

Jesse Burkhardt

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EDUCATION

Ph.D. Environmental Economics, Yale University, 2016.

M.E.M. Master of Environmental Management, Yale University, 2010.

B.M. Jazz Performance, Portland State University, 2003.

PROFESSIONAL EXPERIENCE

Assistant Professor, Department of Agricultural & Resource Economics, Colorado State University (2016-Present)

Faculty Associate, Partnership for Air Quality, Climate and Health, Colorado State University (2016-Present)

Pre-Doctoral Researcher, Arizona State University (2014)

Research Associate, Lawrence Berkeley National Laboratory and the Department of Energy, (2012-2014)

PUBLICATIONS (*GRADUATE STUDENT)

Chan, N., **Burkhardt, J.**, Flyr., M*, (2019) The Effects of Recreational Marijuana Legalization and Dispensing on Opioid Mortality, Accepted at *Economic Inquiry*

Burkhardt, Jesse, et al. (2019) "The relationship between monthly air pollution and violent crime across the United States." *Journal of Environmental Economics and Policy*: 1-18.

Berman, J., **Burkhardt, J.**, et al., (2019) Acute Air Pollution Exposure and Risk of Violent Behavior in the United States (2000-2013) Accepted at *Epidemiology* (Ranked 7th highest journal in epidemiology with an impact factor of 5.23)

Burkhardt, J., (2019), The Impact of the Renewable Fuel Standard on U.S. Oil Refineries Accepted at *Energy Policy*

Maas, A., Goemans, C., Manning, D. T., **Burkhardt, J.**, & Arabi, M. (2019). Complements of the house: Estimating demand-side linkages between residential water and electricity. *Water Resources and Economics*.

Flyr, M.,* **Burkhardt, J.**, Goemans, C., Hans, L., Neel, A., & Maas, A. (2019). Modeling Commercial Demand for Water: Exploring Alternative Prices, Instrumental Variables, and Heterogeneity. *Land Economics*, 95(2), 211-224.

Burkhardt, J. and Flyr, M.* (2018), The Effect Of Marijuana Dispensary Openings On Housing Prices. *Contemporary Economic Policy*. doi:10.1111/coep.12414

Burkhardt, J. and Chan, N.W. "The dollars and sense of ballot propositions: estimating willingness to pay for public goods using aggregate voting data." *Journal of the Association of Environmental and Resource Economists* 4.2 (2017): 479-503.

Burkhardt, J., Wisser, R., Darghouth, N., Dong, C. G., & Huneycutt, J. (2015) "Exploring the impact of permitting and local regulatory processes on residential solar prices in the United States." *Energy Policy*, 78: 102-112.

WORKING PAPERS

Peer Effects in Dry Landscape Adoption (with Ken Gillingham (Yale) and Bryan Bollinger (Duke)) (**Revisions Requested**)

Sanctuary Policies Decrease the Cost of Crime (With Dale Manning) (**Under Review**)

The Effect of Marijuana Dispensary Openings on Crime (With Chris Goemans) (**Under Review**)

How do Residential Consumers Respond to Critical Peak Pricing? Experimental Evidence on the Role of Information and Incentives (with Ken Gillingham (Yale) and Praveen Kopalle (Dartmouth)) (**Under Review**)

The Effect of Pollution on Aggressive Behavior: Evidence from Wildfires and Crime (With many coauthors) (**Revisions Requested**)

What is the value of conformity? Evidence from home landscaping and water conservation (With Nathan Chan)

Spatio-temporal coordination for increased utilization of renewable resources in the electric grid (With Sid Suryanarayanan and Edwin Chong)

OTHER WORKS IN PROGRESS

The effect of acute pollution exposure on cognitive outcomes: Evidence from online chess players

Do people avoid wildfire smoke? Evidence from the American Time Use Survey (With Jude Bayham)

The effect of drought and climate change on agricultural production and farmers' attitudes (with Chris Goemans, Dale Manning, and Mani Rouhi Rad)

Eliminating the Evidence: Abortion's influence on the health impact of pollution (With Sammy Zahran and Jude Bayham)

Social Comparison and Water Consumption: Evaluating Home Water Reports (With Salvador Lurbe, Dale Manning, and Chris Goemans)

Evaluation of Time of Use Pricing on Electricity Consumption (With Chris Goemans and Liesel Hans)

The Impact of Climate Change Induced Fishery Decline on Global Trade (with Amanda Countryman, Travis Warziniack, and Dale Manning)

Long-term impacts of pollution on aggressive behavior across the U.S. (With Jesse Berman)

NON-PEER REVIEWED PUBLICATIONS

Burkhardt, J., Gillingham, K., Kopalle, P.K., 2019, Experimental Evidence on the Effect of Information and Pricing on Residential Electricity Consumption, *NBER Working Paper*, <https://www.nber.org/papers/w25576.pdf>

Burkhardt, J., Gillingham, K., Kopalle, P.K., 2019. Experimental Evidence on the Effect of Information and Pricing on Residential Electricity Consumption. SSRN Working Paper: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3336385

Bollinger, B., **Burkhardt, J.**, Gillingham, K., Peer Effects in Water Conservation: Evidence from Consumer Migration, 2018, *NBER Working Paper*, <http://www.nber.org/papers/w24812>

Burkhardt, J., Bollinger, B., Gillingham, K., Peer Effects in Water Conservation: Evidence from Consumer Migration, 2018, *Global Water Forum*, <http://www.globalwaterforum.org/2018/08/13/peer-effects-in-water-conservation-evidence-from-consumer-migration/>

Burkhardt, J., Kopalle, P., Gillingham, K., How do Residential Consumers Respond to Critical Peak Pricing? Experimental Evidence on the Role of Information and Incentives, Extended Abstract, *2018 Association for Consumer Research*, <https://convention2.allacademic.com/one/acr/acr18/>

Modelling Commercial Demand for Water, Colorado Water, Sept/Oct 2018. https://issuu.com/coloradowater/docs/cw_35_5?e=1964603/66317052

Faculty Profile, Colorado Water, Sept/Oct 2018.

https://issuu.com/coloradowater/docs/cw_35_5?e=1964603/66317052

GRANT ACTIVITY AND FELLOWSHIPS ACTIVITY

SoGES 2018-19 Global Challenges Research Team Proposal. 2018-2019. Co-PI. Sustainable Performance of Healthy and Efficient Residential Environments (SPHERE) \$20,000. **Funded.**

National Science Foundation Energy Research Centers Grant. 2019. Co-PI. **Pending**

National Integrated Drought Information System Grant: 2019. Co-PI. **Pending.**

Graduate School Student Recruitment Mini-Grant. 2018. Co-PI. **Funded.**

SoGES 2018-19 Global Challenges Research Team Proposal. 2018-2019. Co-PI. Next Generation Electricity Demand Response. \$20,000. **Funded.**

SOGES 2018-2019 Global Challenge Research Team Proposal. 2018-2019. Co-PI. Integrating Solar Energy into Dryland Agriculture – Innovation at the Food-Energy-Water Nexus. \$20,000. **Pending.**

National Science Foundation. 2018-2021. Co-PI. Spatio-temporal coordination for increased utilization of renewable resources in the electric grid. \$700,000. **Pending.**

U.S. Department of Agriculture, Forest Service and Colorado State University Vice President of Research Seed Grant, 2016-2017. PI. Assessing the Global Economic Impacts of Predicted Fishery Decline. \$29,070. **Funded.**

Colorado State University Water Center Fellow, 2017. PI. From Information to Prices: What Drives Residential and Commercial Water Demand? \$10,000. **Funded.**

Environmental Protection Agency. 2017-2020. Co-PI. Forecasting the Heterogeneous Adoption and Environmental Impacts of Clean Energy Technology in the United States. \$300,000. **Pending.**

National Science Foundation. 2017-2020. Co-PI. Spatiotemporal Variability in Clean Energy Technology Uptake and Environmental Impacts under a Decarbonizing Future. \$225,000. **Pending.**

National Science Foundation. 2017-2020. Co-PI. CPS: Medium: Collaborative Research: Spatio-Temporal Coordination for Increased Utilization of Renewable Resources in the Electric Grid. \$700,000. **Not Funded.**

National Science Foundation, 2017-2021. Co-PI. INFEWS/T3: Resource-Efficient Thin-Film Photobioreactor System for Fuel and Fertilizer Production. \$2,500,000. **Not Funded.**

SoGES 2017-18 Global Challenges Research Team Proposal. 2017. Co-PI. Next Generation Electricity Demand Response. \$20,000. **Not Funded**.

Arizona State University Pre-Doctoral Fellowship in Environmental and Resource Economics. 2013. **Graduate Salary**.

Yale Institute for Biospheric Studies, Dissertation Improvement Grant. 2013. \$5,000.

National Science Foundation Integrative Graduate Education and Research Traineeship Grant. 2011. (Declined to attend Yale)

Doris Duke Conservation Fellowship. 2009-2010. \$70,000.

American Alpine Club and Mountain Hardware grant to establish new climbing routes in Tajikistan. 2010.

INVITED PRESENTATIONS

Colorado State University Water Center: *Water Center Fellow Report* (May, 2019)

University of Wyoming Seminar to Economics Club (Spring, 2019). *Three papers on the socioeconomic effects of marijuana legalization*

Colorado School of Mines Economics Seminar (February, 2018). *Peer Effects in Dry Landscape Adoption*

University of Wyoming Economics Seminar (Fall, 2018). *Incomplete Regulation of an Imperfectly Competitive Market: The Impact of the Renewable Fuel Standard on U.S. Oil Refineries*

University of California Los Angeles Industrial Organization Workshop (Spring, 2017). *Incomplete Regulation of an Imperfectly Competitive Market: The Impact of the Renewable Fuel Standard on U.S. Oil Refineries*

New York University Industrial Organization Seminar (Fall, 2017). *Incomplete Regulation of an Imperfectly Competitive Market: The Impact of the Renewable Fuel Standard on U.S. Oil Refineries*

Colorado State University Economics Seminar (Fall, 2016). *Peer Effects in Dry Landscape Adoption*

Arizona State University Urban Water Demand Roundtable (Fall, 2016). *Peer Effects in Dry Landscape Adoption*

Yale University Environmental Economics Seminar (Fall, 2015). *Incomplete Regulation of an Imperfectly Competitive Market: The Impact of the Renewable Fuel Standard on U.S. Oil Refineries*

Arizona State University Urban Water Demand Roundtable (Fall, 2015). *Peer Effects in Dry Landscape Adoption*

CONFERENCES

American Water Works Association Annual Conference (June, 2019). *Consumer Responses to Social Comparison* (presented by graduate student)

AERE (May 2019). *The Effect of Pollution on Aggressive Behavior*. Presented by Coauthor

Front Range Energy Economics Workshop (May 2019). *Do people respond to pollution and wildfire smoke? Evidence from the American Time Use Survey*

Front Range Energy Economics Workshop (May 2019). *Welfare Effects of Electricity Grid Shutdowns* (presented by coauthor)

ASSA Annual Meeting (January 2019). *Willingness to Pay for Conformity* (presented by coauthor)

AERE at Southern Economics Association Conference (November 2018). *The Effect of Pollution on Aggressive Behavior*

UC Boulder Environmental Economics Workshop in Vail (August 2018). *Willingness to Pay for Conformity* (presented by coauthor)

AAEA Annual Meeting (September 2018). *Consumer Responses to Social Comparison* (presented by graduate student)

Western Agricultural Economics Association (June 2018). *Estimating Heterogeneity in the Price Elasticity of Commercial Water Users* (presented by graduate student)

Colorado State University Graduate Student Symposium (April 2018). *Consumer Responses to Social Comparison* (presented by graduate student)

Colorado State University Graduate Student Symposium (April 2018). *Estimating Heterogeneity in the Price Elasticity of Commercial Water Users* (presented by graduate student)

Front Range Energy Economics Workshop (May 2018). *How do Residential Consumers Respond to Critical Peak Pricing?*

Front Range Energy Economics Workshop (May 2018). *The effect of pollution on crime* (presented by Jude Bayham)

National Bureau of Economic Research (NBER) Energy and Environmental Economics Spring Session (March, 2018). *Peer Effects in Dry Landscape Adoption*

NBER Workshop on Commodity Prices (Fall, 2016).

NBER Summer Institute for Environmental and Energy Economics (Spring, 2015). *Incomplete Regulation of an Imperfectly Competitive Market: The Impact of the Renewable Fuel Standard on U.S. Oil Refineries*

CAMP Resources (Spring, 2015). *Incomplete Regulation of an Imperfectly Competitive Market: The Impact of the Renewable Fuel Standard on U.S. Oil Refineries*

Northeast Energy Policy and Environmental Economics Workshop at Yale (Spring, 2015)
Incomplete Regulation of an Imperfectly Competitive Market: The Impact of the Renewable Fuel Standard on U.S. Oil Refineries

Arizona State Department of Economics (Spring, 2014) *Peer Effects in Dry Landscape Adoption*

Yale University Graduate Student Conference (2013)

George Wright Society Conference on Parks, Protected Areas, and Cultural Sites (2011)

COURSES TAUGHT

Introduction to Econometrics (Spring, 2016-17)

Economics of Energy Resources (Spring, 2016-17)

Interdisciplinary Graduate Seminar on Integrated Assessment Models and the Social Cost of Carbon (Fall, 2017)

GUEST LECTURES

Masters Econometrics (Fall, 2018)

Honors Seminar in Conflict Management (Fall, 2017)

Engineering Economics in Mechanical Engineering (Spring, 2018)

Climate Change in Atmospheric Sciences (Spring, 2018)

Introduction to Petroleum Geology (Spring, 2018)

TEACHING FELLOWSHIPS

Economics of the Environment (2014-2015) Yale University

Energy Economics and Policy Analysis, (2015), Yale University

REFEREE SERVICE

Journal of Environmental Economics and Management; Journal of the Association of Environmental and Resource Economists; Energy Policy; American Journal of Agricultural Economics; Current Science; Agricultural and Applied Economics Association (AAEA); Resource and Energy Economics, PLOS One, Land Economics, Southern Economics Association Annual Conference, Nature Energy

PROFESSIONAL SERVICE

Undergraduate Committee, Colorado State University (2017-Present)

Graduate Placement Coordinator, Colorado State University (2017-Present)

Environmental and Resource Economics Lab Organizer (2018-present)

Faculty Search Committee, Colorado State University (2016-17)

MEDIA

Wiley Research Headlines: WEAI nominated and selected article published in Economic Inquiry to be presented on Wiley website.

Dartmouth Tuck School of Business News: The Key to Energy Conservation? Priming Consumers with Price. <https://www.tuck.dartmouth.edu/news/articles/the-key-to-energy-conservation-priming-consumers-with-price>

NBER Featured Working Paper on Front Page of NBER Website: Experimental Evidence on the Effect of Information and Pricing on Residential Electricity Consumption (2019)

Cited by Boulder Weekly. “For yuppies, pot is ceasing to be a guilty pleasure.” By Paul Danish December 6, 2018. <https://www.boulderweekly.com/features/cannabis-corner/for-yuppies-pot-is-ceasing-to-be-a-guilty-pleasure/>

Cited by Weedmaps.com. “Study: Dispensaries Raised Neighbors’ Home Prices in Denver.” By Don Jergler. January 7, 2019. <https://news.weedmaps.com/2019/01/study-dispensaries-raised-neighbors-home-prices-in-denver/>

Interviewed for Marijuana.com about research paper *The effect of marijuana dispensaries on housing prices* (2019)

Interviewed for Merry Jane about research paper *The effect of marijuana dispensaries on housing prices* (2018)

National Public Radio (Spring, 2017) Audio news article about interdisciplinary seminar on social cost of carbon.

OUTREACH AND COMMUNITY

Secured internships for two graduate students at the Fort Collins Utility that lead to presentations to the utility, data services for the utility, and two publications

Participated in Interdisciplinary Workshop hosted by SOGES (2018)

Participated in Collaborative Workshop between CSU and Fort Collins Utilities (2018)

Presentation to the American Lung Association (2017), Research Summary and Opportunities for Collaboration (RSC)

Presentation to the Colorado Energy Office (2017), RSC

Presentation to the Colorado Electric Vehicle Coalition (2017), RSC

GRADUATE STUDENT COMMITTEES

Undergraduate Students

Justin Smith (Advised on independent research project with faculty in geography and anthropology)

Masters Students

Matthew Flyn (Chair, 2016-2018)

Jesse Cruce (Outside Member, 2017-Present)
Mingsui Sun (Outside Member, 2017-Present)
Derek Young (Outside Member, 2017-2018)

Doctoral Students

Salvador Lurbe (Committee Member, 2016-Present)
Annabelle Berklund (Outside Member, 2017-Present)

AWARDS

Faculty Appreciation from Agricultural Fraternity at CSU
Best graduate student presentations at CSU graduate student symposium by Matthew Flyr
(Masters Student) and Salvador Lurbe (Ph.D. Student).

OTHER PROFESSIONAL EXPERIENCE

Research Assistant, Institute of Transportation Studies, University of California Davis (2012)
Research Assistant, Dr. Matthew Kotchen and Dr. Kory Kroft, Yale University (2010-2012)
Backcountry Wilderness Ranger, Yosemite National Park, California (2004-2007)
Goat Cheese Maker, Les Courmettes, France (2005)

Updated June 1, 2018