Bruno Wichmann

(version: October 2023)

Department of Resource Economics and Environmental Sociology University of Alberta

503 General Services Building, Edmonton, AB, Canada T6G-2H1

Mobile: $+1 \cdot (780) \cdot 667 \cdot 1304$

Email: bwichmann@ualberta.ca

Personal Website: www.brunowichmann.ca

Citizenship

Canadian, Brazilian.

Education

Ph.D. (Economics) University of Tennessee, Knoxville, 2012

M.A. (Economics) University of Tennessee, Knoxville, 2010

M.Sc. (Economics) Federal University of Ceara, Brazil, 2006

B.Sc. (Economics) Federal University of Ceara, Brazil, 2002

Academic Positions and Professional Experience

Associate Professor (2018-present), University of Alberta

Assistant Professor (2012-2018), University of Alberta

Adjunct Professor (2007), Federal University of Ceara

Public Policy Analyst (2006-2008), Government of Ceara, Brazil

Research Interest

Natural Resource and Environmental Economics, Social Networks, Health Economics, Machine Learning, Experimental Economics.

Teaching

University of Alberta, Canada (2012-present)

- AREC 569: Advanced Topics in Natural Resource and Environmental Economics
- AREC 465: Advanced Natural Resource Economics
- AREC 365: Natural Resource Economics
- AREC 214: Applications of Quantitative Models to Food, Resources and the Environment

University of Tennessee, United States (2008-2012)

- ECON 322: The Global Economy: Trade and Development
- ECON 201: Principle of Economics (laboratory sessions)

Federal University of Ceará, Brazil (2007)

- Industrial Organization I
- Economic Theory II
- Principles of Economics

Journal Articles

Underlined names denote graduate student.

Double-underlined names denote undergraduate student.

- B. Wichmann and R. Wichmann. 2023. Big Data Evidence of the Impact of COVID-19 Hospitalizations on Mortality Rates of Non-COVID-19 Critically Ill Patients, *Scientific Reports* 13. Article number: 13613.
- **B. Wichmann** and R. Wichmann. 2023. Using Machine Learning to Estimate Health Spillover Effects, *European Journal of Health Economics*.
- B. Wichmann and R. Wichmann. 2022. COVID-19 and Indigenous Health in the Brazilian Amazon, *Economic Modelling* 115, 105962.
- <u>K. Lim</u>, **B. Wichmann**, and M. Luckert. 2021. Adaptation, Spatial Effects, and Targeting: Evidence from Africa and Asia, *World Development* 139, 105230.
- **B. Wichmann** and R. Wichmann. 2020. Nonparametric estimation of a primary care production function in urban Brazil, *Health Economics Review* 10.
- <u>K. Lim</u>, **B. Wichmann**, M. Luckert, P. Laderach. 2020. Impacts of Smallholder Agricultural Adaptation on Food Security: Evidence from Africa, Asia, and Central America, *Food Security* 12, 21–35.
- W. Neilson, M. Price, and **B. Wichmann**. 2018. Added Surplus and Lost Bargaining Power in Long-term Contracting, *Journal of Behavioral and Experimental Economics* 76, 7-22.

- M. Chen, B. Wichmann, M. Luckert, L. Winowiecki, W. Foerch, and P. Laderach. 2018. Diversification and Intensification of Agricultural Adaptation from Global to Local Scales, PLoS One 13(5): e0196392.
- S. Mohapatra, **B. Wichmann**, and P. Marcoul. 2018. Removing the 'Veil of Ignorance': Nonlinearities in Human Capital Effects on Gender Inequality, *Contemporary Economic Policy*, 34(4), 644-666.
- B. Wichmann, P. Boxall, S. Wilson, and O. Perger. 2017. Auctioning Risky Conservation Contracts, *Environmental and Resource Economics* 68(4), 1111–1144.
- B. Wichmann and M. Yang. 2017. Blue Beijing: Estimating the Effects of Temporary Emissions Restrictions on Air Quality, *Applied Economics Letters* 24:21, 1504-1510.
- B. Wichmann, M. Luckert, <u>K. Bissonnette</u>, <u>A. Cumberland</u>, <u>C. Doll</u>, <u>T. Gupta</u>, and <u>Y. Shi</u>. 2017. Using Pro-Environmental Information to Modify Conservation Behavior: Paper Recycling and Reuse. *Recycling* 2(1), 5.
- <u>J. Johny</u>, **B. Wichmann**, B. Swallow. 2017. Characterizing social networks and their effects on income diversification in rural Kerala, India, *World Development* 94: 375–392.
- B. Wichmann, M. Chen, and Vic Adamowicz. 2016. Social Networks and Choice Set Formation in Discrete Choice Models, *Econometrics* 4(4): 1–26 (Guest Editor: William Greene).
- B. Wichmann 2015. Agents of Change and the Approximation of Network Outcomes: A Simulation Study, Networks and Spatial Economics 15(1):17–41.
- W. Neilson and **B. Wichmann**. 2014. Social Networks and Non-market Valuations, Journal of Environmental Economics and Management 67(2): 155–170.
- F. Oliveira-Neto, P. Pontes, and **B. Wichmann**. 2014. A Benchmarking Analysis of the Brazilian Airport Infrastructure: An Application of the Expected Minimum Input Frontier, *Journal of Transport Economics and Policy* 48(2): 297–313.
- **B. Wichmann** 2013. Environmental Regulation of Technically Inefficient Firms, *Economics Letters* 121(2): 143–147.
- M. Cozad and **B. Wichmann**. 2013. Efficiency of Health Care Delivery Systems: Effects of Health Insurance Coverage, *Applied Economics* 45(29): 4082–4094.

• N. Gritsko, V. Kozlova, W. Neilson, and **B. Wichmann**. 2013. The CEO Arms Race, Southern Economic Journal 79(3): 586-599.

Book Chapters

- Todd Godfrey and **B. Wichmann**. 2022. Measuring social impacts: building tools for understanding community well-being, in Extractive Industry and the Sustainability of Canada's Arctic Communities. Edited by Chris Southcott, Frances Abele, David Natcher, and Brenda Parlee.
- Holanda, M., **B. Wichmann**, and P. Pontes. 2011. The Viability of the biodiesel program as an instrument of social inclusion, in Energy, Bio Fuels and Development: Comparing Brazil and the United States. Routledge Studies in Development Economics. Edited by Edmund Amann, Werner Baer, and Don Coes.

Grants Received

- Canada Wildfire. Wildfire Detection Economics in Alberta (PI), 2022-2023, \$86,000.
- NSERC-SSHRC Sustainable Agriculture Research Initiative. Accelerating Widespread Adoption and Retention of Climate-Smart Agricultural Practices in Canada: A Multidisciplinary Mixed Methods Approach (co-applicant), 2023, \$29,546 (preparatory funding).
- Future Energy Systems. Social Implications of Energy Development (PI), 2019–2022, \$93,200.
- Canada Wildfire. Experiments, Machine Learning and Regression Analysis on Wildfire Suppression Expenditures in Alberta (PI), 2020-2022, \$68,249.
- Alberta Real Estate Foundation. The impacts of COVID-19 on Alberta real estate markets (PI), 2020–2022, \$60,000.
- Climate Change, Agriculture and Food Security (CCAFS) Flagship 4 and the International Centre for Tropical Agriculture (CIAT). Climate-Smart Agriculture: Examining food security and adaptation in CCAFS global sites (PI), 2020-2022, \$58,000.
- University of Alberta. REES Experimental Laboratory (PI), 2019–2026, \$16,900.

- University of Alberta. Support for the Advancement of Scholarship, REES Experimental Laboratory (PI), 2018–2019, \$10,000.
- University of Alberta. Support for the Advancement of Scholarship, Bargaining in Networks (PI), 2017–2018, \$2,500.
- Northern Scientific Training Program (NSTP) Grant. UAlberta North. Community Economic Monitoring Tool for the Inuvialuit Settlement Region (in support of the application of my M.Sc. student Todd Godfrey), 2017–2018, \$2,158.
- Social Sciences and Humanities Research Council (SSHRC), Resources and Sustainable Development in the Arctic (ReSDA). Socio-Economic Sustainability Indicators: building tools for understanding community wellbeing (PI), 2016–2018, \$50,000.
- University of Alberta. Survey Lab and General Research Services/International Center for Tropical Agriculture (PI), 2016–2021, \$19,561.
- Social Sciences and Humanities Research Council (SSHRC). Partnership Grant. Tracking Change - The Role of Local and Traditional Knowledge in Watershed Governance (coapplicant), 2015–2021, \$2,480,098.
- Climate Change, Agriculture and Food Security (CCAFS) Flagship 4 and the International Centre for Tropical Agriculture (CIAT). Differentiating Among Determinants of Agricultural Adaptation Across Scales and Activities (co-applicant), 2015–2016, \$43,700.
- Social Sciences and Humanities Research Council (SSHRC). Insight Development Grant. Generating Agri-Environmental Improvements: Integrating Social Networks into Conservation Auctions (PI), 2014–2016, \$43,033.
- University of Alberta. VP (Research) Special Funding. Cost Sharing Programs for the Implementation of Beneficial Management Practices: The Role of Social Networks (PI), 2014–2016, \$9,960.
- University of Alberta. Start-up Funding (PI), 2012–2021, \$42,000.

Graduate Student Supervision¹

• Vaibhav Manawat (MSc in Agricultural and Resource Economics, 2023 – expected)

¹University of Alberta

- David Garrett (PhD in Agricultural and Resource Economics, 2022)
- Meghan Lim (MSc in Agricultural and Resource Economics, 2022)
- Michael Huang (MSc in Agricultural and Resource Economics, 2021)
- Catalina Romero (MSc in Agricultural and Resource Economics, 2020)
- Todd Godfrey (MSc in Agricultural and Resource Economics, 2017)
- Meng Yang (MSc in Agricultural and Resource Economics, 2017)
- Daiwei Zhang (MSc in Agricultural and Resource Economics, 2016)
- Krisha Lim (MSc in Agricultural and Resource Economics, 2015)
- Judit Johny (MSc in Agricultural and Resource Economics, 2015)
- Minjie Chen (MSc in Agricultural and Resource Economics, 2014)

Examination Committee²

- Hannah Skelding (MSc in Risk and Community Resilience, 2023)
- Yichuan Wang (PhD in Agricultural and Resource Economics, 2018)
- Orsolya Perger (PhD in Agricultural and Resource Economics, 2016)
- Lucas Novak (MSc in Agricultural and Resource Economics, 2016)
- Patrick Lloyd-Smith (PhD in Agricultural and Resource Economics, 2015)
- Manikarnika Kanjilal (PhD in Agricultural and Resource Economics, 2015)
- Wijaya Dassanayake (PhD in Agricultural and Resource Economics, 2013)
- Hyun No Kim (PhD in Agricultural and Resource Economics, 2013)
- Scott Wilson (MSc in Agricultural and Resource Economics, 2013)

Awards

• Outstanding Master's Thesis Award, Canadian Agricultural Economics Society – Awarded to my MSc student Michael Huang (2023).

²University of Alberta

- Runner-up, Three Minute Thesis Presentation, Dept of Resource Economics and Environmental Sociology Awarded to my MSc student Vaibhav Manawat (2022).
- First Place, Three Minute Thesis Presentation, Dept of Resource Economics and Environmental Sociology Awarded to my MSc student Catalina Romero (2019).
- Third Place Winner, Graduate Student Paper Competition, CAES Annual Meetings Awarded to my MSc student Meng Yang (2017).
- First Place, Three Minute Thesis Presentation, Dept of Resource Economics and Environmental Sociology Awarded to my MSc student Krisha Lim (2013).
- J. Fred and Wilma A. Holly Fellowship. Department of Economics, University of Tennessee (2011–2012).
- The Southern Economic Association, Graduate Student Award (2011).
- Best Graduate Student Research Project. Graduate Student Meetings, Department of Economics, University of Tennessee (2010).
- Outstanding Graduate Student Presentation. Economics Brown Bag Workshop. University of Tennessee (2010).
- Best Graduate Student Research Project. Graduate Student Meetings, Department of Economics, University of Tennessee (2009).
- The University of Tennessee Graduate Assistantship (2008–2012).
- Master of Science CNPq Fellowship. National Council for Scientific and Technological Development (CNPq), Brazil (2004–2006).

Refereeing

Agricultural Economics, American Journal of Agricultural Economics, Australian Journal of Agricultural and Resource Economics, Environmental and Resource Economics, Journal of the Association of Environmental and Resource Economists, Journal of Behavioral and Experimental Economics, Journal of Economic Behavior and Organization, Journal of Environmental Economics and Management, Journal of Development Studies, Journal of Public Economics, Land Economics, Land Use Policy, Plos One, World Development.

Presentations

- Jan/2023 Canadian Agri-Food Policy Conference, Ottawa, ON.
- Apr/2021 Brazilian Institute of Research and Development, Economics Graduate Program, Brasilia, Brazil.
- Mar/2021 Midwest Economics Association, Annual Meetings.
- Dec/2020 Department of Statistics, State University of Paraiba, Joao Pessoa, Brazil.
- Nov/2020 Federal University of Rio Grande do Sul, Economics Graduate Program, Porto Alegre, Brazil.
- Nov/2020 Dept. of Resource Economics and Environmental Sociology, University of Alberta, Edmonton, AB.
- Jul/2020 Federal University of Pelotas, Marketing Graduate Program, Brazil.
- Jun/2020 University of Saskatchewan, School of Environment and Sustainability, Saskatoon, SK.
- May/2020 Faculty of Agriculture, Life & Env. Sciences, COVID-19 Symposium, Edmonton, AB.
- Mar/2019 Midwest Economics Association, Annual Meetings, St Louis, MO.
- Dec/2018 Resources and Sustainable Development in the Arctic (ReSDA) Workshop, Ottawa, ON.
- Mar/2017 Midwest Economics Association, Annual Meetings, Cincinnati, OH.
- Mar/2017 Dept. of Resource Economics and Environmental Sociology, University of Alberta, Edmonton, AB.
- Apr/2016 Alberta Agricultural Economics Association, Visions Conference, Red Deer, AB.
- Mar/2015 Midwest Economics Association, Annual Meetings, Minneapolis, MN.
- May/2014 Canadian Economics Association, Annual Conference, Vancouver, BC.
- Apr/2014 Department of Economics, Virginia Commonwealth University, Richmond, VA.
- Apr/2014 Department of Economics, University of Alberta, Edmonton, AB.
- Feb/2014 Department of Economics, State University of New York at Oswego, NY.
- Oct/2013 Dept. of Resource Economics and Environmental Sociology, University of Alberta, Edmonton, AB.
- Jun/2013 Association of Environmental and Resource Economists. Annual Summer Meeting, Banff, AB.
- May/2013 Alberta Agricultural Economics Association, Visions Conference, Red Deer, AB.
- Apr/2012 Dept. of Resource Economics and Environmental Sociology, University of Alberta, Edmonton, AB.
- Nov/2011 Southern Economic Association Meetings, Washington D.C.
- Oct/2011 Heartland Environmental and Resource Economics Workshop, Urbana-Champaign, IL.
- Oct/2011 University of Colorado, CU Environmental and Resource Economics Workshop, Vail, CO.
- Oct/2011 University of Tennessee, Economics Brown Bag Workshop, Knoxville, TN.
- Aug/2011 Camp Resources XVIII, Wrightsville Beach, NC.
- Jul/2011 International Economic Science Association Conference, Chicago, IL.
- Nov/2010 University of Tennessee, Economics Brown Bag Workshop, Knoxville, TN.
- Nov/2010 National Tax Association 103rd Annual Conference on Taxation, Chicago, IL (poster session).
- Mar/2010 University of Tennessee, Economics Brown Bag Workshop, Knoxville, TN.
- Mar/2010 University of Tennessee, Mini Summit on Poverty and Health Care, Knoxville, TN.

Professional Affiliations

Agricultural and Applied Economics Association, American Economic Association, Canadian Agricultural Economics Society, Midwest Economics Association.

References

Brenda Parlee, Professor and UNESCO Co-Chair

Dept. of Resource Economics and Environmental Sociology, University of Alberta

☑ bparlee@ualberta.ca

Corinne Langinier, Professor

Dept. of Economics, University of Alberta

⊠ langinie@ualberta.ca