging Diseases, Western Economic Forum

Book Reviewer: Econometric Theory and Methods, Oxford; Econometric Analysis, Prentice Hall; Pearson Addison-Wesley; Advances in Econometrics, Emerald; Econometric Foundations, Cambridge University Press

Evaluator: BARD Grants, NSF Grants, USDA-CAR & RAMP, USDA-Invasive Species Grants, IMPACT Center Grants-WSU, FSRG Grants-University of Wisconsin, IPM Steering Group Grants-KSU, K-State (external review of Research & Extension Program), K-STAR - NSF EPSCoR 1st Award Program

Regional, National, and International:

Subject Matter Expert, World Organization of Animal Health (2023-)

Operational Management Committee, Global Burden of Animal Disease Program (2022-)

Co-Chair, Social Burden Working Group, Global Burden of Animal Disease Program (2022-)

Executive Committee, Global Burden of Animal Disease Program (2020-), founding member

Outside Committee Member, Chair for the Economics of Animal Health, University of Edinburgh (2024)

Board of Directors, Washington State Academy of Sciences (2013-2019)

Co-Chair, Committee for White Paper on Washington State Initiative 522, Washington State Academy of Sciences, 2013.

Subject Matter Expert, Invited Participant, National Academies of Sciences, Updated NBAF SSRA Meeting, March 16, 2012.

Subject Matter Expert, Invited Participant, National Academies of Sciences, Updated NBAF SSRA Meeting, September 6, 2011.

Subject Matter Expert, Invited Participant, National Academies of Sciences, National Bio- and Agro- Defense Facility (NBAF) Site Specific Risk Assessment (SSRA) Meeting, July, 2010.

Subject Matter Expert, Invited Participant, National Academies of Sciences, National Bio- and Agro- Defense Facility (NBAF) Site Specific Risk Assessment (SSRA) Meeting, February 26, 2010.

Subject Matter Expert, Department of Homeland Security, Director of National Laboratories, National Bio- and Agro- Defense Facility (NBAF) Site Specific Risk Assessment (SSRA) Meeting, February 25, 2010.

AAEA: Topic Leader for 2021 AAEA Annual Meeting Selected Papers (Health Economics 2021), Selected Paper and Poster Reviewer 2021, President and Directors Nominating Committee (2012-2014), AAEA Awards: Dissertation Committee (2008-2011), Topic Leader for 2005 AAEA Annual Meeting Selected Papers (Consumer Behavior), Topic Leader for 2005 AAEA Annual Meeting Selected Papers (Quantitative Methods), Topic Leader for 2004 AAEA Annual Meeting Selected Papers (Consumer Behavior), Topic Leader for 2004 AAEA Annual Meeting Selected Papers (Quantitative Methods), Topic Leader for 2001 AAEA Annual Meeting

Selected Posters (Quantitative Methods), AAEA Judge Annual Meeting Posters
WAEA: President-Elect; President; Past-President; Fellows Committee; Director; Executive Council; Teaching Award, Chair; Topic Leader Selected Papers

Southern Agricultural Economics Association Task Force, (2004)
Regional Project, S-278 Food, Demand, and Nutrition
Regional Project, NC-194, Agricultural and Rural Finance Markets
Southern Regional Trade Research Committee (S1016), (2005)

University and College Service

Mentor Committee Member, Human Development (WSU 2019-2021)
Committee Member, Review, Dean Vet Med (WSU 2015)
Member, Faculty Search Committee, Allen School (WSU, 2012)
CAHNRS Ag Program Leadership Team (2009-2014)
Mentor Committee Member, AMDT (WSU)
Faculty Search Committee, AMDT (WSU 2007-9)
WSU Faculty Senate (2007-2010)
WSU Presidential, Ad Hoc Economic Crisis Committee (2008)
CAHNRS Promotion and Tenure Committee (2006-2008), Chair (2008)
CAHNRS Assessment Initiative (2005-06)
Graduate Faculty, Kansas State Univ. (1998-2004)
Graduate Task Force, College of Agriculture Review, Kansas State Univ. (1999-2000)
Honors Committee, College of Agriculture, Kansas State Univ. (1999-2002)
Honor Procedures Sub-Committee (1999-2002)
University Steering Committee, Integrated Pest Management (2002-2004)
Recovery Section leader, Department of Homeland Security Center of Excellence Proposal, (Finalist 2003-2004)

Department Service

Chair, Faculty Search Committee (2021-2022)
Chair, SES Friends Committee (2018-2022)
Mentor Committee Chair, multiple faculty (2014-)
Member, Quantitative Core Exam Committee (2004-)
Member, Faculty Search Committee, Econometrics, Economic Sciences (WSU, 2020-2021)
Chair, Faculty Search Committee, Econometrics, Economic Sciences (WSU, 2019-2020)
Member, Faculty Search Committee, Health Economics, Economic Sciences (WSU, 2015-2016)
Member, Graduate Committee, Economic Sciences (WSU, 2013-2014)
Chair, Faculty Search Committee, Endowed Chair: Grains, Economic Sciences (WSU, 2010)
Member, Faculty Search Committee, Health Economics, Economic Sciences (WSU, 2009-10)
SES, Steering Committee (2008-2010)
Chair, Self Assessment Committee on Scholarship & Research, SES (WSU, 2008)
Chair, Annual Conference Committee, School of Economic Sciences (WSU, 2007)
Chair, Faculty Search Committee, Agribusiness, Economic Sciences (WSU, 2007-8)
Chair, Faculty Search Committee, Health Economics, Economic Sciences (WSU, 2006-7)
Faculty Search Committee Member, Economic Sciences (WSU, 2006-7)
Director's Advisory Committee, School of Economic Sciences (WSU, multiple terms)
Chair, Faculty Search Committee (2 positions), School of Economic Sciences (WSU, 2005-6)

Graduate Committee, School of Economic Sciences (WSU, 2005-2007)
Chair, Masters Curriculum Review Committee, School of Economic Sciences (WSU, 2004-5)
Member, Undergraduate Curriculum Committee, School of Economic Sciences (WSU, 2004-5)
Member of the School of Economics Sciences Publicity Committee (WSU, 2004-5)
Joint Graduate Committee, Department of Agricultural Economics and Department of Economics, Kansas State Univ. (2000-2004, chair 2002-2003)
Graduate Committee, On Campus MS/PhD and Distance MAB Program, Department of Agricultural Economics, Kansas State Univ. (1999-2004)
Graduate Prelim Committees, Kansas State Univ. (1999-2004)
Job Candidate Search and Screening Committee (1999)
Department Head Review Committee, Department of Agricultural Economics, KSU (2000)
Promotion and Tenure Review Procedures Committee, Agricultural Economics, KSU (2000)
Advisor, Agecon/Agbusiness Club, Kansas State Univ. (1999-2001)
Seminar Committee, Department of Agricultural Economics, Kansas State Univ. (1998-2004)

Professional Affiliations and Leadership

Agricultural and Applied Economics Association (AAEA):

Econometrics Section: Chair (2011), Secretary (2007-9), founding member

Health Economics Section: Past Chair (2021-2022), Chair (2020-2021), Chair Elect (2019), founding member

American Association for the Advancement of Science (AAAS)

Member-at-Large Nomination - Social, Economic & Political Sciences Section – AAAS
2020 elections

Australian Agricultural and Resource Economics Society (AARES):

North American Branch: President (2006-2008)

Secretary/Treasurer (2004-2006)

Washington State Academy of Sciences

Board of Directors (2013-2016, 2016-2019), Finance Committee
(2017-2019), Section 5 Nomination Committee (2019-2023)

Western Agricultural Economics Association (WAEA):

President Elect (2013-2014), President (2014-2015), Past President (2015-2016)

Director (2002-2004), Executive Council (2001-2004)

Editorial Responsibilities

Associate Editor, *American Journal of Agricultural Economics*, (2008-2011)

Editorial Council, *Journal of Agricultural and Resource Economics*, (2007-2009, 2015-2017)

Guest Editor, *Choices* (2016)

Guest Editor, *PNAS* (2020)

Guest Editor, *Frontiers in Veterinarian Science* (2021)